

**EXPERIENCING LEARNING DIFFERENCES: A SOCIOCULTURAL STUDY OF
HIGH SCHOOL STUDENTS' AND PARENTS' PERSPECTIVES ON
LEARNING DISABILITIES**

by

Hadas Av-Gay

B.A., Tel Aviv University, 1993

M.Ed., The University of British Columbia, 2003

M.A., The University of British Columbia, 2008

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Abstract

Based upon Vygotsky's sociocultural theory, which emphasizes the interdependence between individuals and their sociocultural environments (Vygotsky, 1993; Wertsch, 1985), this generic qualitative study focused on the experiences of high school students with learning disabilities, as well as their perspectives and the perspectives of their parents on their experiences. The research questions guided this study were: 1) How do students describe their experiences of and perspectives on having learning disabilities? 2) How do parents describe their experiences of and perspectives on their child's learning disabilities? 3) How do students describe their strengths and challenges in relation to their academic experiences in school? 4) How do parents describe their child's strengths and challenges in relation to their academic experiences in school?

Semi-structured and collaborative interviews with high school students and their parents, both separately and together were employed to answer the research questions. The transcribed interviews were analyzed using reflexive and iterative thematic analysis (Braun & Clarke, 2006). Findings were coded and five themes were constructed: identifying difficulties in learning; "testing" to diagnose a disability; searching for alternative learning settings; learning and teaching; and students' strengths and challenges.

Five conclusions based on the lived experiences of these students emerged. First, there was no systemic early identification and pedagogy in place in their schools. Second, students reported experiencing secondary disabilities as a result of interpreting their primary learning difficulty as "being stupid." Third, participants reported the affordances and constraints of, what they called, "testing" for diagnosis of learning disabilities. Formal diagnosis did not seem to inform teaching and learning and was limited to allowing the noticeability of students in school and entry to specialized programs or schools. Fourth, the profound sociality of learning

was evident as participants benefited from collaborative relationships with their peers and teachers. Fifth, malleability of learning was shown in students' academic successes in schools with parents' provision of support. Educational implications included the importance of educating for diversity in learning, the importance of academic assessments integrated with pedagogy, distinguishing early screening and diagnosis, and systemizing early screening of students' strengths and challenges.

Lay Summary

Based upon Vygotsky's sociocultural theory, this generic qualitative study examined the experience of learning disabilities. Forty interviews with high school students and their parents, both separately and together, were used to examine their experiences of and perspectives on learning disabilities, including students' challenges and strengths. Five themes were identified: identifying difficulties in learning; "testing" to diagnose a disability; searching for alternative learning settings; learning and teaching including accommodations, beliefs, expectations, teachers' preparation and deficit thinking; and students' strengths and challenges.

The conclusions highlighted that without early identification of students' strengths and challenges students felt unnoticed and embarrassed by their difficulties; the diagnosis did not seem to inform teaching and learning; students benefited from collaborative relationships with teachers and peers; and with parents' provision of supports students experienced academic successes. Educational implications included promoting the importance of diversity in education and the early screening of students' strengths and challenges.

Preface

This dissertation is an original, independent, and unpublished work by the author, Hadas Av-Gay. All projects and associated methods were approved by the University of British Columbia's Behavioural Research Ethics Board (certificate #H15-02436 issued on February 23rd 2016, and amendment certification #H15-02436-A001 on October 5th 2016).

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Dedication

*I dedicate this work to learners of all ages who are:
Striving to perceive strengths when deficits show up,
Investing resources for future growth while stumbling on present obstacles,
Imagining bridging for possibilities,
Deconstructing existing old structures of learning and teaching,
Constructing new structures of meaningful
Learning with Healthy Living and Loving relationships.*

Chapter 1: Introduction

This study was inspired by my appreciation for students' subtle yet meaningful social, emotional, and cultural contexts that they and their parents shared with me during the learning disability diagnosis assessments I conducted as a school psychologist. During the assessment meetings, we discussed a whole spectrum of influences on their learning. Although these influences were included in the developmental history of the assessment, they were not considered in the final numerical decision of diagnosis. At the time, the exclusion of context in the final diagnosis decision seemed to suggest a decontextualized view of students' assessment and an area that merited further exploration that includes students' contexts.

The purpose of this study was to investigate the perspectives and experiences of students with a learning disability diagnosis, as well as the perspectives of their parents, through the lens of sociocultural theory. This approach emphasizes the dynamics between the individual and social processes of learning and how this relationship can lead to development (Daniels, 2001, 2014; Gindis, 1995, 1999, 2003; Vadeboncoeur, 2017; John-Steiner & Mahn, 1996; Vygotsky, 1993, 1998, 2011; Wertsch, 1985). The sociocultural view of the processes of learning may capture a richer and more accurate picture of the phenomenon of having a learning disability diagnosis compared to only interpreting tests scores of cognitive assessment in isolation of their contexts.

Interpreting lived experiences of students and parents in their sociocultural contexts may help to inform how existing educational processes in BC could be improved. Moreover, discussing aspects of lived experiences, relevant literature, and key elements of BC educational policy may help to pinpoint corroborations or contradictions in current practices and educational responses to students with a learning disability diagnosis (Daniels, 2001).

This introduction chapter includes seven sections. The first section reviews the British Columbia (BC) Ministry of Education definition of learning disabilities as part of the context relevant to the students who participated in this study. The second section is an introduction to critique of approaches to learning disability diagnosis practices consistent with the quantitative approaches to learning abilities. The third section is an introduction to the sociocultural theory framing this study. The fourth section describes the statement of the problem. The fifth section presents the purpose of the study and the research questions. The sixth section introduces the research methodology. The chapter ends with an overview of the dissertation.

1.1. Definition of Learning Disabilities in British Columbia

In this section, first, I provide the specific context pertaining to participants in this study and second, I present the prevalence of learning difficulties within the larger context in Canada and then definition of learning disabilities in context of the BC policy relevant for the diagnosis of learning disabilities. Regarding the specific context, students participating in this study attended public or private high schools in Grades 8 to 12, and had a diagnosis of a learning disability that was obtained through a process of a psychoeducational assessment conducted by a private or school psychologist. Participants who were diagnosed with learning disabilities were assigned the classification of the letter code Q indicating learning disabilities and eligibility for an Individual Education Plan (IEP). Their IEP included the accommodations and remedial supports they were eligible to receive in their schools.

Within the larger context, there is variability in the definitions of learning disabilities and interventions for students across Canadian provinces and territories (Kozey & Siegel, 2008). According to Statistic Canada (Government of Canada, 2018, para. 2), in 2006, 2.5% of Canadians aged 15 years and older and 3.2% of all children aged 5 to 14 indicated to have

learning limitation that was defined as resulting from a variety of causes such as, attention, hyperactivity, or dyslexia.

Pertaining to the participants of this study, learning disabilities are a classification used to diagnose students who have difficulties in meeting standard academic expectations. The definition of learning disabilities, according to the Learning Disabilities Association of Canada is:

Learning Disabilities refer to a number of disorders which may affect the acquisition, organization, retention, and understanding or use of verbal or nonverbal information.

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 deficiency. (Learning Disabilities Association of Canada. Official Definition of Learning Disabilities, 2016, para. 1)

The BC Ministry of Education adapted this definition and included it in a policy document discussing learning disabilities titled, *British Columbia Ministry of Education Special Education Services: A Manual of Policies, Procedures and Guidelines, section E.3 Learning Disabilities* (British Columbia Ministry of Education, 2016, p. 47-52).

This general definition of learning disabilities is an umbrella term that includes a variety of learning difficulties students may experience in school. These learning disabilities encompass one or more of several specific learning difficulties in reading, writing, mathematics, memory, visual special processing, phonological awareness, processing speed, memory and attention, and possibly other related cognitive abilities (Kozey & Siegel, 2008). The qualities of each one of these difficulties are generally meant to be the foundation for diagnosis and treatment intervention related to the specific learning disability (Flanagan, Fiorello, & Ortiz, 2010).

Instead of a singular definition, four categories of learning disabilities have been identified and documented by the Learning Disabilities Association of Canada. The four categories of learning disabilities have been defined as: Dyslexia, Dyscalculia, Dysgraphia, and Dyspraxia (Learning Disabilities Associations of Canada, 2015). Dyslexia is characterized as a language processing disability that creates difficulties in reading, writing, and spelling. Dyscalculia has been defined as a mathematics processing disability that creates difficulties in computation, remembering math facts, concepts of time, money, and understanding other math concepts. Dysgraphia is associated with challenges in written expression. Students may have difficulties with handwriting, spelling, organizing and expressing ideas on paper. Dyspraxia has been defined as a disability in fine motor skills that creates difficulties in coordination and manual dexterity. Although the nuances and complexities of how to define, identify, and diagnose learning disabilities are outside of the purpose of this study, these are examples of profiles of “disability” that have been constructed as a way of understanding and supporting individual differences in learning.

1.2. Introduction to a Critique of Approaches to Learning Disabilities

Contemporary literature on learning disabilities includes research by scholars who focus on defining students’ specific cognitive processing to identify specific weaknesses and strengths through the use of standardized assessments of cognitive abilities (e.g., Hale et al., 2006). For example, Shaywitz, Gruen, and Shaywitz (2007) reported that their advanced research on dyslexia was approached from a traditional quantitative method. The BC approach to the diagnosis of learning disabilities tends to be also consistent with a quantitative approach to examining students’ learning abilities (e.g., Decker, Hale & Flanagan, 2013) than with sociocultural theory (Valencia, 1997, 2010; Varenne & McDermott, 1999; Vygotsky, 1993).

This distinction is based on several differences across practices. First, current diagnostic practices in BC appear as if they are based on the assumption that a deficit exists within the individual student alone (Baglieri, Valle, Connor, & Gallagher, 2011). Barber (2011) explained that, “the medical model of disability proposes that disability rests within the individual person and that the individual must change in order to fit into and be acceptable to society” (p. 228). Further, Dudley-Marling, and Paugh (2010) argued that associating learning failures within students and not within the school context, risks locating the responsibility for failure in the individual alone with no sufficient attention to contextual aspects. In relation to literacy, Lesaux, Vukovic, Hertzman, and Siegel (2008) argued that focusing on the child alone may lead to the neglect of positive or negative contextual influences on students with learning difficulties that have an effect on their successes in school. Critically, Vygotsky described this medical notion of diagnosis as follows:

They must take into account the compensatory processes in a child’s development and behavior, which substitute for, supersede, and overarch the defect. Just as the patient—and not the disease—is important for modern medicine, so the child burdened with the defect—not the defect in and of itself—becomes the focus of concern for defectology (Vygotsky, 1993, p. 32).

Vygotsky argued that focusing on these measured neurological cognitive differences—perceived solely as within the individual—as separate from their social and cultural contexts presents limitations on educational supports for students’ differences.

Second, deficits defined as learning disabilities are identified by experts who are school psychologists using sound scientific cognitive assessments (Shaywitz et al., 2007). This notion of diagnosis is in accordance with Stanovich’s (1989) description of the intention to objectively measure cognitive abilities within the student to find the “glitch” (p. 487) that prevents students

from performing academically. Although Flanagan, Fiorello and Ortiz, (2010) argued that this specific identification may support the choice of instruction, accommodations, and compensation. However, according to sociocultural theory the whole person and their context need to be included. Vygotsky distinguished between the identified deficit and the whole child, suggesting that it is important to account for how the child compensates for difficulties beyond just studying the difficulties.

Third, students' cognitive abilities are measured quantitatively and compared with normative range for age-related development that is considered to be universal and lacks the ecological accuracy reflected in academic performance on class assignments (Francis et al., 2005). Vygotsky (1993) noted, over seven decades ago, that when testing students with disabilities, "A purely arithmetical conception of a handicapped condition is characteristic of an obsolete, old-school defectology. Reaction against this quantitative approach to all theoretical and practical problems is the most important characteristic of modern defectology" (Vygotsky, 1993, p. 30).

1.3. Introduction to Vygotsky's Sociocultural Theory

The theoretical framework for this study is based on Vygotsky's sociocultural theory on learning and development. Vygotsky's work marked the connectedness between societal sociocultural processes and individual's psychological functions, as articulated by Gindis, "Vygotsky considered learning as a shared/joint process in a responsive social context" (1999, p. 32). Vygotsky's writings, based empirically in the domain of special education, were translated from Russian to English into the volume of "The Fundamentals of Defectology" (Vygotsky, 1993). Vygotsky's translated writing includes terms that are considered to be derogatory in our day and time. Gindis (1999) noted that about 80 years ago the terms: defectology, abnormality, handicapped, and retardation, referred to the study of defects or

disabilities, while, contemporary definitions of learning disabilities were unknown in Russia at the time of Vygotsky. Nevertheless, Vygotsky challenged the approach of focusing on diagnosis and syndromes rather than the whole person. Although these terms are incongruent to our time, “Vygotsky’s theoretical and methodological finding is the most powerful single source of professional inspiration for current and coming generations of special education professionals” (Gindis, 1999, p. 33).

Wertsch (1985) noted three interrelated themes in Vygotsky’s theoretical approach. The first theme is that examining processes of development needs to involve a search for explanations beyond description of behaviours in order to “understand inner workings and causal dynamics” (p. 18). Vygotsky argued that a single set of principles explaining the development of an individual, for example, biological or organic origin – ontological, is not sufficient. Looking at several different kinds of development – genetic domains – helps to account for multiple forces shaping development. Vygotsky (Wertsch, 1985) noted four genetic domains or origins of human psychological functioning required to examine learning and development: the first is an individual developmental history (ontogenesis); the second is evolutionary development (phylogenesis); the third is sociocultural history, including each culture’s use of tools and speech; and the fourth is specific developmental changes (microgenetic). A holistic understanding of human psychological functioning includes these four origins across contexts and phases of development. Relying on one domain, for example, ontogenesis, by measuring cognitive abilities as genetically inherited and, thus, possibly determinant of future learning and development, provides only a partial picture (Wertsch, 1985).

The second theme reflects Vygotsky’s argument that human beings are predominantly social and that the social sphere is primary and the individual sphere is secondary. Our sociality enables development from natural to cultural, or from elementary to higher psychological

functions. Vygotsky emphasized parent-child relations and teacher-student relations as central for learning and development. Social exchanges that involve communicating through speech and other forms of meaning making mediate learning and development and, thus, are central in learning contexts such as schools (Wertsch, 1985).

The third theme articulated by Vygotsky is that psychological processes transform and are transformed by the cultural tools that mediate experience. Therefore, understanding students' learning requires an examination of the cultural tools they have accessed (Wertsch, 1985). Considering the availability and use of cultural tools is one key to examining how students' psychological functioning is tied to cultural, institutional, and historical contexts since these contexts shape and are shaped by individuals (Vadeboncoeur, 2017; Wertsch, 1985).

Sociocultural theory emphasizes the interdependence between individuals (e.g., students, parents, and teachers) and their relationships with historical, social, and cultural processes of learning that lead to development (Daniels, 2001, 2014; John-Steiner & Mahn, 1996; Kozulin 2002; Vadeboncoeur, 2017; Vygotsky, 1993, 1998, 2011; Wertsch, 1985). This interdependence of the individual and social environment can be exemplified in the holistic view of the student-teacher relationship in school: a dynamic relationship in which students and teachers are both learning and teaching while showing care, responsiveness to one another's needs and interests, and ideally, trusting in the learning and teaching process (Vadeboncoeur, 2017). As noted by Vadeboncoeur (2017) "Vygotsky's holistic approach to this relationship is emphasized in the Russian word, *obuchenie*, which is translated as "learning and teaching" and joins the two processes as inseparable" (p. 15). Learning and teaching as one entity includes the exchange of social, emotional, and cognitive processes between students and teachers (Vadeboncoeur, 2017). On a side note, similarly, the root of the words *learning* and *teaching* in Hebrew is the same root, also showing a unity of learning and teaching.

Central concepts from sociocultural theory that were used to frame the analysis of interviews are briefly introduced here and further discussed in Chapter 2. The first is the sociocultural view on approaches to learning disabilities, including viewing deficits as residing within the child alone, focusing on deficits, and using quantitative measures as the main method to assess learning disabilities. The second is Vygotsky's (1993) argument that the social and cultural context surrounding a student with primary organic disabilities, if reflected back to the individual as limitations, gives rise to secondary disabilities. In an effort to avoid this, Vygotsky (1993, 2011) suggested a strengths-based approach that proved to be effective in improving students' learning outcomes by focusing on potential, ability to compensate for difficulties, and strengths, rather than on deficiencies.

The third area described in Chapter 2 is pedagogy for learning and development of students with learning difficulties. This includes Vygotsky's concept of the Zone of Proximal Development (ZPD), Feuerstein's Mediated Learning Experience (MLE), and Response To Intervention (RTI) suggested for use in schools in BC. The ZPD, a practical way to support students' learning and development, was defined by Vygotsky (2011) as follows:

The ZPD of the child is the distance between the level of his actual development, determined with the help of independently solved tasks, and the level of possible development, defined with the help of tasks solved by the child under the guidance of adults or in cooperation with more intelligent peers. (p. 204)

The ZPD marks the difference between the child's present actual functioning and future possible development, as well as emphasizes the dynamic learning relationship between students and teachers.

An elaborated approach to pedagogy, Mediated Learning Experience (MLE) was developed by Feuerstein who emphasized the brain's capacity for change and development

given mediation by a teacher who attends to students' learning needs through assessments that guide teaching (Feuerstein, Feuerstein, & Falik, 2010). Feuerstein suggested that students might experience a revolutionary development that includes modifiability of cognitive functions that may be unexpected based on current diagnoses (Kozulin, 2002).

The RTI approach to assessment appears to be consistent with sociocultural pedagogy (Kozulin, 2010b) and is an academic assessment method that can inform teaching early in schools for potential development rather than diagnosing students' current difficulties (Lesaux et al., 2008). Identification is linked to providing specific support and collaborating with students when monitoring their academic progress (Fletcher-Janzen & Reynolds, 2008). Kozulin (2009b) emphasized the advantage of curriculum based assessments as it is "carried out by teachers rather than psychologist" (p. 242), as these assessments are based on classroom curriculum rather than on cognitive tests.

1.4. Statement of the Problem

The necessity of considering sociocultural aspects of learning of students with learning difficulties in addition to individual considerations in order to better understand how to support students' learning is emphasized in this study. "Learning disability," as a field of study, includes a vast literature on definitions, identification, diagnoses, and interventions (e.g., Alfonso, Flanagan, & Radwan, 2005; Flanagan, Ortiz, Alfonso, & Mascolo, 2006; Fletcher, Lyon, Fuchs, & Barnes, 2006; Siegel, 1988, 1999; 2013; Vygotsky, 1993). However, there is not one universal definition of learning disabilities in the literature or among Ministries of Education in Canada (Kozey & Siegel, 2008). This problem of variability, inconsistency, and disagreement among experts in the field of learning disabilities demonstrates the complexity of capturing the phenomena of learning disabilities in a single definition, let alone measuring it and requiring teachers to address students' learning needs in the classroom (Fletcher et al.,

2006; Siegel, 1988a, 1988b, 1989, 2012, 2013).

Lloyd, Irwin, and Hertzman (2009), conducted a study in BC schools based on “the most comprehensive population-based databases on early child development in North America” (p. 559). They argued, “A necessary future direction will be to explore the impact of proximal level factors” (p. 600). Inconsistencies in their results led them to conclude the importance of studying the interplay of students’ environments in addition to results of standardized assessments. Moreover, Lesaux et al. (2008) also argued that “research base on reading development is currently limited in its ability to inform the goal of promoting high literacy rates for the population, because the great majority of studies have focused on child-level factors, including language and cognitive skills” (498).

Francis et al. (2005) noted that the problem of school support aiming for remediating deficient abilities within a student and excluding contextual sociocultural influences is “inherent in *any* psychometric approach to the identification of students as having learning disabilities that relies exclusively on observed test scores that represent the end points in a complex system of personal, cognitive, instructional, social, and environmental input” (p. 99). Further, Kozulin (2009a) argued that “one may distinguish between two main approaches to the assessment of human cognitive functions: the psychometric and the sociocultural” (p. 117). Similarly, Connor, Gallagher, and Ferri, (2011) argued for the need to broaden the horizons in research on learning disabilities by expanding the research methodologies beyond the traditional quantitative method. In 2008, they reported that, “75% of all research articles are quantitative, 6% are mixed methods, and 3% are qualitative” (p. 110). Revealing the methodological gap in the research on learning disabilities suggest a higher focus on researching students’ abilities and performance than researching societal influences.

Vygotsky reconciled the well-known nature-nurture debate about whether development is biological or sociocultural by arguing that both influences work in tandem (Wertsch, 1985). Therefore, scholars who use sociocultural theory do not deny the biological origin of diversity in individual learning, but they also do not attribute students' outcomes solely to the individual biology. As Wertsch (1985) argued, development cannot be reduced to either biological or cultural influences. The problem of not considering the whole child in the diagnosis of and pedagogies for students with learning difficulties was expressed by Siegel (2013) who stated, "I want us to understand individuals with learning disabilities as whole people and to see beyond the problem" (p. ix). A holistic view of the individual was also argued by Gerber (2012) and Siegel (2013) who noted that there are many different variables involved in inter-individual differences, and that it is likely that each individual with learning disabilities will experience diverse developmental outcomes.

Contemporary scholars who use sociocultural theory have argued for the need to examine other aspects affecting students with a learning disability diagnosis. For example, Shifrer (2013) argued that there is a risk in labeling students as it creates a stigma that lowers teachers' and parents' educational expectations of students who are labeled with learning disabilities. Smagorinsky (2012) described a possible consequence of a diagnosis of learning disabilities as a secondary disabilities emerging as a result of deficit thinking (Valencia, 1997, 2010) which defines a biological condition as a lack, or as lesser. Baglieri et al. (2011) stressed that the arbitrary nature of the learning disability diagnosis allows one to be learning disabled in one location but not in another. This judgment, based on criteria that vary by time period and location, questions the meaning of a learning disability diagnosis.

Furthermore, Baglieri et al. (2011) and Lalvani and Broderick (2013) discussed a conceptual distinction between impairment and disability that may have direct implications for

the education of students with a learning disability diagnosis. Impairment, they argued, refers to existing variations in human sensory experience, appearance, or cognitive processing; for example, blindness. A disability is a product of society. That is, learning disabilities are defined by society and assigned to individuals who are not able, from the perspective of those who are able. The conceptualization of impairment as a disability has implications for how resources are allocated, policies are designed, and programs developed to improve the abilities of students with learning difficulties who are assigned a socially constructed notion of disability to their organic impairment. Therefore, the problem addressed in this study is the need to include sociocultural influences to the current focus of research on quantitatively examining child's attributes, in order to better understand the multifaceted phenomenon of learning disability.

1.5. Purpose of this Study and Research Questions

The purpose of this study was to conduct a qualitative exploration of participants' experiences of learning disabilities for the purpose of revealing sociocultural influences on learning disabilities within participants' lived experiences in the BC context. The four research questions driving this study were: 1. How do students describe their experiences of and perspectives on having learning disabilities? 2. How do parents describe their experiences of and perspectives on their child's learning disabilities? 3. How do students describe their strengths and challenges in relation to their academic experiences in school? 4. How do parents describe their child's strengths and challenges in relation to their academic experiences in school?

1.6. Introduction to the Methodology

To address the research questions, the qualitative methodology in this study included interviewing eight student-parent dyads about their experiences and perspectives of learning disabilities in the contexts of their school, family, and friends. Participants in this study were recruited based on the snowball sampling method (Cohen & Arieli, 2011). Students and parents

were interviewed separately twice and once together for a total of 40 interviews. Audio-recordings were transcribed and transcripts were shared with each participant prior to the next interview to allow them to review ideas and further participate in continued dialogue. Thematic analysis, based on Braun and Clarke (2006), was an iterative process that included becoming familiar with the data, creating preliminary codes, and formulating themes that reflect patterns, trends, and influences that shaped participants experiences and interpreting the meaning of their experience of their learning difficulties and learning disability diagnosis.

1.7. Organization of the Dissertation

This dissertation continues next with Chapter 2, a literature review. Chapter 3 opens with my research position and presents the methodology, participants, and the interviews accounts. Chapter 4 describes three themes: identifying difficulties in learning, testing to diagnose a disability, and searching for alternative learning settings. Chapter 5 describes the fourth theme, learning and teaching. Chapter 6 describes the fifth theme, students' strengths and challenges. In Chapter 7 I provide an analysis. Chapter 8 presents conclusions and implications.

Chapter 2: Theoretical Framework and Literature Review

There are several approaches to the study of learning disabilities (Butler, 2004). One approach is research on standardized assessments for identifying specific academic and cognitive disabilities (e.g., Decker et al., 2013; Fletcher, Reid Lyon, Fuchs, & Barnes, 2007). This research focuses on examining the validity and reliability of standardized assessments in explaining specific cognitive and academic abilities. In particular, Catell-Horn-Carroll (CHC) is a theory that promises to hold significance in the identification of specific learning disability. Application of this theory based on its expansive research base improved measurements and interpretations of students' cognitive and academic strengths and weaknesses (Flanagan et al., 2010). Moreover, according to this research, these improved interpretations, when guided by the CHC theory may illuminate reasons for the degree of the effectiveness of instruction, what alternative instructions would be most effective, and what compensatory strategies and accommodations might also be more effective for the student who experiences learning difficulties (Flanagan et al., 2010). Related quantitative research focuses also on identifying specific abilities and how to calculate test scores in formulas to determine a learning disability diagnosis that are firmly grounded in data (e.g., Flanagan & Harrison, 2005; Flanagan, Ortiz, Alfonso, & Mascolo, 2006; McGrew & Keith, 1997; Newton & McGrew, 2010).

A second approach is longitudinal follow-up studies using standardized assessments to understand the change over time of students' achievements related to difficulties or learning disabilities. This approach focuses on identification of and interventions on specific academic tasks, for example; reading fluency, phonological awareness, written output, or math problem solving (e.g., Chiappe, Siegel, & Woolley, 2002; Goldberg, Higgins, Raskind, & Herman, 2003; Raskind, Goldberg, Higgins, & Herman, 1999; Siegel, 1988a, 1988b, 1989, 1999, 2012, 2013; Sprenger-Charolles, Siegel, Bechenec, & Serniclaes, 2003).

A third approach to research uses qualitative methods to focus on perspectives of adults with learning disabilities (e.g., Gerber & Reiff, 1991; Gerber, 1992; Shessel, 1995, Shessel & Reiff, 1999). For example, Shessel (1995), who interviewed adults with learning disabilities, reported various negative impacts of learning disabilities on their lives, such as: prejudice and discrimination related to disclosure of their learning disabilities; academic problems compounded by anxiety; social isolation as a side effect of being different; being rejected by their parents and sometimes in both the home and with friends; and fear of looking stupid leading to anxiety and negative self concept. Shessel (1995) reported that individuals with learning disabilities developed positive qualities such as being creative, loving, caring, kind, and sensitive to others. These examples of different research perspectives provided different “windows” into how researchers in the world approached the experience of learning disabilities.

The rest of this chapter presents a literature review of Vygotsky’s (1997, 1998, 1993, 2011) sociocultural theory extended by Wertsch (1985), Gindis (1995, 1999, 2003), Feuerstein (2010), Kozulin (2002, 2009a, 2009b, 2010a, 2010b) Daniels (2001, 2014), and Vadeboncoeur, (2017). The review begins, first, with the sociocultural view on approaches to learning disabilities that investigate individual development by itself while not inquiring sufficiently into students’ personal experiences and supports, as well as the social and cultural contributions to their learning and development. These individualistic approaches are criticized also for attempting to classify learning trends through standardized assessments despite individuals’ varied contexts and cultural backgrounds. This may lead to deficit thinking and a focus on quantitative diagnostic approaches. These critiques apply to current practices and regulations pertaining to learning disabilities in general and particularly in BC. The second section reviews Vygotsky’s theory and views on learning and disabilities. The third section reviews practical examples of learning and teachings pedagogies for students with learning

difficulties.

2.1. A Sociocultural View on Approaches to Learning Disabilities

In this section, I begin by briefly describing the historical origin of approaching learning difficulties through an individualistic lens. I then continue with a discussion of Vygotsky's argument for advancing a new model. This argument includes: first, that disability is not only natural within the child, it is also social; second, there are benefits of focusing on the whole student including their strengths; and third, there are concerns about the quantitative method of diagnosing learning disabilities relevant to current practices of using measures of cognitive abilities to diagnose learning disabilities.

As early as the 1800s, psychologists, physicians, and educators who explored ways to support individuals who were intellectually or emotionally different, labeled these individuals as *feeble-minded* (Trent, Artiles, & Englert, 1998). The assumption that individuals with disabilities were not educable led to harsh treatment and even institutionalization for a life in hospitals or asylums away from mainstream society (Evans, 2008). Later studies on brain injuries led researchers to conclude that there were two different types of delays in functioning. One type was due to familial environmental conditions and, thus, it was concluded that functioning could be improved by educational interventions. The other type of delay, due to neurological conditions, was assumed to be incurable by educational interventions (Trent et al., 1998). Although the role of familial and environmental influences on development was recognized, to this day, the focus has been on examining the individual with less consideration of environmental characteristics influencing learning. Research on learning and the environment continued to advance, however, it was not applied to change the practice of focusing on measures of cognitive abilities for diagnosis of students with learning difficulties (Colker, 2012).

2.1.1. Within the Student Disability

Vygotsky (1993) emphasized the limitations of examining students with learning disabilities as if the problem resided within them assuming that the responsibility for learning lies mostly on the individual's responsiveness to standard teaching. Instead, sociocultural theory includes the role of social and cultural supports, and students' difficulties, strengths, and abilities to compensate for differences with teacher's support. Vygotsky's genetic law of cultural development highlights social relations between people as the source for the development of an individual's higher functions:

Every function in the cultural development of the child appears on the stage twice, in two planes, first, the social, then the psychological, first between people as an intermental category, then within the child as a intramental category. This pertains equally to voluntary attention, to logical memory, to the formation of concepts, and to the development of will. (Vygotsky, 1997, p. 106)

The argument that learning is not only within the child—that, “everything that is internal in higher mental functions was formerly external” (Vygotsky, 1997, p. 103)—is echoed in the statement that “through others we become ourselves” (1997, p. 105) reducing the focus on the child in isolation from his/her environment. Kozulin (2002) emphasized that perceiving individuals' ability to learn as natural, has been challenged theoretically and practically.

Similarly, Torgesen (2002) argued “variety of factors other than cognitive abilities and knowledge” (p. 22) influence development of reading. Therefore, in an effort to include environmental influences on reading, screening of the various skills of reading three times a year is essential to reveal change and fluctuations in students' development. Denton described as false the assumption that “IQ is an invariable capacity for learning related only to within-child characteristics (something unchangeable that you are born with), and that this capacity

can be measured by our IQ tests” (as cited in Siegel, 2012, p. 68). Denton (2012) further described the importance and advantages in implementing RTI in order to ensure that schools provide resources by responding to the various identified learning needs of students. Hence, sociocultural theory—emphasizes students’ access to educational resources in addition to their “natural” abilities—includes a critique of the individualistic assumption that learning disabilities reside inside the individual (Baglieri et al., 2011).

2.1.2. Attention on Deficit

In addition to emphasizing the contribution of social context for learning and development, Vygotsky also argued against focusing on the deficits of students:

All psychological methods used thus far for studying the behavior of the normal and the abnormal child, regardless of the great variety and differences that exist between them, have one common characteristic that links them in a certain respect. This characteristic is the negative description of the child that results from existing methods. All the methods speak of what the child does not have, what the child lacks in comparison with the adult, and what the abnormal child lacks as compared to the normal child. We have before us always a negative picture of the child. Such a picture tells us nothing about the positive uniqueness that distinguishes the child from the adult and the abnormal child from the normal child. (Vygotsky, 1997, p. 98)

Deficit thinking, part of the foundation of individualistic educational policies and practices, then and now, aims to support students by focusing on identifying weaknesses without equally capitalizing on their strengths, ability to compensate, and future development.

While not denying that organic differences can create difficulties, Vygotsky (1993) emphasized searching for strengths in the education of all individuals and particularly those with identified organic impairments, including what was named at that time mental retardation:

It is impossible to explain mental retardation on the bases of purely negative definition. It is impossible to be guided only by what a given child lacks, by what he is not. On the contrary, it is necessary to have some conception, even if the most vague understanding, of what his capabilities are and what he represents. (p. 123)

Educators' lack of self awareness of possibly being locked in perceiving deficits may set limits to students' potential to learn. In order for educators to notice students' strengths and learning growth teachers' awareness of their own perceptions of deficits is key.

The idea that educators and society in general perceive learning disabilities based on political, social, cultural notions of deficits was demonstrated by Dudley-Marling (2004). This study analyzed a dialogue between a teacher and special education student to demonstrate how the perpetuation of deficit thinking was evident in language used by teachers while interacting with students. Similarly, Dudley-Marling and Paugh (2010) reported on a one year-long inquiry with four teachers of special education students. Their goal was to shift teachers' attention from talking about students' struggles to talking about their strengths. Although this met with limited success, teachers appeared to develop an awareness of their tendency to use deficit language to describe students.

Vygotsky emphasized that in addition to recognizing students' biological attributes, a holistic qualitative view of students' culture, history, interests, strengths, challenges, and ability to compensate is crucial:

The position of modern defectology is the following: Any defect creates stimuli for compensatory process. Therefore, defectologists cannot limit their dynamic study of a handicapped child to determining the degree and severity of the deficiency. Without fail, they [educators] must take into account the compensatory processes in a child's development and behavior, which substitute for, supersede, and overarch the defect. Just

as the patient—and not the disease—is important for modern medicine, so the child burdened with the defect—not the defect in and of itself—becomes the focus of concern for defectology. Tuberculosis, for example, is diagnosed not only by the stage and severity of the illness, but also by the physical reaction to the disease, by the degree to which the process is or not compensated for. Thus, the child’s physical and psychological reaction to the handicap is the central and basic problem—indeed, the sole reality—with which defectology deals. (Vygotsky, 1993, p. 32)

Vygotsky argued that examining the difference or the impairment is not sufficient, rather, the whole person who has the difference needs to be examined in relation to how they compensate and respond to supports because development, he argued, depends on access to opportunities presented through social relationships.

2.1.3. Quantitative Method for the Diagnosis of Learning Disabilities

Vygotsky’s critique of quantitative assessments of deficits does not imply a denial of the need to identify challenges in order to acutely support students. He described the reliance on quantitative testing of students’ cognitive abilities as an old method that was proven wrong by modern methods: “The struggle between these two attitudes toward defectology— between two antithetical ideas, two principles—is the burning issue in that positive crisis which this area of scientific knowledge is presently undergoing” (Vygotsky, 1993, p. 30). Vygotsky (1993) referred to arithmetical conception of handicap as the scientific method of identifying abilities through standardized testing to determine the static state of students’ abilities. He further argued against symptomatic diagnoses:

If we limit ourselves only to determining and measuring symptoms of development, we will never be able to go beyond the limits of a purely empirical establishment of what is obvious to persons who just observe the child. In the best case, we will be able only to

increase precision of the symptoms and confirm them with measurement. But we can never explain the phenomena we observe in the development of the child nor predict the further course of development, nor indicate what kind of measures of a practical nature must be applied with respect to the child. This kind of diagnosis of development, fruitless with respect to explanation, prognosis, and practical applications can be compared only to those medical diagnoses, that doctors made at the time when symptomatic medicine prevailed. (Vygotsky, 1998, p. 205)

Testing may verify what is already known, but its capacity to explain the origin and nuances of the phenomenon and how best to support the learner is limited. Emphasizing the valuable information an educator may be exposed to when observing a child compared to quantitatively measuring their performances is echoed by Shaywitz et al. (2007): “listening to a struggling reader attempt to pronounce each word leaves no doubt about the child’s reading difficulty” (p. 618). Moreover, noting particular errors while teaching may inform instruction far more than a standard score on a quantitative measure.

Vygotsky (1998) described that the value of standardized testing as “essentially empty since the investigator adds nothing new to what he knew from observations of the patient himself and plays back to the patient his own complaints, supplying them with scientific labels” (p. 205). Newton and McGrew (2010) articulated a few questions regarding the usefulness of the vast research on cognitive and academic abilities to the field of learning disability:

Have we simply become more sophisticated in the range of measures and tools used to “sink shafts at more critical points” in the mind (. . .) which, although important for understanding and studying human individual differences, fails to improve diagnosis, classification, and instruction in education?” (p. 631)

They included results of 25 years of research of mapping cognitive and related academic

abilities that if used based on the CHC theory is argued to promise usefulness.

As evident in the literature, the majority of current educational school practices in Canada and United States support students with learning disabilities by predominantly examining their cognitive and academic abilities and diagnosing learning disabilities for the purpose of understanding and improving their academic performance (Flanagan et al., 2005). Colker (2012) argued that the field of learning disabilities made “little progress since a member of the US Congress declared in 1975 that no one really knows what a learning disability is” (p. 105). Colker (2012) suggested that the way out of what she described as *the learning disability mess* is “not to develop better diagnostic instruments for evaluating the existence of learning disabilities,” but to “ask why we have such an overemphasis on whether students meet a definition of ‘learning disability’” (p. 105). Rather than asking how best to diagnose learning disabilities some scholars suggested examining the rationale behind the current model of diagnosis. For example, Evans (2008) suggested that a seemingly justified rationale to diagnose learning disabilities based on standardized measures of cognitive abilities is reflected in theories of disability with a focus on deficits. Similarly, Björnsdóttir and Traustadóttir (2010) challenged the focus on the individual in the identification of learning disabilities. Based on six life histories and four case studies of young adults with learning difficulties, they concluded that it is critical to investigate individual everyday experiences in context with societal macro level patterns that may lead to oppression and exclusion.

Finally, Vygotsky (1993) argued that educators need to consider the unique interweaving of various factors, and reveal the specific dynamic processes of these factors, rather than attempting to represent learning and development mostly through statistical analyses:

Theoretically, psychology has long since rejected the idea that development of the child is a purely quantitative process. All agree that here we have a process that is much more

complex, a process not exhausted by quantitative changes alone. But in practice, psychology is confronted with having to disclose this complex process of development in all its real completeness and to detect all those qualitative changes and transformations that refashion child development. (1997, p. 98)

Vygotsky (1993) clarified that learning and development must be examined holistically based on an individual's developmental history and behaviour, and "not in accordance with isolated symptoms and defects" (p. 174). Similarly Kozulin (2009b) discussed the advantages of dynamic assessment notion of RTI method, that aim at individualizing pedagogy for students based on an ongoing assessment, rather than on the "one time established discrepancy between the child's IQ and his or her classroom performance" (p. 243).

2.1.4. Current Practices of Diagnosis of Learning Disabilities

In 1965, Barbara Bateman developed the concept of the discrepancy model, emphasizing the gap between intellectual potential, assumed to be measured through IQ tests, and the actual level of performance measured by achievement tests (Colker, 2012). This model was disputed and shown to be unnecessary for identifying students' learning disabilities (Siegel, 1988a, 1988b, 1989, 2012), and yet it is still prevalent in BC and other locations to identify learning disabilities and to guide pedagogy. Furthermore, Flanagan et al. (2010) noted based on their 25 years of research that "the traditional ability-achievement discrepancy approach has been found to be invalid as the sole indicator of criterion for SLD identification" (p. 741).

Academic expectations and norms set out for students of a particular age are applied to all students based on a range of scores, or cut-off scores, regardless of quality of teaching, individualized response to teaching, background, and educational history. Thus, students are compared against a range for normal development that is considered to be universal (Francis et al., 2005). The linking of cognitive testing scores as latent ability related to academic

performance serves in generalizing interventions for students based on tests results (McDermott, 1996; Newton & McGrew, 2010). Students who cannot meet the age group norm or cut-off scores set as academic expectations are likely to be identified with learning deficits (Valencia, 1997, 2010; Varenne & McDermott, 1999). Although there is no argument that there is diversity in students' performance in school, the age group norm, range of scores, and cut-off scores that set the specific expectations and diagnostics are argued to be arbitrary and to change over time, particularly with instruction (Francis et al., 2005; Siegel, 2012; Kozulin, 2010b).

Alongside scholars who object to the emphasis on diagnosis through standardized assessment, are scholars like, Anastasiou and Kauffman (2011) who argued that ignoring the importance of identifying and diagnosing specific academic skills will not help special education. They claimed that rethinking the model of disability may: “contribute not only to a zealous pursuit of inclusion at the expense of effective instruction but also to the demise of special education” (p. 368). In other words, their concern is that if students are not noticed for their learning needs, not only teachers will not know what specific skills to teach students, but also they may feel neglected. Furthermore, there are numerous examples of students with learning disabilities who claimed that the diagnosis of learning disability was a relief for them and for their parents. Before the diagnosis they felt confused and could not make sense of their difficulties. After receiving a diagnosis, some students felt that they had a reason for their difficulty and frustration (Siegel, 2013). The uncertainty of students about their learning difficulties was resolved with their learning disability diagnosis. However, Kozulin (2009b, 2010b) suggested curriculum based early screening done by teachers to inform their students of their learning needs as well as their potential to learn as an alternative to a one-time diagnosis. Siegel (2012) further argued that beyond diagnosis students need pedagogy, “the LD field has failed to place any emphasis on early identification and intervention” (p. 64).

2.1.5. Studies Suggesting Sociocultural Processes

The following studies examined issues relating to learning disabilities and included in their findings recommendations to consider sociocultural processes of learning and development in order to better understand and interpret the quantitative results of their studies.

A study conducted by Lloyd et al. (2009) “utilised data contained in one of the most comprehensive population-based databases on early child development in North America” (p. 559). They examined early trajectories of students with special needs and found unpredicted variation in their progress. They indicated:

The most important overarching observation from this study is that there is tremendous variation in school readiness, school success, (. . .) for children with special needs. Thus, a special needs designation does not necessarily ‘fate’ a child to a developmental trajectory different from other children. (Lloyd et al., 2009, p. 559)

This insight into the early educational trajectories of children with special needs suggests that the determinants of success for children with special needs are not universal, and thus, cannot be used as categories, or be represented in range of standard scores. Furthermore, they concluded that what might have also a strong influence of trajectories of students in addition to their early assessment results, was the proximal–level factors at the child or family level. These proximal variables, they concluded, are likely to describe the more intimate environments in which children are reared and have significant impact on their learning and development.

Therefore, they suggested that a necessary future direction would be to explore the impact of proximal level factors (e.g., family socio-economic status, family structure, special health services/ interventions) on the trajectories of children with special needs in addition to early instruction (Lloyd et al., 2009). This study concluded that in addition to the use of sound and scientific quantitative examination of students’ abilities within the BC province, an

examination of proximal factors is also needed to better explain students' learning and development. Included within proximal factors is early instructional support in school.

Another study by D'Angiulli, Siegel, and Maggi (2004), examined the socioeconomic status as a proximal influence on reading. Their study that included 30 schools in BC, provided evidence of two sociocultural relevant influences: First, that at an early age before providing literacy intensive program, students' low performance on word-reading was associated with the proximal factor of low socioeconomic status. Second, the literacy intensive program as a proximal factor was reported to reduce the negative influence of the low socioeconomic status on word-reading development.

Shaywitz et al. (2007) reviewed quantitative research in areas, such as, epidemiology, neurobiology, genetics, and cognitive influences, on dyslexia—a reading disorder. Several sociocultural processes critical to learning and development of students were noted in this study. First, tests of intelligence are relatively poor predictors of later reading difficulties. Second, by using the academic measures (with no cognitive measures), phonologic abilities can be evaluated beginning at about age of four years. Third, “[t]he importance of such early assessments is that they can identify at-risk children early on so that these boys and girls can be provided with the highly effective, evidence-based reading interventions” (p. 617). Fourth, early remediation may even prevent reading difficulties in primary school-aged children. Fifth, effective reading intervention influences neural systems in the brain. Finally, they recognized sociocultural influences on development by describing one group as being, “doubly disadvantaged in being exposed to a less rich language environment at home and then less effective reading instruction at school” (p. 614). These findings support the need for research using theories consistent with sociocultural theory.

Finally, Lesaux et al. (2007) research findings demonstrated the interrelation of early

literacy with contextual influences. They recognized that students' reading ability may be one influence among other factors and, thus, context matter to educational achievement. Therefore, they suggested that early assessments and effective pedagogy must include consideration of the proximal influences that have an influence on reading development of students in a particular community. Context relevant interventions may be potentially preventative and effective above and beyond the function of tests scores that reflects existing skills level of students.

2.1.6. Cognitive Assessment of Current Performance

The practice in BC schools for diagnosing students' learning disabilities is based on standardized testing of cognitive (and academic) abilities conducted by a psychologist.

Vygotsky (1993, 2011) and others (Feuerstein et al., 2010; Karpov & Tzuriel, 2009; Kozulin, 2009b, 2010b; Siegel, 2012) argued that instead of using standardized cognitive testing to reveal performances reflecting a static snapshot of abilities, future potential for learning and developing should be assessed by investing more in teaching or in dynamic assessment that focuses on students' strengths and potential. This is particularly significant because the “[a]bility to benefit from remediation is not predicted by IQ scores” (Siegel, 2012, p. 68). Similarly, Bryan (1989) argued that IQ scores are not static: “On the basis of attributional research, treating intelligence as a static characteristic may well serve our children poorly by reinforcing their maladaptive notions about themselves” (p. 481), instead of promoting positive change and teachings based on a future growth potential.

The cognitive measures, as argued by Siegel (2012), “measure, for the most part, what a child has learned, not what he or she is capable of doing in the future” (p. 67). Like Siegel, Vygotsky (1993, 2011) argued that understanding any student with a learning difference based on their performances on standardized cognitive tests reflects only their already matured functioning. According to Vygotsky (1993), what the child has learned depends on mediation of

contextual influences that are not incorporated in the measure that generated the scores to determine learning disabilities. Future ability of students is more accurately estimated if contexts are factored in the process of determinations of learning disabilities in a qualitative manner that aims at measuring learning potential (Vygotsky, 1993, 2011).

Vygotsky (1993) and Kozulin (2010a) argued that reliance on intelligence testing risks not seeing the person's potential that may lie in one's future through contextual mediations, as well as not seeing one's strengths that are not measured by standardized tests or any other test for that matter. Additionally, focusing on data collected as test scores may ignore the extent to which a student's environment plays a role in shaping their performance prior to testing and how it can be modified in the future. In order to examine the intrapsychological level, the interpsychological functioning must also be investigated (Wertsch, 1985). Educators mediate learning, thus, they have the capacity to help students avoid the negative identification with their challenges demonstrated in cognitive assessment of current abilities (Kozulin, 2010a) by emphasizing strengths and potential to learn (Feuerstein et al., 2010).

2.1.7. Requiring Average Ability for Learning Disabilities Diagnosis

Cognitive average ability is required for a learning disability diagnosis in BC. Siegel argued:

To differentiate people with learning problems from those with serious developmental delay, the professionals specified that someone with learning disabilities had to be of at least average intelligence. The question of what is average is not easy – everyone has a different opinion or cut-off score, below which the individual is considered too stupid to learn to read or do arithmetic. (2012, p. 67)

Siegel (2012) noted two points: first, challenging the arbitrarily use of average range, and second, challenging the requirement of students to be within a range of average in order to qualify for the diagnosis of having a learning disability. Siegel argued, "...do people who get

higher scores on an IQ test really have a greater right to help for their problems with reading or mathematics?” (2012, p. 69). Valencia (1997, 2010) and Varenne and McDermott (1999) also criticized educational decisions that are based on student’s cognitive test scores.

Identification of and pedagogy for students with academic difficulties that are restricted by and rely on scores of standardized cognitive assessments are criticized for several reasons. First, some believe that for academic difficulties, academic assessment is sufficient, more ecological, and accurate (Klassen, 2002; Siegel, 1989, 2012; Stanovich, 1989). Second, cognitive testing is not available to all students who experience learning difficulties, thus, the diagnosis and services that may come with it are not available as well. Third, as noted by Siegel (2012), learning difficulties may produce low scores on cognitive testing:

There is an additional problem in the use of IQ tests with children with learning disabilities. It is a logical paradox to use IQ scores with learning disabled children because most of these children are deficient in one or more of the component skills that are part of these IQ tests and, therefore, their scores on IQ tests will be an underestimate of their competence. (p. 68)

In other words, if students fail to produce average cognitive scores this may be an expression of their academic difficulty, rather than the cause for the academic difficulty. Francis et al. (2005) noted identifying academic difficulties—such as reading fluency, reading comprehension, or spelling—is more useful and accurate than diagnosing students with learning disabilities in general as this is not useful for improving students’ academic performance. Moreover, Torgesen, (2002) summarized 20 years of research in the field of reading in a conclusion he described as a fact, “the early word reading difficulties of children with relatively low general intelligence and verbal ability are associated with the same factors that interfere with early reading growth in children who have general intelligence in the

average range” (p. 12). In other words, early teaching of the needed skill for reading may be effective for a range of students with a range of cognitive ability level (Klassen, 2002).

This requirement of average cognitive ability (BC Ministry of Education, 2016) implies associating learning potential based on current cognitive test results, and thus, offering different services to those who earned average and those who earned low average scores. This is based on the incorrect assumption that students with low average ability are classified differently as they may not benefit from intervention to support their learning, for example, to read (Siegel, 2012).

2.1.8. Response to Intervention

Among those who have argued that academic abilities are sufficient in early identification of learning disabilities are those who support the RTI method (e.g., Fletcher-Janzen & Reynolds, 2008; Kozulin, 2010b; Siegel, 2012). This method of Curriculum Based Assessment (CBA) is a three-tier method designed for screening for identification of students who are at risk of failing academically. Although the RTI is not a method of diagnosing a learning disability, it serves the purpose of early screening and identifying the specific academic strengths and challenges and, thus, needs of students whose screening results fall in the range defined as “at risk”. Catts, Nielsen, Bridges, and Liu, (2016) regarded RTI to be a dynamic assessment that can provide error free estimate of ability that is also culturally and linguistically unbiased, compared to the use of a static cognitive measures.

In the first tier of a school-wide or a class-wide level of universal screening, teachers identify the students who exhibit challenges in a specific academic skill and offer support that targets that skill. If that fails, students then move to be serviced in the second tier. There, students receive intensive and consistent intervention in small groups that is geared towards improving the specific skill. Teachers continue to monitor each student’s progress on the

specific identified skill periodically. In the third tier, those students who did not respond to the second tier of intensive intervention are referred to specialized intervention and/or a psychoeducational assessment is recommended for a diagnosis of learning disabilities (e.g., Fletcher-Janzen & Reynolds, 2008; Siegel, 2012).

The RTI method offers intensive, consistent, and continuous assessment that guides pedagogy for targeting students' deficient skill prior to considering a diagnosis of learning disabilities with psychoeducational assessment (Hale et al., 2006). The RTI method of assessment is argued to be an alternative to cognitive and academic standardized assessments and its focus is more on how students respond to early and ongoing teaching-intervention and less on a diagnosis (Fletcher-Janzen & Reynolds, 2008; Lesaux et al., 2008). Nevertheless, some may argue that the focus on 'within the individual' academic performance is somewhat inconsistent with the sociocultural theory that promotes including social and cultural influences. However, the RTI notion of focusing on how students respond to teaching-intervention is consistent with the design of dynamic assessment in which assessment and teaching is seamless (Feuerstein et al., 2010). In addition, the RTI method includes systemic progress monitoring of students' learning and development that resembles the ZPD. Student-teacher relationships and the ongoing feedback teachers give students for their progress may potentially influence the learning dynamics. Furthermore, Decker et al. (2013) noted: "Best practices would suggest that RTI is useful for prevention of disability and early intervention for children at risk for disability" (p. 309). Finally, they argued that if students do not respond to the curriculum based best practices then, a comprehensive cognitive testing may provide insight about individual needs and interventions to help students succeed. RTI is a systematic method of a class-wide or a school-wide screening. Teachers can implement this screening to

inform pedagogy of each of their students. RTI is an example of early screening of students' academic strengths and challenges for identification of their learning needs.

2.1.9. Early Identification and Mediation

Based on two decades of research, Torgesen (2002), described methods for preventing development of reading difficulties, essentially through early identification of learning difficulties and differentiated instruction. Torgesen (2002) argued that “public education is not as effective as it should be in teaching all children to read” (p. 8). Given the literacy demands in our modern society, individuals with low levels of literacy are at a disadvantage. Bratsch-Hines, Vernon-Feagans, Varghese, and Garwood (2017) pointed out that “effective reading instruction for children who are at risk for reading problems or learning disabilities can mitigate risk, particularly when delivered early, as in kindergarten and first grade” (p. 271). In accordance with Vygotsky's (1993) emphasis on sociability, mediation, student-teacher relationships, and principles of learning and development, as well as the emphasis by Feuerstein et al. (2010) on combining assessment and pedagogy, Torgesen (2002) argued that the only way to meet society's literacy standards is by changing the way we teach reading.

Effective teaching for producing better literacy outcomes includes the allocation of resources for early screening for identification and preventative instruction (Shaywitz et al., 2007). Torgesen (2002) argued that waiting until mid-elementary years to identify children in need of special instruction in reading has potentially negative effects on growth of vocabulary, motivation to read, and utilizing early opportunities for learning. More specifically, readers are fluent because they mastered the skills of accurate phonemic decoding. Therefore, “children who enter first grade low in knowledge about the phonological features of words or who have difficulties processing the phonological features of words are at high risk for difficulties responding to early reading instruction” (Torgesen, 2002, p. 12). Torgesen (2002) argued that

the automaticity of fluent readers may seem as if they are not decoding, however, fluent readers converged the natural and cultural paths of development (Vygotsky, 1993) by mastering the skill of phonological awareness. They may also be able to appropriate the practice of reading as enjoyable in order to learn more vocabulary needed for further development of their reading (Wertsch, 1998). Mastery of phonological awareness—the awareness of the sounds of components of words—is needed prior to recognizing the printed letters; “phonemic awareness is what makes phonics instruction meaningful” (Torgesen, 2002, p. 12). In addition to the low skill level of phonological awareness, another cause for delay in reading development is associated with low socioeconomic background. Nevertheless, both causes require early word reading support, and all students may benefit from class-wide early screening and preventative instruction.

2.2. Vygotsky’s Approach to Learning Disabilities and Development

In this section, I present the key points of Vygotsky’s sociocultural theory pertaining to students with learning disabilities mainly based on Vygotsky’s collected works, *The Fundamentals of Defectology* (Vygotsky, 1993) extended by others such as Wertsch (1985), Gindis (1995, 1999, 2003), Daniels (2001, 2014), and Vadeboncoeur (2017). I begin briefly locating learning disabilities within Vygotskian theory as a social and cultural phenomenon. Second, I describe primary and secondary disabilities. Third, I describe the notion of the importance of addressing differences with strengths, rather than solely working to remediate perceived weaknesses. Fourth, I describe the concept of disability as a difference. Fifth, I describe the natural and cultural paths of development.

In the time and place of Vygotsky (1896-1934, Russia), the term defectology was used to refer to children with biological impairments, such as deafness or hardness of hearing, visual impairment and blindness, mental retardation, and speech/language impairments. Gindis

(2003) argued that Vygotsky's ideas were not initially discussing the exact contemporary definitions of learning disabilities as we may define it nowadays, nevertheless, these innovative, socially just, inclusive, humanitarian, and revolutionary ideas "could serve as a powerful source of professional inspiration for current and coming generations" (p. 202). Gindis (1995, 2003) described that mainstream education has not yet applied elements from Vygotsky's (1993) progressive blueprint of how to reconstruct the social and cultural reality for students with learning difficulties. Although the West may have been inspired by Vygotsky's theory of disontogenesis—the theory of identifying distorted development from a point of strength.

Examining the nature of learning disabilities and how to remediate it has been the goal of most research in this field. Gindis (1995) noted that perceiving disability as a sociocultural developmental phenomenon negates the assumptions that disability is mainly biological and, therefore, remediation is accordingly to cure the deficit within the individual. One of Vygotsky's contributions was that the social implications of the organic or neurological concern are the problem requiring attention for diagnosis and remediation. Flanagan et al. (2010) who argued for use of cognitive and academic measures to explore learning needs, also emphasized the need to take into account, prior to testing, ecological factors that may explain learning difficulties. They included a list of factors such as, school related interruption to learning, home and family related influences, health concerns, sensorimotor limitations, and cultural – language limitations, that if present, an examination of their influence is necessary.

2.2.1. Primary and Secondary Disabilities

Vygotsky (1993) distinguished between primary/organic and secondary disabilities. Secondary disability is "distortions of higher psychological functions due to social factors" (Gindis, 2003, p. 203). Differences become social when the individuals and others perceive them as stigmas indicating deficiencies. An organically originated disability may cause a student's delay in

meeting the academic expectations of his/her age normative level. These delays are secondary as they are acquired through processes of social interactions. These delays may lead to other acquired negative emotional perceptions of the self, and may be more severe and debilitating than the original neurological and/or organic difference. Being noticed as less than others based on the difference that is perceived as a deficit may result in a secondary disability of being considered by others as inferior, helpless and dependent. Bryan, Burstein, and Ergul (2004) noted that given the prevalence of social and emotional difficulties experienced by students with learning disabilities it seems like a sub type of learning disabilities. In accordance, Siegel (2012) noted “a significant number of adolescent suicides can be attributed to LDs that have not been properly identified and remediated” (p. 64).

According to Vygotsky (1993), the organic primary disability, unlike socially acquired secondary disabilities, cannot be reversed or influenced by sociocultural influences. Through social interaction, however, the secondary disability may be reduced or overcome and, thus “education must cope not *so much with these biological factors* [primary disabilities] *as with their social consequences* [secondary disabilities] [emphasis added]” (Vygotsky, 1993, p. 66). Vygotsky was more interested in the secondary disability, because he argued that cultural resources could change it. This distinction between primary and secondary disabilities has practical significance because secondary social and emotional complications are more responsive to remediation and supports than primary disabilities that may not be easily modifiable. Smagorinsky (2012) argued that Vygotsky’s suggestions for addressing this problem require both: 1) providing appropriate mediation for the student within the Zone of Proximal Development (ZPD) learning contexts, and 2) promoting inclusive and socially just views of people with a difference, so they are not affected by the potential secondary disabilities of feeling emotional distress and negative stigma as a result of discrimination,

possible oppression, and disabling conditions.

This distinction between primary–organic impairment and secondary–social disabilities is also expressed by Lalvani and Broderick (2013): “Within the social model of disability, impairment refers to particular physical or sensory experience (e.g., blindness, absence of motor function), while disability or disablement refers to the political, economic, social, and cultural oppression that people with impairments experience” (p. 472). Lalvani and Broderick (2013) introduced ableism as the negative assumptions held by individuals who are able and, thus, they assume to be superior to individuals living with a disability. The ableist assumption that disability is a tragedy may be implicitly expressed through social interaction. Therefore, Lalvani and Broderick (2013) took a social justice stance and noted a conceptual distinction between impairment and disability that is critical for including the phenomenon of disabilities as diversity within the fabric of multiculturalism in a democratic society and seeing impairment as a variation of human development positioned within human diversity. In 1996, Barga’s interview study of students with learning disability presented participants’ call for teachers and peers to be educated for better awareness and acceptance of learning differences.

These issues that concerned Vygotsky should also concern contemporary educators, as argued by Smagorinsky (2012). Therefore, asking if symptoms of learning disabilities are organic or secondary in nature, may guide educators’ in designing pedagogical supports and accommodations for students. Ideally, recognizing the impairment with no additional judgment of disability and negativity associated with the impairment may allow students with learning difficulties to have access to mediation and resources and be more included within the diversity spectrum of learning differences.

2.2.2. Associated Stigma with the Diagnosis of Learning Disabilities

Secondary disabilities, or as termed in contemporary literature negative stigma, have been studied, as shown in several examples in this section. Shifrer (2013) argued that a diagnosis of learning disabilities means assigning to students a label and taking the risk of creating a stigma that may lower teachers' and parents' educational expectations of these students. Another risk students with a learning disabilities label may face is a secondary disability based upon the social perceptions of their learning differences as deficits (Vygotsky, 1993).

Reid and Button (1995) described Anna's story of her experiences of being labeled with a learning disabilities diagnosis. For example, Anna reported that in school she usually felt mad and sometimes frustrated, as her peers did not understand her condition and the reasons for leaving class to receive support. Her classmates told her that she was not in the main class because "you are not there because you're retarded" (p. 606). Rosetti and Henderson (2013) interviewed adolescents about their lived experiences with learning disabilities. They reported that elementary school was more a struggle than high school; nevertheless, the stigma associated with their academic difficulties was salient. Therefore, success, or the best moments in school were identified in relation to doing well academically, possibly, to reduce the effect of the stigma in their social context. In relation to others' perceptions of them leading to secondary disabilities. Barga's (1996) and Rosetti and Henderson's (2013) interview data with students with learning disabilities revealed that students received helpful parental support at home and a positive sense of validation and relatedness with peers, with and without learning disabilities.

Kenyon, Beail, and Jackson (2013) asked adult participants about the meaning of learning disabilities and their experience of diagnosis. Participants reported that they had an awareness of being different in school due to their academic difficulties and "they described

diagnosis and discovery of their perceived difference as a shock” (p. 259). They reported trying to hide the diagnosis as one participant said “I felt, well, miserable. I felt, well, shame in a way” (p. 259). They described their teenage years a time of stress and difficulty. One participant reflected on his past years: “We shouldn’t be labeled because we are all equal at the end. You’re a human being for God’s sake...The person is still a person so don’t label them” (p. 260).

Keyes and Brandon (2011) developed an inclusive mutual support model for individuals with learning difficulties based on their exploration of how adults with learning difficulties perceived the support that they gave and received from others with learning difficulties. This study’s interview data revealed people’s needs to participate fully, fulfill personal ambitions, and feel dignity and respect as a human being. This finding suggests that social acceptance, inclusion, and respectful support may reduce possible negative issues associated with stigma and development of secondary disabilities.

Reid and Button (1995) concluded from the interview with Anna about the irony that in the field designed to improve the life of students with disabilities: “We have constructed a system of intervention in our schools that addresses what we think are their best interests, but we have chosen not to confront the personal damage that that system can inflict on some students” (p. 612), further suggesting to ask students directly about their experiences.

In contrast, Siegel (2013) and Barga (1996) reported that there are numerous examples of students with learning disabilities who claimed that the diagnosis of learning disabilities was a relief for them and for their parents. Before the formal diagnosis they felt confused and could not make sense of their difficulties. Receiving a formal diagnosis was helpful in the system that sets them up for struggle and being different as they felt that the label provided them with a reason and explanation for their difficulties and frustration.

2.2.3. A Strengths Based Approach

Vygotsky's (1993) theory of disontogenesis is a strengths based and a health focused approach to learning disabilities. Society changes the stereotypical negative notion of learning difficulties from focusing on weaknesses and disorders to focusing on strengths to empower individuals: "Special pedagogical techniques aimed at the positive uniqueness of these children, in order to create in them the necessary sociocultural superstructure which will shore up development at its point of physical or mental weakness" (1993, p. 17). Gindis (1995) reported that Vygotsky presented his strengths based approach as the "positive differential approach" (p. 79), echoed by Armstrong's (2009, 2010, 2012) view of differences as neurodiversity or multiple intelligences. Moreover, Vygotsky further emphasized that recognizing their positive uniqueness, is unlike feeling pity or being charitable towards their weaknesses. The implication here may be alluding to teaching all students and acknowledging their relative accomplishments, rather than continually comparing them to norms and expectations (Vygotsky, 2011). Instead, offering support and access to mediation while including all diverse learners with strengths and challenges.

Gindis (2003) argued that the experience of having a disability makes one more disabled, suggesting that individuals may learn to embody their perceived deficits beyond the degree of the impairment. In social interactions, teachers, parents, and friends reflect what is perceived to be low societal expectations and attitudes towards students with learning difficulties. This notion conveyed in social interaction may influence the access of students "to sociocultural knowledge, experiences, and opportunities to participate in shared or joint activities with peers" (Gindis, 2003, p. 203). As argued by Vygotsky (1993), changing these negative societal expectations of students with learning disabilities and, instead, emphasizing their positive qualities is essential. Vygotsky suggested noticing the "wealth of each retarded [sic] child's

reserves and strength that must be the determining factor in establishing a program for him or her” (Vygotsky, 1993, p. 20).

Additionally, based on Vygotsky (1993), students with learning disabilities may compensate for their organic condition through the development of higher psychological functions. Although the impairment is within the organic processes, “... the objects of rehabilitation are the cultural processes of abstract reasoning, logical memory, voluntary attention, and goal-directed behavior” (Gindis, 2003, p. 204). Compensating for the organic impairment is limited, but “compensating through the mightiness of the mind (imagination, reasoning, memorization, etc.) has virtually no limits” (Vygotsky, 1983, p. 212 as cited by Gindis 2003 p. 204). Therefore, when organic development is impossible, cultural development is possible.

Further regarding the compensation phenomenon, Vygotsky (1993) suggested, “the desire to fly will appear in children who experience great difficulty to jump” (p. 56). Vygotsky (1997) argued that education must not neglect the positive forces all students have, and argued for society’s duty in detecting “true uniqueness of child” (p. 98). Clarifying that this positive and strengths based approach may seem simple, but in fact:

[A] positive picture is possible only if we radically change our representation of child development and take into account that it is a complex dialectical process that is characterized by complex periodicity, disproportion in the development of separate functions, metamorphoses or qualitative transformation of certain forms into others, a complex merging of the process of evolution and involution, a complex crossing of external and internal factors, a complex process of overcoming difficulties and adapting. (Vygotsky, 1997, pp. 98-99)

Students’ positive psychological drive to compensate for their organic impairment with

educators' search for their positive uniqueness is the first step and key to allow students to access resources that support their complex dynamic processes of development. Finally, Siegel's (2012) statement, "[W]e must pay attention to their strengths. So let us search hard for the talents within people and make sure that the school system and families and individuals have an opportunity to develop their talents" (p. 74), is consistent with Vygotsky's call to a radical change of perception by considering a disability as strength.

2.2.4. Disabilities as a Natural and Cultural Difference in Development

One foundation of Vygotsky's (1993) theory of education is in his distinction between the two paths of development—natural and cultural—and acknowledging that the natural and cultural lines of development occur in both typical and atypical developing children. Children's biological development converges with their cultural development. Not only do they adapt to and transform their culture, but also cultural innovations are shaped to support more the typically developing people than the atypical.

For example, a typically developing child would have more access to cultural tools in a form of books at a level set for their age group. Society not only defines each age level's reading expectations and standard of performance but it also allows production of cultural tools of age level books for typically developing children. This converging of natural and cultural development works in tandem to support even further students who can use the cultural tools to read at their typical age level. At the same time, for atypically developing children, the gap between natural and cultural development grows larger as students who are not able to read at the level set as normal by society are not always provided with access to cultural tools that can help them converge their natural with their cultural development. Cultural support for the atypically developing children is key, "the line of a child's natural development, when left to its own devices, never shifts over to the cultural line of development" (Vygotsky, 1993, p. 167).

Furthermore, Vygotsky (1993) noted, “the social education of the severely retarded [sic] children reveals to us possibilities which might seem outright Utopian from the view point of purely biologically based physiological education” (p. 218). Vygotsky called for a dialectical view of these two paths, arguing for no longer considering cultural development extending linearly from natural development (John-Steiner & Mahn, 1996).

Scientific educational theory entails examination of the existing relationships between the environment and the organism. Vygotsky (1993) explained that our culture is designed for typically functioning people, so it creates an illusion that the typically developing children experience an easy transition from natural to cultural paths of development. However, the typically developing child’s struggles of transition are unnoticed because the culture that is designed for their ways of functioning provides them with the essential cultural tools for the merging of their natural and cultural paths of development. The atypical developing child, on the other hand, is unable to converge their natural-organic development with that of the cultural development if society is not designed to provide them with fitting cultural tools. The atypical developing child is not able to make good use of the available cultural tools. Therefore, the cultural development of the atypical child is further diverging from her natural development. Vygotsky (1993) argued, “that a child whose development is impeded by a defect is not simply a child less developed than his peers but is a child who has developed differently” (p. 30). The difference contributes to the disontogenesis, a growing gap between their natural and cultural paths of development due to limited access to mediation through cultural tools that suits them.

The normalization of cultural tools deprives students with learning differences from the cultural resources they need. To support their different natural line of development, the cultural line of development must be enriched to help students compensate for their differences.

Vygotsky (1993) argued that for these reasons researchers should “study not merely the

biological character but also how it develops in various conditions of the social environment in which the child must build his character” (p. 140).

Defining disability as a different path of development removes the negative and hierarchical classification of an individual when compared to a norm by suggesting, instead, to view their development based on their differences in making use of cultural tools, rather than deficiencies. The case of individuals who are hard of hearing—who learn the function of speech with no typical tie to sound by using cultural tools that compensate for their limited organic hearing function—illustrates the disparity between the cultural forms of behavior designed for typically developing children and the cultural tools available for the atypically developing child. Therefore, Vygotsky (1993) stated that cultural tools and compensations support development as “the cultural forms of behavior serve as the only path of education for an abnormal [sic] child” (p. 168). Finally, both natural and sociocultural origins to development are needed to understand learning and development. It is not enough to examine cognitive deficits as if they are inside the child. The societal cultural tools that were provided, and how they were integrated with students’ natural path of development, also need to be examined.

2.2.5. Sociocultural Aspects in BC Schools

In accordance with notions of moving away from assuming a typical learner to whom learning and expectations are directed, in 2015, the BC Ministry of Education drafted a new curriculum statement alluding to some aspects of sociocultural processes pertaining to learning and development, as follows:

Personalized learning acknowledged that not all students learn successfully at the same rate, in the same learning environment, and in the same ways. It involves the provision of *high-quality and engaging learning opportunities* [emphasis added] that meet the diverse

needs of all students. Schools may provide *flexible timing* [emphasis added] and pacing through a range of learning environments, with learning supports and *services tailored to meet student needs* [emphasis added].

(British Columbia Ministry of Education, 2015, p. 2)

This statement in the new curriculum draft acknowledges diversity in learning among all students. Ideally, students with learning difficulties may be considered as having a learning difference as Vygotsky (1993) suggested. Furthermore, to avoid emphasizing an individual difference from a normal standard, all students may be considered as diverse learners within the larger spectrum of diversity. An important factor is that all students learning needs are addressed in a timely manner and based on their uniqueness.

2.3. Sociocultural Assessment and Pedagogy

In this section I present two interventions that are based on mediated learning involving social and collaborative relationships between teachers and students. Vygotsky (Vygotsky, 2011; Wertsch, 1985) and Feuerstein (Feuerstein et al., 2010; Kozulin, 2010a, 2010b) developed their theories and practical guidelines for mediated learning based on the notable improvement of the individuals who they worked with, such as, students and adults with brain injury, individuals from culturally deprived populations, and individuals who were labeled decades ago mentally retarded.

Both Vygotsky and Feuerstein advanced a positive view of human potential with their work with individuals. They recognized weaknesses and emphasized mediated learning for that specific identified weakness arguing that it can be modified while communicating to them their strengths and potential (Feuerstein et al., 2010; Gindis, 1995, 1999, 2003). Pedagogy and assessment were combined in the process of mediation according to both Vygotsky and Feuerstein. Based on Feuerstein's work, "including the learning phase into the assessment

procedure and focusing on students' ability to grasp new principles and strategies rather than their absolute performance level" (Kozulin, 2009a, p. 120). Feuerstein's work on structural cognitive modifiability showed that learning, assessment, and teaching are inseparable.

Vygotsky also noted that given the development of psychological functions and the ability to use cognitive strategies, there is a difference between testing of already learned material or assessing the potential of a child for understanding new material.

2.3.1. The Zone of Proximal Development

Vygotsky described learning through mediation in which elementary psychological functions are transformed to higher psychological functions with teachers' mediating learning and being aware of the interpsychological plane that may possibly be influencing the intrapsychological plane of students (Daniels, 2001). The ZPD Vygotsky referred to is the gap between what the student can do on his/her own and what the student can do with the help of an adult or more capable peer (Vygotsky, 2011). In the zone lies the possibility of students developing their intellectual potential as higher psychological functions. He noted and demonstrated that what children learn to do in cooperation with adults is likely to lead them to be able to do it independently. Hence, development and growth happens through learning that takes place in context of social interactions with others, rather than only within the person based on their genetic abilities. Similarly, Dudley-Marling (2004) argued that being self-sufficient is our most powerful cultural myth: it assumes that individual success depends on the individual, neglecting to take into account support from interactions with the environment.

Vygotsky's (1993) ideas, from nearly a century ago (1896-1934, Russia), emphasized that not only is assessment integral to teaching, but also, the focus of assessment must be on what is possible for students in the future, rather than based on what happened to them in the past or describing how they perform in the present. Vygotsky's purpose for assessment and

teaching was to identify the zone for social and meaningful interaction of learning and teaching that will ignite the maturing higher level thinking and lead to development (Daniels, 2001).

Educators identify, through dynamic assessment, the “zone” of students’ potential to learn and develop with help while focusing on their strengths and possible ways they can compensate for the difficulty caused by an organic condition. Good instruction, Vygotsky argued, is holistic. It builds on students’ abilities with a future vision of advancing their development, and accommodating their limitations to enhance their development and also to prevent societal interpretations that impose circumstances that create secondary disabilities (Chaiklin, 2003; Daniels, 2001, 2014; Gindis, 1995, 1999, 2003; Kozulin, 2010b; Vygotsky, 1993, 1998).

The purpose of interacting with students in their ZPD is to provide students with possibilities for development. Wertsch (1985), following Vygotsky, noted that instruction is not equal to development, but instruction that is ahead of the current development of the individual encourages transformation and future development. Both the teacher and student are actively participating in the process by socially negotiating their collaboration and generally sharing and transferring control for the learning progress over time to the student (Chaiklin, 2003, 2011; Daniels, 2001).

As noted earlier, Vygotsky (1993) argued that each psychological function takes place first on the interpsychological plane, before it becomes integral to the learner on the intrapsychological plane. Hence, interaction is crucial for learning and development (Gindis, 1999). Internalization from the interpsychological to the intrapsychological plane may be mistakenly interpreted as internalizing external teachings. To clarify the widely used term of internalization in the context of mediated learning, Wertsch (1998) distinguished between two processes: mastery and appropriation. Mastery is described as knowing how to use a tool to

accomplish a task and achieving proficiency in certain area of knowledge or skill.

Appropriation is a process of “taking something that belongs to others and making it one’s own” (Wertsch, 1998, p. 53). That way, appropriation involves identifying in some sense with the learning.

This distinction is relevant to students with learning difficulties because some students may identify with achieving academic outcomes and experiencing success as their peers may experience, but they have not yet mastered the skills needed. Or, alternatively, some students may master a skill of writing, but they may not identify with the process of writing and thus they may not appropriate writing as a method of communication. Educators who are aware of processes of appropriation in learning are likely to support students with relating, engaging, and making sense of a given subject or a needed skill to master or to appropriate an identity or meaningful experience. The processes of mastery and appropriation may be intertwined or correlated, but they are two distinct processes. Wertsch (1998) argued that when asking about a student’s skill level it is crucial to include an evaluation of the performance of a skill and an inquiry into how meaningfully they appropriated their learning. Wertsch (1985) also argued to examine beyond students’ academic outcomes, the cultural tools that students were able to access within their ZPD.

2.3.2. Mediated Learning Experience

Reuven Feuerstein reported succeeding in improving the learning and development of populations that were disadvantaged, intellectually delayed, and severely deprived in many aspects (Falik, 2007; Feuerstein et al., 2010; Smagorinsky, 2012; Wertsch, 1985). Based on his experience and research, Feuerstein developed the Mediated Learning Experience (MLE) approach (Falik, 2007; Feuerstein et al., 2010; Kozulin, 2002). The premise underlying Feuerstein’s concept of the mediated learning experience was to explore the possibility for

mediating cognitive modifiability by helping people develop habits of mind that transform their ways of interacting with others, problem solving, learning, and being proactive about their environment and circumstances (Feuerstein et al., 2010).

The emphasis in the MLE approach is to create lasting changes in peoples' minds: "It is our belief and experience that a human being who possesses the need, belief, intention, and proper tools can be given a way to bypass the barriers of etiology and realize the option of modifiability" (Feuerstein et al., 2010, p. 482). The assumption is that people could develop qualities and structures of thinking and skills with the help of human mediator even if they did not have them at early age. MLE takes place "when a person (mediator) who possesses knowledge, experience, and intentions mediates the world, makes it more understandable, and imparts meaning to it by adding to the direct stimuli" (Feuerstein et al., 2010, p. 799). Furthermore, Feuerstein argued that this development of thinking contributes to positive changes in their emotional wellbeing that then sets people on a trajectory of even better improvement of their cognitive abilities as they are empowered (Feuerstein et al., 2010).

Human interaction that mediates includes the beliefs people hold about their own learning and the teachers' beliefs about students' learning (Feuerstein et al., 2010). The belief in ability creates the motivation to find the means to reach the desired and needed results. Teachers' commitment to be involved in the interactive process of meeting the needs of students is critical for students' learning. Mediation may not take place if it involves mere following theoretical guidelines of teaching or interacting. The place of belief in the process of mediation is reflected also in Feuerstein's notion of intelligence as "a *force* that drives the organism to change itself and to change the structure of thinking and reaction in order to answer the needs that appear before it and change before its eye" (Feuerstein et al., 2010, p. 666). Feuerstein described intelligence not as a trait but as a dynamic energetic agent that is highly modifiable through

meaningful interactions with human mediator.

Feuerstein et al. (2010) discussed human development as a dynamic among three components: first, the biological individual who interacts with the environment; second, the sociocultural influences that shape the individual through interaction; and third, the MLE. This third component, MLE, occurs naturally to enrich sociocultural experiences within family and social contexts. MLE also can be used willingly and deliberately towards a shared end goal (Feuerstein et al., 2010). Like Vygotsky, Feuerstein was concerned with mental functions that are beyond biological conditions. He emphasized, “we do not reject the hereditary components but consider them as not having last and final word” (Feuerstein et al., 2010, p. 739). His method of cognitive modifiability is designed to alter brain functions through mediation and education that involves explicit meaningful teaching while holding a strong belief in students’ potential (Feuerstein et al., 2010).

Positive results of the method of cognitive modifiability challenges the notion that learning disabilities are fixed conditions if students have the possibility to modify, change, and develop when their weaknesses are mediated systematically by a human mediator (Feuerstein et al., 2010). The effectiveness of mediation based on the sociocultural theory maintains that educators are in a position of potentially supporting students’ development.

2.4. Teachers’ Expectations and Beliefs of Students

The relationship between teacher and student in the ZPD and in the MLE, evolves through the process of mediation that includes among, other factors, teachers’ communication of expectations. These processes of mediation described earlier may shape development positively or negatively. For example, teachers who have low expectations of their students may unintentionally mediate, through their interactions with students, limited standards of performance (Rosenthal, 2002). Panofsky (2003) reported studies that showed that teachers’

expectations of students perpetuated students' beliefs in their own abilities to the point that students' performance was in accordance with their teacher's high or low expectations.

The interactions between teachers and students have a significant impact on students (Brooks, 1991). In a workshop for teachers, Brooks (1991) asked teachers about their past experiences as students. One teacher described how her teacher encouraged her to face her fear of public speaking: "he sensed that I was shy.... he asked more and more of me in terms of participating and projecting in discussions. He believed in me" (p. 9). This example describes how mediation as the teacher's communication of expectations and beliefs in students' abilities while identifying the source of the weakness is meaningful in shaping the experience of learning. Another teacher described how her junior high teacher let her remain silent in class and informed her, "I can tell by your knowing glance and your facial expressions that you are participating silently and that you know the answers" (p. 10). These words spoken by the teacher made her feel comfortable with being silent and confident with her knowledge. In contrast, some of the negative experiences teachers reported included: "a teacher sneered at me," and "I was told by my grade-school teacher that my answer was stupid" (p. 11). Siegel (2013) recounts the life story of Johnny who was a retired physical education teacher with dyslexia. He recalled, "Being in this class I developed an inferior complex" (p. 121), describing his feelings of shame and difficult experiences particularly around testing but also in general, being in the special needs class.

Brooks (1991) argued that these memories, positive or negative, became engraved in the lives of students into their adulthood and indicated that, "portraits and stories are guides to our inner world" (p. 19). As the above quotes illustrate, mediations through social relationships and exchange of expectations affected students and continued to shape students' perceptions well after the event.

2.4.1. Teachers' Beliefs

The notion that mediators' beliefs regarding students' abilities influence students' behaviour, learning, and self-perception, is critical for understanding the dynamics of student and mediation of teachers in education (Feuerstein et al., 2010). Some students are treated based on their deficits, or expected deficits, by adults who may not be aware, or who are aware, of the societal beliefs they hold, which guide their communication with students. In addition, some educators may also not be aware of the power of their positive or negative influence when interacting and communicating with students in the learning contexts (Panofsky, 2003). Teachers' mediation is a crucial element in the learning environment, affecting secondary disabilities, learning and development. Chaiklin (2003) noted that the effectiveness of mediation does not depend solely on the knowledge or skills mediators have or teach. Rather the quality of mediation is in the nature of interaction between the teacher/adult/or more capable peer and student.

Evidence for the powerful positive impact of teacher mediation is provided in a study by Comber and Kamler (2004), who showed how teachers who visited families' homes and had conversations with students and their parents gained a holistic understanding of students' family culture. Understanding the complexities of students' home life—rather than responding to their low performance in school—allowed these teachers to be more empathic, honour their unique life at home after school, and raise their expectations. As a result, teachers mediated learning differently and more effectively after getting to know aspects of their students' home environment and family culture.

Research concerning the Pygmalion Effect has also demonstrated the power of human mediation, and specifically, the power of teachers' expectations of students' achievement. In Rosenthal and Jacobson's (1968) experiment at Oak School, they administered a fake

intelligence test. The “Harvard Test of Inflected Acquisition,” was administered to students and fake results about students were circulated in order to examine the impact of teachers’ beliefs on students’ performance. Teachers were informed that the purpose was to screen students who have a great potential to succeed in school, but may be late bloomers. The test was administered to kindergarten to grade five students who would be enrolling in the school the following year. Names of 20 percent of students were selected randomly and presented to teachers as those ‘special students’ who were predicted to succeed academically in the near future. Teachers were asked to keep this information confidential. After eight months of classroom teaching and interaction with the teacher expecting highly of these students, the results of post-test, on the verbal section of the test were dramatically higher for first and second graders.

Woodcock and Vialle (2011) explored the influence of teachers’ knowledge of the presence or absence of learning disabilities on the feedback they give a student, their felt frustration or sympathy towards a student, and their expectation of that student. Teachers responded to vignettes that included information of each student’s either low or high level of ability, effort, and academic performance. Results showed that teachers’ knowledge of students’ learning disabilities correlated with teachers’ higher levels of sympathy, positive feedback, and expectations of future failure. Teachers interpreted learning disabilities as a fixed uncontrollable cause for future failure, and thus, communicated low expectations. Woodcock and Vialle (2011) suggested that teachers did not factor hard work of students with learning disabilities that may lead to success, as they were guided by a perception of deficit.

The theoretical support for investing in those that are believed to have higher potential was expressed by Vygotsky: “IQ was a symptom, or a sign” (Vygotsky, 2011. p. 210) that indicated privileged circumstances (Vadeboncoeur, 2013). As shown in Rosenthal and

Jacobson's (1968) experiment, greater success came to those who were provided with the support, the human mediation, of adults who believed in their potential and likely provided the necessary missing cultural tools for optimal development. Mediation can be effective in promoting development when mediators are aware of their own beliefs that are based on societal influences about students' potential. It can be powerful when educators understand their assumptions and biases, build on strengths, and take deliberate control over their teaching. However, there are also educators who operate with an implicit understanding that is less deliberately, but nevertheless, positive. When a lack of awareness is paired with stereotypical "deficit" thinking of students' abilities, then negative mediations are most pronounced.

Educators may or may not be aware of how their expectations of students guide the quality of their mediation in teaching. Research on the effect of teachers' expectations on students' performances provides evidence for potential positive or negative implications of teachers' beliefs on students' abilities (Rosenthal & Jacobson, 1968). For example, teachers' beliefs are formed based on factors such as students' history, culture, socio-economic status. Vygotsky (1997) argued; "education has, at all times and in all places, borne a class-based character, whether or not its adherents or apostles were aware of it" (as cited by Panofsky & Vadeboncoeur, 2012, p. 206). The influence of expectations is in line with Vygotsky's claim that "the developmental origins of higher mental functioning must be found in social-communicative interactions" (Tappan, 1998, p. 23). Vygotsky emphasized the importance of human mediation and of social interaction for mediation in development.

The power of these human social interactions is potent, and may follow the lead of the prevailing societal expectations dominating these social interactions (Panofsky & Vadeboncoeur, 2012). Panofsky (2003) emphasized that closely examining issues of social relations by using Vygotsky's theory is important in order to reveal the dynamics involved in

the failure of low-income students. Panofsky (2003) reviewed several ethnographic studies that documented semiotic interactions between teachers and students. Her conclusion was that “the process of differential expectations and differential treatment of low-income learners is both out of awareness of educational personnel in all dimensions that the researchers observed, and at the same time, integral to the cultural processes of schooling” (p. 424). Teachers were not always aware how societal views and expectations shaped teaching and learning dynamic and had an impact on educational outcomes. Varenne and McDermott (1999) claimed, “No person is self made” (p. 5), suggesting that the context in which students perform is as important as personalized characteristics of learning.

2.4.2. Teachers’ Education

The sociocultural theory principle of sociability emphasized that cognition and emotions are linked, irreducible, and inseparable. Teachers in the classroom are faced with both addressing cognitive as well as emotional challenges students may experience. Torgesen (2002) conclusion of Meta analysis research noted two levels of supports students with difficulties need. The first is positive emotional support in a form of feedback, and encouragement. The second support is combined of both, systematic pedagogy on the skills required, and “teacher-student dialogue that directly shows the child what kind of processing or thinking needs to be done in order to complete the task successfully” (p. 17).

Regarding the emotional aspect of learning and development, Lalvani and Broderick (2013) argued that conceptualizing impairment as disability—has implications for teacher education so teachers would be cognizant of this difference and role model acceptance to diverse learning in the classroom. Some teachers may not be aware of the negative mediation communicated subtly by them, but perceived saliently by students with organic impairment. These students might also experience social and emotional secondary disabilities that might

further hinder their ability to access cultural tools.

Therefore, Gindis (2003) argued, “students with disabilities need specially trained teachers” (p. 212) and Smagorinsky (2012) proposed reeducating the whole society to view individuals with impairment not as disabled. Directing attention to the education of teachers is as critical as examining students’ performances as alluded by Kalyanpur and Harry (2004) who argued that systemic discrimination, embedded in the conversations about learning disabilities, adds to the notion that individuals fail while schools do not. Lalvani and Broderick (2013) argued that educating teachers and students to recognize and challenge inequalities, including ableism, is conditional for democratic participation in society. From this perspective, teachers’ respect in the classroom for human differences should come from a position of considering how social and cultural contexts may allow or prevent their participation and functioning in schools. Teachers’ exploration of differences must include the individual-context dynamics, rather than focusing on either individual or contexts (Wertsch, 1985). Vygotsky (1993) noted, “education must cope not so much with these biological factors as with their social consequences” (p. 66).

Regarding the cognitive aspect of learning and development, an educational challenge for teachers is how to identify students’ difficulties for the purpose of either teaching them the skill they do not have or accommodating their learning without harming their potential future development. Torgesen (2002) summarized three component to addressing students’ needs:

First, we must insure that classroom instruction in kindergarten through Grade 3 is skillfully delivered with a balanced emphasis on word-level and reading comprehension skills. Second, we must have procedures in place to accurately identify children who fall behind in early reading growth, even when they are provided excellent classroom instruction. Third, we must provide these at-risk children with reading instruction that is

more intensive, more explicit, and more supportive than can be provided in a classroom of 20 to 30 children. (p. 13)

Teachers' skills, early identification, and pedagogy are noted as essential in meeting the needs of diverse learners in accordance with the individual-context relation of individuals with learning difficulties. The sociocultural approach directs attention to the interactive dynamics in the processes of mediation for students in their contexts of learning by pointing to the possibility of preventing an individual's development of secondary disabilities and supporting students in transforming their higher psychological functioning.

2.5. Chapter Summary

This chapter described first practices and approaches to examining learning disabilities in general and in BC in particular. The review suggested broadening the attention from examining individual qualities of students to including examining how learning environments may be enriching, or limiting for students. The second section in this chapter described Vygotsky's sociocultural theory including secondary disabilities and strengths based approach as holding power in directing the trajectory of students with learning disabilities. The lens of sociocultural theory reveals how contextual influences may interact with and shape students' perspectives, experiences, and the meaning they have made of their learning challenges or diagnosed disabilities. The third section described ZPD and MLE that are pedagogies based on sociocultural framework which emphasize the sociality of learning and teaching as mediation processes that include assessing and teaching. Within ZPD or MLE, a wider educational discourse (i.e., regarding the successes and failures of students with learning disabilities) is mediated through expectations to students, teachers, parents, and others who are involved in the learning processes of students.

Chapter 3: Methodology

This study aimed to examine the experiences and perspectives of students and parents of learning disabilities. The sociocultural framework was used to address the research questions:

1) How do students describe their experiences of and perspectives on having learning disabilities? 2) How do parents describe their experiences of and perspectives on their child's learning disabilities? 3) How do students describe their strengths and challenges in relation to their academic experiences in school? 4) How do parents describe their child's strengths and challenges in relation to their academic experiences in school?

This chapter is divided into five sections. In the first section, I describe my position as the researcher and the related concepts of reflexivity and power. In the second section, I describe the recruitment process and introduce the participants. In the third section, I describe the research design including the purpose of the interviews. In the fourth section, I clarify the analysis procedures including: the preparation of transcripts, theoretical thematic analysis, the confidentiality of transcripts, and how trustworthiness was addressed in this study.

3.1. Researcher Positioning

In this study, I expand on my experience of working as a school psychologist, assessing over 200 students, consulting in school-based teams on a regular biweekly basis, and consulting with teachers in a provincial early intervention class for students in Grade 1 to 3 who had reading difficulties and a diagnosis of a learning disability. As a full-time school psychologist, I was assigned 10 schools each year, and worked in over 20 elementary and high schools. Within the scope of the assessment aspect of my work, I conducted psychoeducational assessments that included administering cognitive, academic, social and emotional, and adaptive measures as well as interviewing students, parents, and teachers and consulting with teachers and parents. Interviewing students, parents, and school personnel was part of the process of assessing

students' functioning and recommending how to support their progress. One possible recommendation that was frequently expected by school personnel and parents was to diagnose students with learning disabilities. My colleagues and I had ambivalent thoughts about a school's expectation of assessing for a diagnosis. As professionals, our concern was to focus on supporting students so they may experience greater success in school. The diagnosis was not sufficient to support students, as other means were necessary for helping students. However, the assessment results had a great potential of informing parents, teachers and students by providing a snapshot of students' strengths and weaknesses based on their performance at that time on the standardized tests.

It concerned me that the main focus in schools where I worked was the diagnosis of learning disabilities as if the means turned into an end goal or a cure. I realized that although diagnosis was not a cure, it was a key to accessing services. Although, in my view, all students, whether meeting the diagnostic criteria or not, had the right to receive services. The typical referral process was that some students out of those who experienced difficulties in the classroom were referred to the school-based team that then decided whether to add them to the assessment waiting list. Once students' names were on the waiting list they had to wait for an average of two years to be assessed by a district school psychologist. Some parents who were alert to their child's difficulties as early as Grade 1, paid for the assessment privately and forwarded the results to the school-based team who then designated them with a "Q," a Ministry of Education category of learning disabilities.

In addition to tests scores, assessment processes also included interviews, familiarity with each student and their family history and conditions, and my observation notes. In these assessments I noticed, repeatedly, the value of the information from the interviews and stories shared with me by teachers, parents, and students. Each interview included complexities and

nuances that helped me understand each individual student's unique strengths, aspirations, and needs within their lived contexts. Interviews were like a social gathering that allowed an authentic connection and ease of participation by sharing, listening to, clarifying, and discussing aspects of their life histories and conditions. These conversations allowed me to develop a contextual perspective on the experiences of each student's learning difficulties and potentially learning disabilities. This narrative information, provided by students and their parents, was distinct from the quantitative and individually focused information I generated through the use of standardized testing.

Throughout my experience of assessing students as a school psychologist, I became more eager to pay greater attention to each student's history and their parents' perspectives and past and present experiences they shared in our discussions when I tried to understand the complexity of their unique condition and what could help them be more successful within the school. By asking students questions and taking a holistic approach, individual contextual influences that were missing for me in the standardized part of the assessment and diagnosis of learning disabilities were included. I consistently experienced the benefits of considering contextual (social, cultural, and historical) influences and viewing the problem of learning disability more holistically than was allowable by the standard practice of testing. Instead of asking what are a child's strengths and weakness based on standardized tests, I started looking beyond the scope of standardized cognitive and academic testing, and became interested in asking students different questions, for example: How do you experience your learning difficulties? What method or program was helpful and why? What was not helpful for you? How do you prefer to show your learning? What are you proud of? Or, what are your strengths?

Based on these experiences, I became interested in exploring the relation between social, historical, institutional, and cultural influences with students' individual experiences of their

learning difficulties or disabilities. Social and cultural influences that interested me included those that arise from the particular contexts in which students live and learn. I became interested in exploring the dynamics of contextual influences and the successes and failures of students through their perspectives, as well as the perspectives of their parents.

I was familiar with the points of views of teachers and other school personnel. They were largely bound by school policies that are based on the approach of focusing on the deficits of the individual through testing practices. Being part of the professional community of the school system as a school psychologist, I had many opportunities to discuss and explore the phenomena of learning disabilities from within the school system with my colleagues. Given my daily and multifaceted interactions with school personnel, I became familiar with the school system and school personnel dynamics and wanted to learn more about the perspectives and experiences of students and parents from outside of the schools.

In this study, I focus on the perspectives and experiences of students and parents in a setting that would not require students and parents to censor their voices due to their personal connections with school personnel. I presented myself as a person who is not affiliated with any school to allow participants to openly share their stories. For that reason, I recruited students-participants outside of the school system and not through teachers and other school personnel. In addition to students, I included the perspectives of parents who raised their children and are familiar with their child's developmental histories and milestones, adding to the contextual aspects of development of which I explored.

My experience of interviewing students and parents revealed a complex dynamic of contextual and personal facets of learning disabilities both as a phenomenon and as a unique personal experience. This detailed portrait of each student generated unique explanations and solutions for each student that was more specific than the generalized explanations and

solutions I generated from standardized test results. Gerber and Reiff (1991) stated that “the moment we begin to speak together, we have the potential to create new ways of being” (p. 29). Conversing about what contributes to the experience of learning disabilities has value for further understanding how experiences shape learning.

3.1.1. Reflexivity

The essence of qualitative research is in the reliance on researcher subjectivity in interpreting interview data by being reflexive. Because my own epistemological and theoretical assumptions are infused in the assumptions I made throughout this study they shaped me as a research instrument to the point that representations of ideas are in, some sense, self-presentation. Making meaning, rather than finding meaning in the interview data, results from the reflexive approach to data analysis (Mauthner & Doucet, 2003). To maintain the required high degree of awareness of my biases that inform and constrain my qualitative reflexive analysis, I asked myself throughout the analysis of interview data three recurring questions suggested by Mauthner and Doucet (2003). One question that was addressed earlier in my research positioning was: What are the preconceived ideas and assumptions I bring to my analysis? The way I, as a researcher, organized knowledge, depends on what I claimed and asked participants. Therefore, the way I formulated my questions to participants may have shaped their answers and my meaning making and interpretations of the interview data.

A second question suggested by Mauthner and Doucet (2003) that I needed to ask myself is: What is my role in the analytical process? As a researcher of the phenomenon of learning disabilities I considered myself integral to the world of learning disabilities. I saw and filtered information through the lens of my own professional history, personal history, and various experiences in relation to learning disabilities and academic successes and failures. There is knowledge embedded in my emotional and intellectual reaction to participants’ words,

therefore, I paid attention to my reactions. However, keeping distance from the emotional and intellectual reaction to data also allowed me to notice new themes with a fresh view (Mauthner & Doucet, 2003). One possible way to distance oneself from data could be the practice of self-observation attained through mindfulness meditation. As a person who has been regularly meditating for over 16 years and has also been teaching meditation in small groups, I cannot exclude this practice when asked to report how I distanced myself from a situation or context. I applied principles of mindfulness to quiet my thinking mind away from my biased reactive response to interview data and took, in addition to my biased view, also an observer point of view, and an opposite point of view when creating meanings in interview data. This is one example of how I developed awareness of myself as a 'research instrument' so that I continued to strive to meet a level of self-awareness and self-consciousness that reflexive researchers need in order to notice our own biases.

There is a degree of being reflexive rather than an absolute dichotomy of being reflexive or not being reflexive (Mauthner & Doucet, 2003). Patton's (2002) suggestion to triangulate reflexive inquiry may enhance the degree of this awareness by including three aspects of reflexivity: self-reflexivity, reflexivity about those studied, and reflexivity about the audience who will read the research. Questions a researcher asks self-reflexively are about what do I know, how do I know what I know, and how have my past experiences shaped my collection and analysis of the data. What is the voice with which I identify and how I see my interviewees? I have been asking these questions from a point of view of a learner while reflecting on personal epistemologies and I considered my participants as experts.

In being reflexive about my interviewees, I asked: How do they know what they know and what has shaped their perspectives? I also was reflexive about how they see me as the researcher. And how do I know that? Reflexivity about the audience refers to how those who

read my findings may make sense of what I wrote. How do we perceive one another? How do these perceptions affect what and how I report my findings?

The third question Mauthner and Doucet (2003) suggested that a reflexive researcher asks is: How to be reflexive? How can I incorporate my reflexive observations into analysis of data? Mauthner and Doucet (2003) offered journaling in a research diary as one way to engage reflexively. I designated time after interviews to be reflexive and journal in a research diary my feelings, thoughts, biases, and positions, while I paid attention and listened to how I responded emotionally and intellectually to the words in the interview data. This allowed me to examine how my assumptions may have affected my interpretations of participants' words. Patton (2002) suggested that journaling could be used as data. He argued that the interviewer needs to debrief and be reflexive with oneself by journaling and "their observations and feelings can become part of the data" (p. 406). In this study, the main source of data was participants' stories, while my reflexive journal was incorporated in preparing for the next interview by reviewing not only the interview transcript, but also my reflexivity journal notes.

Throughout the research process, after each interview, I wrote in my reflective journal my reflections, conclusions, questions, key concepts, and drew diagrams to help me reflect about my thoughts. This journaling process helped me in probing participants to discuss nuances in our dialogues. I did not use notes from journaling as data because the three interviews with each participant included ample explicit discussions relating to my journaling notes. However, in constructing the thematic analysis, my journal notes helped me be reflexive. For example, my bias was that I am opposed to the current standard practice in schools of using the term "learning disabilities" to label students who have a learning difference while at the same time students' strengths are not clearly acknowledged with the same formality. I handled this bias by being reflexive and recognizing that for some students labeling or testing,

or diagnosis, was a very positive experience, given their circumstances. Participants associated the diagnosis and testing with the help they desired to receive and with their need to be recognized. I was aware that it was my bias that allowed me to hear in participants' words that if they got recognition or support without the testing or diagnosis they may have not regarded the label and testing as necessary. Looking deeper into my bias, I was conscious that I hold the view that the reason that some students may have taken comfort in the label of learning disabilities was that it helped them to justify their difficult condition of not meeting standardized academic expectations. This awareness of my bias guided my clarifications in interview probing and discussions as well as in thematic analysis while being transparent about these conceptual dynamics.

As the interviewer, being reflective helped me become aware of how I wove my own biases, motivations, and agenda into the unfolding of the interviews, as well as the analysis of the interview data (Talmy, 2010). My motivation to listen to participants' stories resulted from my desire to better understand participants' experiences of being a student or a parent of a student with a learning disabilities diagnosis.

3.1.2. Power

Talmy (2010) emphasized the importance of recognizing the power associated with the interviewer's role. For example, I articulated the research questions that designed the research, I created the interview protocol, and I decided in the interviews how to ask additional questions to clarify the meaning intended by the participant. This power was also exerted in the process of analyzing the interview data, including the decisions I made in creating the transcripts of the interviews, conducting the systematic and comprehensive analysis of the entire data set, noticing codes, compiling codes into themes, and interpreting the themes. The notion of power here recognizes that as a researcher—although I opened the first interview by saying: “I would

like to learn from you about learning disabilities”—I was in a leading position despite my intention to collaborate with the participants and present myself in the interviews as a learner.

In this study, as the researcher, I recognized that I was holding this position of power while, at the same time, being reflexive enabled me to alleviate some of the effects of this power. For example, I was careful not to impose my meanings in the dialogue, asking them to clarify instead, and was thoughtful as I analyzed the data, regularly reminding myself to consider alternative interpretations and raised my level of awareness of my biases and the power in them. Keeping a curious mindset and asking further questions to clarify, helped me to avoid leading the interviews based only on my ideas and/or assumptions and allowed me to present myself as being in a learner position.

3.2. Participants

There were eight student-parent dyads, identified with a pseudonym, who participated in this study. Six of the students were in Grade 10, one was in Grade 11, and one was in Grade 12 at the time of the interviews. An additional dyad participated only in the first interviews before they decided to leave the study. The inclusion criteria in this study were the following: 1) student participants had a formal BC Ministry of Education designation of learning disabilities diagnosed by a psychologist based on a psychoeducational assessment; 2) participants and their parents were able to speak English so that language differences would not be a barrier to self-expression in the interviews, and; 3) the students were attending public or private high schools in Grades 8-12.

Initially, I intended to interview only students from public schools. However, a potential participant who was interested in participating attended a private school. In order to also include students from private schools, I applied to the Ethics Review Board to modify this detail and in October 2016, it was approved. The revisions were threefold: 1) including students

in the study from private schools in addition to public school; 2) offering participants an honorarium of a \$50 gift card for Cineplex as an alternative to money, 3) and also including Grade 12 students.

It is important to note that the parents who participated in this study were highly involved in their children's schooling and, given what was shared in the interviews, they were able to access both financial and knowledge based resources to devote to their children's learning in schools. For example, parents reported identifying, accessing, and providing resources to support the emotional well-being and academic success of their children in schools. Further, the parents devoted their time by helping their child with homework daily, driving their child to distant schools, and investing money in private tutors and private schools, as well as private assessments. With these resources, the parents in this study appeared to have been highly resourced and their knowledge and ability to access these resources contributed to the creation of resource conditions that were likely optimal for the students in this study. In this sense, although there was no formal measurement of these sociocultural conditions, the experiences reported here may well have reflected "a best case scenario" for these students.

3.2.1. Recruitment

The snowball sampling method (SSM) was used in this study for participants' recruitment (Cohen & Arieli, 2011). Initially a Recruitment Letter (see Appendix A) and Introduction Letter (see Appendix B) were distributed by hand and via email to potential participants and or colleagues and friends who mentioned, or I thought might know, a potential student who may be interested in participating in the study. I distributed these two letters to approximately 50 persons asking them to refer the information to potential participants. The SSM works when one participant gives the researcher the name of another who provides the name of a third and so on. The snowball sampling method, or chain referral sampling, is a particular method useful

in conducting research with marginalized groups. In order to locate and access participants from a specific population that may be hard to reach, this referral method might engage more participants than a direct recruitment approach.

The following is a description of how the participants, who attended seven different schools across four municipalities within the Lower Mainland of BC, were recruited. The first dyad, Elizabeth and Miriam, responded to an email I sent to Miriam. Although I am acquainted with Miriam, I did not know that her Grade 12 daughter, Elizabeth, was diagnosed with dyslexia in Grade 3. Following my informal presentation of the study to personnel in The Learning Disability Association of Vancouver, they referred to me the second dyad, Annie and Gayle. My daughter's friend referred to me the third dyad, Anthony and Maria. Although Maria and I were acquaintances 10 years ago I did not know that her son had learning disabilities. My daughter shared information about my study with her friends and Kira asked to participate in the study. She indicated to my daughter: "I would love to participate, I don't mind her testing me, I'm used to it" (personal conversation; April, 2016). Cora, Kira's mother was also passionate about participating. Professor Linda Siegel referred the fifth dyad, Alexandra and Kate, who shared information about the study with several families. Two of these families, the sixth and the seventh dyads, joined the study. The eighth dyad was referred to me through Kira, a participant in this study, who was taking private lessons from Mark, Oliver's father.

There were a few other people who contacted me showing interest in participating: one of them did not have the formal learning disability designation while another parent expressed interest, but her daughter was "too shy" to talk about her learning disabilities. Two other people did not call back after they initiated the first phone conversation. One dyad participated in the first interviews and after that decided to stop as they explained that the Grade 12 student was busy with sport competitions and was experiencing stress in school at that time. I gave

them the honorarium with a thank you card. These two interviews were transcribed but were excluded from the analysis of the data, as the information shared was not at the level achieved with the other eight dyads that further conversed about their experiences and perspectives.

An advantage in employing the snowball sampling method was that, as a researcher outside this marginalized population, I could begin the study with few contacts and gradually expand my contacts by using the social network of the participants. One potential limitation of snowball sampling was that participants were not identified randomly and, therefore, may not represent the population of students with learning disabilities in BC schools. Participants who participated in this study were not representative of all parents particularly because their high level of involvement and devotion to their child's schooling appeared extraordinary. However, regardless of the snowball sampling method, and as is typical with the generic qualitative research design, the generalizability of findings to other dyads and conditions was not intended.

The snowball sampling method lies in its reliance on the "gatekeeper," or principal referrer, who begins the referral chain; the social networks within which this person participates are largely what will be accessed using this method (Cohen & Arieli, 2011). To overcome this limitation, I distributed initial cover letters to several key people in a variety of locations in order to invite participants from different communities. In this study, the first and second participants were independent and not related to the others. The third and fourth participants attended the same high school, but they may not have known of each other's participation in the study. The sixth, and seventh, participants contacted me through Kate, the fifth participant, who was referred by Professor Linda Siegel. Kira, who was studying math privately with Mark, suggested to him to participate in this study. Oliver, Mark's son, was not connected to any of the other participants.

Regardless of how participants learned about the study, they were all enthusiastic to

participate and share their experiences. Being highly invested in overcoming their obstacles and striving for successes in school may have also contributed to their interest to participate in this study. More specifically, getting to know my participants, I learned that the students who participated were outspoken and confident and the parents were strong advocates of their child. In this sense, participants in this study may not represent other students and parents who might not be able to afford devoting the time, money, and other resources for their student's schooling to that degree.

3.2.2. Introduction of Participants

In Table 3.1, I introduce the participants using pseudonyms, each dyad's parent, place of interview, their grade at the time of the interviews, each student's diagnosis including grade and year of testing, and length of interviews. In addition, I included students' and/or parents' quotes that struck me as significant in describing their learning experience. This technical and qualitative information is presented to familiarize the reader briefly with participants.

In Table 3.1, each interview with a student is marked with S and each interview with a parent is marked with P. The labels S1 and P1 indicate the student and parent's first interview, while the labels S2 and P2 indicate the student and parent's second interview, and, the label SP3 indicates the third student-parent joint interview. These markings, S1, P1, S2, P2, SP3, and the numbers of lines of a data item, are used in citing participants' excerpts, included in the subsequent chapters.

Table 3.1 Information on students' and parents' participation in interviews

Interview Information		Dyad #1			
		Student: Elizabeth, G-12		Mother: Miriam	
First Interviews	Date	April 17, 2016	S1	April 17, 2016	P1
	Place/Length	Participant's home/ 68 min.		Participant's home/ 74 min.	
Second Interviews	Date	May 8, 2016	S2	May 8, 2016	P2
	Place/Length	Participant's home/ 73 min.		Participant's home/ 60 min.	
Third Interview	Date	June 28, 2016			SP3
	Place/Length	Participants' home/ 70 min.			
<p>Elizabeth was tested and diagnosed with dyslexia when in Grade 3 (2006) by the school psychologist in her private Jewish school.</p> <p>Elizabeth said: "In elementary school it was a lot more predominant (. . .) I was taken out of class to get help (. . .) so everyone kind of knew which like made me become like an OTHER (. . .) but in high school it's kind of just been normal because I kind of just kept it more under the radar" (Elizabeth, S1, 17-21).</p>					
Interview Information		Dyad #2			
		Student: Annie, G-10		Mother: Gayle	
First Interviews	Date	May 29, 2016	S1	May 29, 2016	P1
	Place/Length	Participant's home/ 50 min.		Participant's home/ 59 min.	
Second Interviews	Date	June 29, 2016	S2	June 23, 2016	P2
	Place/Length	Restaurant/ 49 min.		Participant's work/ 40 min.	
Third Interview	Date	August 15, 2016			SP3
	Place/Length	Participants' home/ 76 min.			
<p>Annie was tested and diagnosed with Auditory Processing difficulties when in Grade 8 (2014) by a private psychologist.</p> <p>Annie said: "They didn't actually fully comprehend (. . .). I never really got that, 'She has a learning disability. Help her out.' To this day, I still don't. (. . .) I just feel like they don't ... If you don't have it, you don't understand and that's everything" (Annie, S1, 148-154).</p>					

Interview Information		Dyad #3			
		Student: Anthony, G-10		Mother: Maria	
First Interviews	Date	June 24, 2016	S1	June 24, 2016	P1
	Place/Length	Researcher's home/ 58 min.		Researcher's home/ 70 min.	
Second Interviews	Date	July 22, 2016	S2	July 22, 2016	P2
	Place/Length	Researcher's home/ 63 min.		Researcher's home/ 62 min.	
Third Interview	Date	October 10, 2016			SP3
	Place/Length	Researcher's home/65 min.			
<p>Anthony was diagnosed with dyslexia when in Grade 8 (2014), in a mini public school by a district school psychologist. His Grade 8 English teacher noticed his difficulties and referred him for assessment.</p> <p>Anthony said that in elementary school: "At one point my like confidence in learning wasn't very big, because like I let the negativity of some of those negative teachers get to me" (Anthony, S1, 171-172).</p> <p>In high school, he said: "Yeah, I feel like my teachers always have my back" (Anthony, S1, 140).</p>					
Interview Information		Dyad #4			
		Student: Kira, G-10		Mother: Cora	
First Interviews	Date	June 28, 2016	S1	June 28, 2016	P1
	Place/Length	Participant's home/ 82 min.		Participant's home/ 69 min.	
Second Interviews	Date	August 28, 2016	S2	August 28, 2016	P2
	Place/Length	Participant's home/ 64 min.		Participant's home/ 76 min.	
Third Interview	Date	October 4, 2016			SP3
	Place/Length	Participants' home/ 58 min.			
<p>Kira was tested and diagnosed with dyslexia in Grade 2 (2009) and was tested again in Grade 7 (2014) She was tested twice by a private psychologist.</p> <p>Kira said: "they teach really only one way so it is hard because I'm spending like 6 hours at school (. . .) Sometimes it doesn't even click in my head" (Kira, S1, 29-30).</p> <p>Hadas: "What's important to you... to learn? Kira: "Emm... Other kids' feelings... and I know it's really hard to teach that, but just like manners and... confidence and... being giving and forgiving. So, I think that's probably the most important things and to be happy with yourself" (Kira, S2, 493-497).</p>					

Interview Information		Dyad #5			
		Student: Alexandra, G-10		Mother: Kate	
First Interviews	Date	October 20, 2016	S1	October 20, 2016	P1
	Place/Length	Researcher's home/ 55 min.		Researcher's home/ 92 min.	
Second Interviews	Date	November 5, 2016	S2	November 5, 2016	P2
	Place/Length	Researcher's home/ 38 min.		Researcher's home/ 62 min.	
Third Interview	Date	November 10, 2016			SP3
	Place/Length	Researcher's home/72 min.			
<p>Alexandra was tested in Grade 2 (2009) with no diagnosis. In Grade 3 (2010) she was tested again and was diagnosed with dyslexia. In Grade 10 (2016), she was tested for the third time. All three assessments were done by a private psychologist.</p> <p>Alexandra said: "Just knowing the person first, [crying] I guess, so they know that I'm not retarded or something [crying], (. . .) So I can show them [crying], there is nothing wrong with me, it's just reading and stuff [crying]" (Alexandra, SP3, 548-553).</p>					
Interview Information		Dyad #6			
		Student: Jonathan, G-10		Father: Dewayne	
First Interviews	Date	October 21, 2016	S1	October 21, 2016	P1
	Place/Length	Participant's home/ 73 min.		Participant's home/ 97 min.	
Second Interviews	Date	October 29, 2016	S2	October 29, 2016	P2
	Place/Length	Participant's home/ 51 min.		Participant's home/ 51 min.	
Third Interview	Date	November 12, 2016			SP3
	Place/Length	Participants' home/66 min.			
<p>Jonathan was tested by a district school psychologist and was diagnosed with learning disabilities in Grade 3 (2010). He was tested again by a district school psychologist in Grade 10 (2016).</p> <p>Jonathan said: "I try really hard, but if I'm not learning the way that I learn it's not really going to help me overall, and it's not going to stick as much. It's the way that, I guess, I learn information" (Jonathan, S1, 531-533).</p>					

Interview Information		Dyad #7			
		Student: James, G-10		Mother: Barbara	
First Interviews	Date	October 23, 2016	S1	October 23, 2016	P1
	Place/Length	Participant's home/ 59 min.		Participant's home/ 97 min.	
Second Interviews	Date	November 20, & December 22, 2016	S2	November 20, 2016	P2
	Place/Length	Participant's home/ 24 min.		Participant's home/ 55 min.	
Third Interview	Date	December 22, 2016			SP3
	Place/Length	Participants' home/ 32 min.			
<p>James was tested privately in Grade 2 (2009) and was diagnosed with sever dyslexia. He was tested again in Grade 6 (2013), by a private psychologist.</p> <p>Barbara [speaking to James]: “Yeah. Well, I can’t really speak for you. I would be interested to know what you think. What was the best thing?” James: “It was all pretty terrible, until the end.” Barbara: “[laughing] That’s pretty honest.” James: “Like I got good grades in a couple classes, but like the whole time to get those good grades were completely terrible” (James and Barbara, SP3, 190-195).</p>					
Interview Information		Dyad #8			
		Student: Oliver, G-11		Father: Mark	
First Interviews	Date	January 11, 2017	S1	January 13, 2017	P1
	Place/Length	Researcher's home/ 64 min.		Participant's work/ 68 min.	
Second Interviews	Date	January 25, 2017	S2	January 20, 2017	P2
	Place/Length	Researcher's home/ 49 min.		Participant's work/ 50 min.	
Third Interview	Date	February 26, 2017			SP3
	Place/Length	Participants' home/ 43 min.			
<p>Oliver was diagnosed with learning disabilities in math and writing based on a district school psychologist testing in Grade 5 (2011). He was tested again by a school psychologist in Grade 9 (2015).</p> <p>Oliver said: “Being diagnosed doesn’t really do anything for me... I mean... The IEP does something for me, the benefits that I get from it help me, but like, diagnosis doesn’t change anything” (Oliver, S1, 282-284).</p>					

3.3. Research Design

This generic qualitative study used interviewing to elicit experiences as constituted by the relationship between individuals and their social environments and how they made meaning of these interactions (Patton, 2002). The interview process included an introductory meeting followed by a series of three interviews and an optional member-check meeting if needed (see Table 3.2). The purpose of the introductory meeting was to discuss the purpose of the study, to clarify the nature of participation in the interviews, to begin developing rapport, to answer preliminary questions potential participants may have, and to discuss the process of the informed consent. The series of three interviews included, in this order: 1) an individual semi-structured interview with each participant separately, 2) a collaborative interview that included themes from the first interview with each participant separately, and 3) a collaborative joint interview with the student and one parent on themes from the first two interviews and their questions (Arvay, 2003; Patton, 2002).

Table 3.2 Goals of meetings and interviews

	Student	Parent	Student and parent
Introductory meeting			Present the study Explain consent
First Interview	Confirm consent and semi structure interview	Confirm consent and semi structure interview	
Second Interview	Confirm consent and collaborative dialogue on previous interview data	Confirm consent and collaborative dialogue on previous interview data	
Third Interview			Confirm consent Allow integration of experiences. Answer questions & closure
Member Check			Sharing of transcripts and draft of thematic analysis

3.3.1. First Meeting: Introduction and Informed Consent

The first meeting with participants took place either on the phone or face-to-face. Five out of the eight dyads met with me in person and with three dyads we had a phone conversation. These introductory meetings lasted between 20 to 30 minutes and included the following topics: 1) introducing the purpose of the study which is to understand the sociocultural aspects of learning disabilities from students' and parents' perspectives and experiences; 2) introducing the time commitment of 60-90 minutes participation in each of the three interviews, detailing the locations of interviews, incentives, and scheduling the first interview; and 3) describing the process of informed consent (Anderson et al., 2012; Chabot, Shoveller, Spencer & Johnson, 2012; Renold, Holland, Ross, & Hillman, 2008).

Chabot et al. (2012) discussed three principles of the informed consent: autonomy, beneficence, and justice. Autonomy, the first principle, refers to the right of individuals to determine whether they are interested in participating in the research. Given the series of meetings and interviews, the process of informed consent was ongoing, rather than a single event (Renold et al., 2008). Once participants consented to participate during the introductory meeting, the first interview was scheduled. At the beginning of each interview, participants were asked if they are interested in continuing their participation and reminded that they could withdraw from the study any time should they change their mind.

Beneficence, the second principle, was achieved by offering an honorarium. As was approved by the Ethics Review Board, the first two dyads received a \$10 honorarium per session for their participation. The next six dyads received a \$50 Cineplex gift card for their participation in three interviews. The last dyad asked for and received \$50 instead of a gift card. The reason I decided to change from cash money to a gift card was that it felt a little awkward for me to pay participants with money at the end of each interview session. I preferred to ask

participants their preference. The beneficence principle respects the potential harm and benefits the research involved and focused on how to reduce possible harm and maximize potential benefit to participants. Interviewees shared information that may have been hurtful or reminded them of painful memories. However, at the same time, sharing past experiences in non-critical and supportive conditions can be healing, as some of the interviewees reported (Patton, 2002). At all times, interviewees were reminded that they could choose to answer or not answer interview questions.

The third principle of justice refers to fair and equitable treatment of participants in the research. Chabot et al. (2012) argued that requiring parental consent in addition to the consent of the student might reduce their participation. This creates a selection bias of participants and can cause harm, as these students' perspectives may be excluded. In my study, I asked both parents and students for their consent because I was also interested in parents' participation. However, interviewing students and their parents separately, in addition to asking both for consent, acknowledged to students and parents that both their voices are equally valued. Details and rationale for each of the three interviews are presented in the next sections.

3.3.2. The First Interview

In the first semi-structured interviews, I gathered interview data separately from each student and parent. I used open-ended questions, probing and eliciting questions to encourage detailed elaboration as needed (see Appendix D for First Interview Protocols). For this study, students were offered the option to bring a copy of their psychoeducational report if they wished to share it in the interview. All participants shared their reports during the interviews and six dyads provided me with a copy. The purpose of looking at the report together was to dig deeper into how they perceived their strengths and challenges in relation to their learning disabilities as was presented in the report. Looking at the report elicited discussion on what

they thought about their abilities in relation to how they were described in the report. In addition, participants were asked to share their perceptions on the content and the process of diagnosis. The discussion around the report was not intended to verify or disprove diagnosis, but to answer their questions and highlight their strengths as shown in the report.

In formulating questions for the interview, I was aware that I was guided by curiosity. Riessman (2008) argued that interviewers need to ask themselves, what information they value and what questions they have. I had initially crafted questions based on my interest. More specifically, in accordance with sociocultural theory, I was interested to hear about contextual influences and relevant relationships that contributed to their experience of learning disabilities. These questions elicited interview data that was transcribed, coded, and then, thematically analyzed guided by aspects of sociocultural theory. These first interviews with students and parents started to answer the four corresponding research questions of this study.

3.3.3. The Second Interview

Prior to each of the second interviews, I transcribed the first interview and completed an initial search for thematic codes to prepare for the analysis. The transcripts were sent to participants before the second interview to allow them time to review it if they so chose. The second interview was inspired by notions of Arvay's (2003) collaborative dialogue, in which we both constructed meaning while engaging in a dialogue. This dialogue enabled further clarifications of ideas that surfaced in the first interview. If participants, especially students, did not initiate a conversation, I asked guiding questions to help them construct and reconstruct the meaning of themes found in their interview data (see Appendix E for Second Interviews Protocol).

In accordance with sociocultural theory, conversations raised awareness for historical, contextual, and practical perspectives on how meanings and experiences of learning disabilities were constructed by individuals in relation to their social environments (e.g., Allahyar &

Nazari, 2012). Nuances unique to each participant's experience informed the bigger picture of the phenomena of learning disabilities and addressed more in depth the four research questions of this study.

3.3.4. The Third Interview

Prior to the third interview, the transcripts of the second interview were sent to each participant to allow them time to review it before the third interview. Each student and parent dyad participated together in the third interview for the purpose of integrating and discussing themes they wished to share. Transcripts of the third interview were emailed to participants after the interview. During the interview, as a researcher, I followed the initiatives of students and parents in sharing themes. I responded and reflected back based on themes they raised. I guided the dialogue based on what they chose to share. (see Appendix F for Third Interview Protocol).

3.3.5. Member Check

The purpose of the last member check, also called a member validation, was to solicit feedback from participants on the initial thematic analysis of the interview data in the previous interview (Schwandt, 2007). Schwandt (2007) argued that there is a risk in assuming that participants can be part of the process of analysis. Participants may have multiple reasons and their own personal motivation for why they agree or disagree with the proposed analysis. However, in this study, transcripts were presented to participants after each interview and we had two interviews to clarify and discussed themes from their previous two interviews.

Across all participants, these third interviews also functioned as a review and closure meeting. Participants conveyed a sense of clarity about ideas discussed thereby leaving no need for a fourth meeting as planned. Out of respect and sensitivity for students' preference, I did not schedule a face-to-face last member check meeting. I emailed parents and students their transcripts of the third interview and reminded them again of my availability. Some parents

texted, emailed, or called, to briefly say thank you, or send me a copy of their child psychoeducational assessment, or to wish me Merry Christmas. However, no one requested to meet again. Upon completion of a preliminary version of the thematic analysis I emailed it to all participants for further member check. Some participants confirmed receiving the draft and explained that they hope to find time to read some parts of it soon. One participant reviewed the complete document and we clarified nuances and continued the conversation over email.

3.4. Analysis Procedures

3.4.1. Transcription of Interview Data

Audio recordings were transcribed as the first level of analysis guided by sociocultural theory for theoretical thematic analysis. A first level of transcription, as shown in Table 3.3, was guided by Ochs (1979) and consistent with thematic analysis of Braun and Clarke (2006). Initial transcription began with the aid of a transcriptionist. I corrected the transcripts while listening repeatedly to the recordings and applied the conventions presented in Table 3.3 systematically.

3.4.2. Thematic Analysis

Thematic analysis is used in this qualitative study as a method to identify, code, and analyze specific and latent themes within the interview data guided by sociocultural theory. Based on Braun and Clarke's (2006) thematic analysis is considered as "a method in its own right" (p. 78). Clarifications of terminology used in describing the thematic analysis are necessary. The data *corpus* included all interview transcripts generated in this study, while *data set* may include data of a certain interview or data selected from across the whole corpus about a specific theme, or both. Data *item* is each individual data that was collected and data *excerpt* is each individual data that was coded to be in the pool of possible data extracts to be used in the final analysis (Braun & Clarke, 2006).

I approached the data for themes in two ways. One was inductive, finding themes in interview data, and the other was deductive by searching for themes drawn from sociocultural theory, as well as the literature about learning disabilities. In this study, I used both inductive and deductive approaches for identifying specific and latent themes in the interview data. Thematic analysis at the latent level interprets the underlying ideas and assumptions beyond the semantic content of the interview data. When using inductive analysis, I created themes from the data, thus, they sometimes were different than the questions participants were asked in the interviews, and also different than the theoretical interest and research questions of the study. For example, the theme of early identification and the need for recognition of students' needs were present in the data although I did not ask directly about these themes. When using deductive analysis, for example, I applied the theoretical concept of mediation of teacher-student dynamics. The following is a description of the six steps of thematic analysis I followed in this study, based on the approach of Braun and Clarke (2006).

The first step was to become familiar with the data by repeated readings of the transcribed interview data while listening to the recordings. This step was ongoing throughout all phases of the study from interviewing to final analysis in order to avoid the risk of weakening thematic analysis by focusing mostly on repetitive themes (Pavlenko, 2002). Listening to audio files while reading transcripts was critically important in noticing repetitive, as well as latent themes that were mentioned only once but were worth a discussion (Pavlenko, 2002). While listening, editing, and correcting the transcripts based on the transcription conventions at the preliminary phases between interviews, I listed ideas, thoughts, key words, metaphors, or phases of students' development, in my research journal.

The second step was coding data by organizing data into meaningful groups by reading systematically through the entire corpus and highlighting data items to mark codes. As the

analysis progressed, themes of aspects of social and cultural influences on how students perceived and experienced their learning disability were identified. Based on my familiarity with the data I refined the codes and grouped them into the following ideas: “other” in friends context, challenges, strengths, success and un-success and grades, teachers’ expectations and support, how was I taught and how do I learn, self worth, public and private schools / elementary and high school, parents support, learning disability label and stigma, diagnosis, psychoeducational testing, a disability or a difference, and experiences of participating in interviews. I collated all data items that were relevant to each group of codes by indicating the

Table 3.3 Transcription conventions based on Ochs (1979)

What to mark	How	Why
Intonation, Prosodic quality	At the end of utterance	To mark new information, hearer selection, communicative act, utterance boundary
Marks low rise	,	Pause
Marks high rise	?	Question
Marks low fall	.	Statement
Marks exclamation	!	Exclamation
Emphasis by loud voice	CAPITAL LETTERS	To show increased volume and to mark stress or emphasis
Emphasis by quiet voice	<i>Italic</i>	To show decreased volume and to mark stress or emphasis
Metatranscription Marks		
()		Inaudible
{ }	{00:00:00}	Timestamp approximately every 10 - 15 minutes
[]	Square brackets	Additional information from interviewer including laughing, crying, and other specific clarifications on contextual meaning of text
...	Three Dots	Short pause of a few seconds between words
_____	A line	Silence due to need to process intense feelings or taking the time to think

line numbers in the interview transcript. This process assisted me in further familiarizing myself with constructing themes, as well as allowing me ongoing easy access to the data items relevant to each group of codes and developing themes.

The third step was further collating codes into themes by creating a visual thematic map

of the main themes and sub themes. The themes created in the visual map (see Figure 3.1) were: Learning disabilities, school personnel, success, challenges, strengths, parents, how students learn, how teachers teach, and school type. The visual in Figure 3.1 reflects my intention to organize the groups of codes in a relational fashion and find connections in order to further refine the themes in a meaningful way.

The fourth step was a review of the meaning of themes for coherence of data within themes and distinction of data between themes. In order to examine internal and external validity of data within themes, I created a table (see Table 3.4) of the codes on the horizontal column, and the 40 interviews in the vertical lines. For each interview, I indicated the line numbers of each of the coded data items that were highlighted. This systematic process helped me notice overlapping of data items across themes, significant differences in meanings, and deeper implications for interpretation of the interviews' data.

The fifth step involved naming and defining the themes by identifying the core idea of each theme and writing a detailed analysis for each main theme that includes the related sub themes. This was a recursive process that involved repetition of previous steps as needed. The rationale for the organization of the first three themes was to follow a chronological sequence of the unfolding events in participants' life stories that included issues around early identification, followed by testing that was critically pivotal and, then, searching for alternative learning settings (see Figure 3.2). The next themes do not have a chronological order, as they are ongoing across time and describe the complexities of the processes involved in learning and teaching as well as students' strengths and challenges.

The sixth step of producing the report of the analysis involved combining compelling excerpts and relating themes to research questions and literature and was combined with the previous steps and involved much fine tuning, editing, and rethinking while writing the

analysis chapters (Braun & Clarke, 2006).

Finally, Braun and Clarke (2006) emphasized “thematic analysis has limited interpretive power beyond mere description if it is not used within existing theoretical framework that anchors the analytic claims that are made” (p. 97). Therefore, the role of sociocultural theory was to provide a framework and sensitizing concepts that contributed to the process of coding, construction of themes, and interpretation.

Table 3.4 Preliminary codes across all data corpus – example of dyad # 2

Codes / Dyad # 2 Annie & Gayle (Auditory processing)	'Other', Teasing & LD in friends context	Challenges	Strengths	Success Un success Marks	Teachers and school personnel, Expectation Support	How S was taught and how S learn Teaching /Learning	Self worth Self Esteem	Schools: private, public, elementary, secondary	Parents' support, trust, believe in, family context	LD Label / diagnosis / recognition / psych-ed / stigma
	S1, 495-499 S1, 544-545 S1, 561-563 S1, 614	S1, 24-27 S1, 279-281 S1, 330-331 S1, 520-521	S1, 291-297 S1, 304-305 S1, 446-447	S1, 333-334 S1, 361-364 S1, 373-375 S1, 379-382 S1, 593-595	S1, 37-45 S1, 51-54 S1, 68 S1, 130-132 S1, 168-173 S1, 182-184 S1, 200-201 S1, 209-211	S1, 7-10 S1, 103-105 S1, 189-193 S1, 243-244 S1, 342-344 S1, 352-356 S1, 438-442	S1, 409-412 S1, 501-509 (listen to kids) S1, 569-574	S1, 134-136 S1, 271-276 S1, 338-340 S1, 349-350 S1, 515-519	S1, 420-422 S1, 434-435 S1, 438-442 S1, 477-480	S1, 144-151 S1, 222-227 S1, 233-235 S1, 250-254 S1, 389-394
	P1, 228-231 P1, 247-249 P1, 401-404 P1, 413-419 P1, 763-766	P1, 16-22 P1, 30-33 P1, 284-288 P1, 301-304 P1, 319-322	P1, 198-200 P1, 194-198 P1, 557-558 P1, 566-569 P1, 710-713 Personality	P1, 251-253 P1, 360-363 P1, 375-376 P1, 598-602 P1, 604-608 P1, 612-616	P1, 44-51 P1, 77-81 P1, 106-107 P1, 111-113 P1, 178-184 P1, 265-267 P1, 378-382	P1, 60-65 P1, 257-260 P1, 271-272 P1, 532-534	P1, 396-399	P1, 13-17 P1, 328-332 Alternate P1, 342-346	P1, 23-28 P1, 128-134 P1, 155-164 P1, 364-370 P1, 444-446 P1, 474-477 P1, 485-487 P1, 501-506 P1, 654-661	P1, 7-9 P1, 87-89 P1, 167-169 P1, 220-223 P1, 240-244 P1, 447-452 P1, 623-625
Interview Experience S2, 16-17	S2, 95-99 S2, 536-537	S2, 462-465	S2, 470-471	S2, 132-136 S2, 156-165 S2, 316-320	S2, 223-227 S2, 237-241	S2, 197-201 S2, 249-253 S2, 508-512		S2, 34-36 S2, 39-41	S2, 271-277 S2, 538-542	S2, 427-428 S2, 432-435 S2, 439-441
	P2, 43-46	P2, 314-315		Teachers schools P2, 365-373 P2, 381-383 P2, 476-483	P2, 49-54 P2, 63-68 P2, 77-84 P2, 288-296 P2, 342-345	P2, 246-248	P2, 347-350	P2, 259-261	P2, 31-32 P2, 114-120 P2, 305-309 P2, 332-334 P2, 421-425	P2, 45-46 P2, 468-469
SP3, 741	SP3,	SP3, 369-372 815-818	SP3 702-706					SP3, 827-828	702-706, 727-729, 930,	

Note. Numbers indicate line numbers in the transcript. S1= student first interview; S2= student second interview; P1= parent first interview; P2= parent second interview; SP3= student-parent third interview.

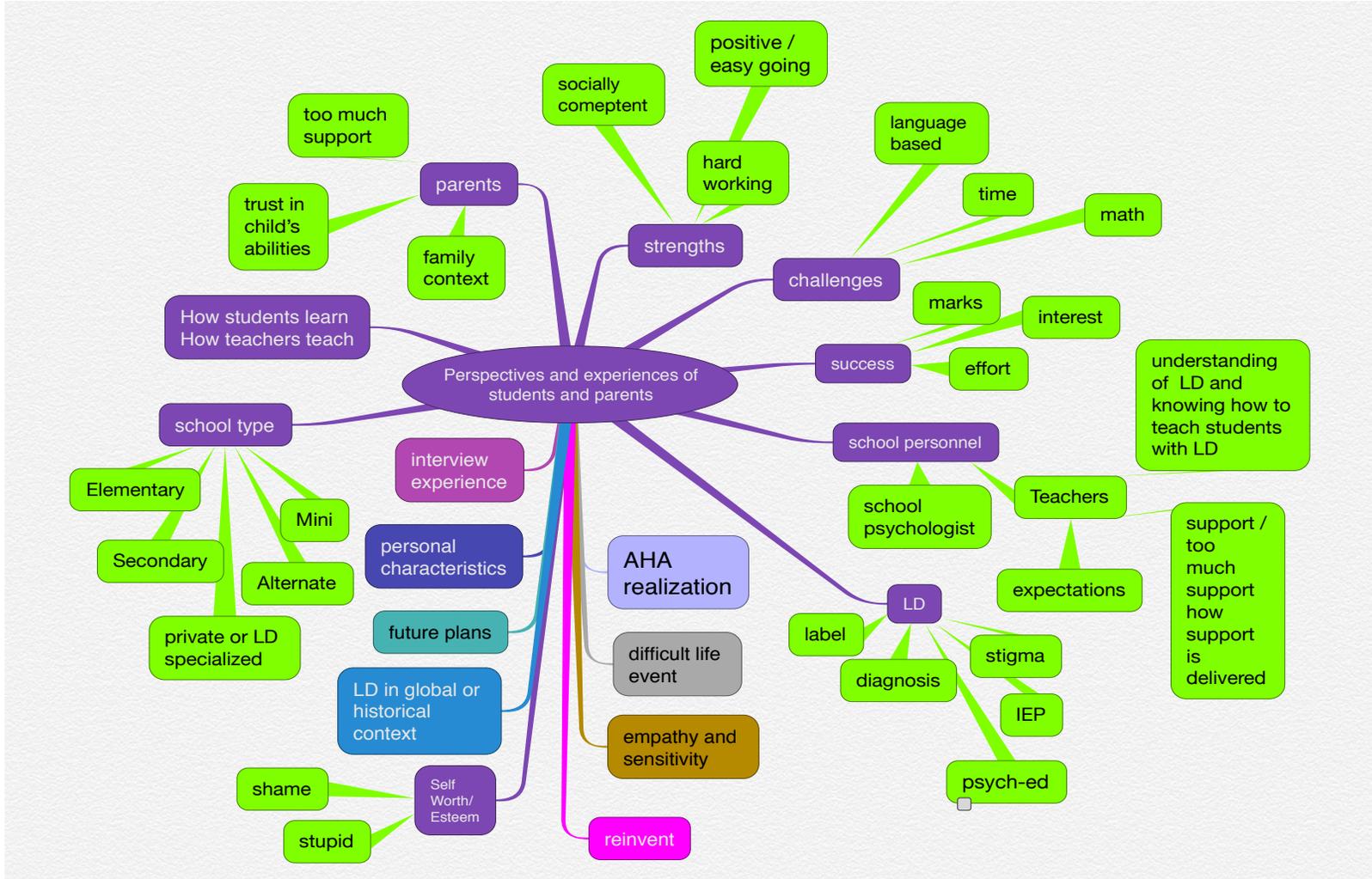


Figure 3.1 Map of preliminary grouping of codes



Figure 3.2 Map of preliminary processes of forming themes

3.4.3. Confidentiality and Trustworthiness

Audio files were saved as MP3 files and kept confidential in my computer, which was password-protected and encrypted. When recordings were not in use I stored the MP3 files in a secured locked cabinet at UBC in the office of the supervisor of this study. I, as researcher, with assistance of another reliable confidential professional transcribed the audio files. At least five years after the completion of this study, audio recordings and electronic documents of transcripts stored at a UBC facility will be deleted to ensure that confidentiality will not be breached.

Participants are identified using pseudonyms throughout this study. Four criteria were addressed to evaluate the trustworthiness or soundness of a research study: credibility, transferability, dependability, and confirmability (Guba, 1981; Shenton, 2004) (see Table 3.5).

Patton (2002) argued that because in interviews we cannot observe feelings, thoughts, and intentions, the interviewer needs “disciplined and rigorous inquiry based on skill and technique” (p. 341) to establish trustworthiness. In addition, when developing codes and classifying data the researcher must look at recurring regularities in data that reveal patterns that can be grouped into categories that need to be defined by internal homogeneity to show convergence of data that hold together in a meaningful way, and external heterogeneity to show divergence by clearly differentiating categories (Patton, 2002).

Patton’s (2002) guidelines to judge internal homogeneity and external heterogeneity are: 1) internal and external plausibility means that each category has internal consistency, and all categories comprised a cohesive combination of concepts within the bigger topic of learning disabilities; 2) the set of categories is sufficient including data that cover the facets underlying the purpose of the study to examine learning disabilities through aspects of sociocultural theory; 3) a second observer of the available data will validate the logic of the categories and the fitting of data into the categories; and 4) categories should make sense to interviewees.

Table 3.5 Trustworthiness based on Guba (1981) and Shenton (2004)

Criteria	How each criteria was met in this study
<p>Credibility: the confidence in the certainty of the findings of the study, known in scientific terms as internal validity</p>	<ul style="list-style-type: none"> • Research design is based on relevant literature • As a researcher I am familiar with the learning disability phenomena through my work as a school psychologist • Snowball sampling model to mitigate my bias in participant selection • Triangulation of data and investigator is used • Insuring honesty of interviewees' data by establishing rapport and emphasizing that participants can refuse participation • Use of iterative questioning to probe and elicit detailed data, clarify previously raised issues, and draw attention to the inconsistencies and gaps in data—was achieved in second and third interviews • Include in analysis negative cases that do not support themes in order to account for all aspects of learning disabilities as expressed in the data by participants • Debrief frequently with my supervisory committee to widen my perspective and notice my own biases and strengthen my arguments • Evaluate the unfolding of the study by documenting my impressions of each session in my research journal • Verify with participants the content of transcripts and their understanding of the initial themes in a member check meeting
<p>Transferability: applicability of findings in other contexts, known in scientific terms as external validity or generalizability</p>	<ul style="list-style-type: none"> • Acknowledge that all social phenomena is context-relevant • Provide thick description of details of all procedures, interview context, steps and processes of analysis, and all contextual factors • This thick detailed description of context may allow future researchers to judge if findings of this study may be of use for studying other contexts
<p>Dependability: consistency of findings, known in scientific terms as reliability</p>	<ul style="list-style-type: none"> • Reporting in detail the process of the study so future researchers can repeat the study, although it is not guaranteed that results will be the same • Document processes of data collection and analysis so that other researchers can examine the processes used in this study • Triangulation of investigators by sharing transcripts with the supervisor of this study and with participants
<p>Confirmability: Findings are shaped by interview data</p>	<ul style="list-style-type: none"> • Finding are shaped from data generated in interviews, rather than representing my bias, motivation, or interest as a researcher • Investigator triangulation: researcher, supervisor, and participants • Data triangulation: transcripts of interviews with parents and students • Reflexivity as a research practice

However, Schwandt (2007) argued that the analysis of data should not be based on participants whose motives are not clear. As the researcher who is responsible for reflexivity and awareness of biases, I co-constructed meaning with participants. Therefore, preliminary drafts of ideas and themes were presented to participants during the interviews.

3.4.4. Significance and Triangulation

The significance of findings and conclusions in qualitative research is judged by the participants' input, the researcher, and by the reader of the analysis (Flick, 2006; Patton, 2002). Questions that need to be asked about the analysis are: How solid and consistent is the evidence in support of the findings? In what way do the findings deepen our understanding of learning disabilities? How consistent are the findings with other knowledge, as a form of confirmatory significance, or a discovery of innovative significance if findings are not consistent? How useful are the findings for informing the study of learning disabilities? Potential mistakes in establishing the substantive significance can be a result of not attributing significance and excluding significant data or, including insignificant data.

Braun and Clarke (2006) argued that it is important that the analysis write-up include sufficient evidence of the themes and that data extracts demonstrate the themes and be concise and an interesting account of the story the data tell. Significance is established by researcher's intelligence, experience, and judgment, taking seriously the interview data; and taking into account the potential reaction of those who will read the results. Consensus validation of the substantive significance is achieved when all three—the researcher, the participants, and the potential readers (e.g., parents, educators, or researchers) of the analysis—agree on the findings and conclusions. If there are disagreements about conclusions, Patton (2002) said, “you get a more interesting life and the joys of debate” (p. 467).

Triangulation is a method used in qualitative studies to establish validity through different

sources of data, investigators, theories, methodologies, and environments of research (Guion, 2002; Flick, 2009). All five approaches or one of them can be used for triangulation. In my study, I used investigator triangulation and different sources of data to establish validity (see Table 3.6).

Investigator triangulation involved input from potentially three evaluators— students and parents, the supervisor, and myself as the researcher—who examined the transcripts and reflected on some aspects of the analysis of themes. Data triangulation involved gathering data from two different stakeholders—students and parents—that may have different positions. I reflected by journaling after each interview on my perceptions and biases so I could be aware of my own lens while analyzing interview data (Flick, 2009).

Table 3.6 Triangulation of sources of data and investigators

Research Questions	Method	Data Generated
1) How do students describe their experiences of and perspectives on having learning disabilities? 2) How do parents describe their experiences of and perspectives on their child’s learning disabilities? 3) How do students describe their strengths and challenges in relation to their academic experiences in school? 4) How do parents describe their child’s strengths and challenges in relation to their academic experiences in school?	Two Sources of Data	
	Interviews with students and parents	Transcripts of interviews with students & parents
	Three Investigators	
	Sharing transcripts with students, parents, and the supervisor of this study	Participants: feedback from students and parents while discussing themes of transcripts of each of the first two interviews provided trustworthiness Sharing with and receiving from my supervisor feedback on thematic analysis contributed to consistency

3.5. Chapter Summary

Five themes were generated in the process of thematic analysis in order to answer the four research questions of this study. Chapter 4 includes the first three themes that described the early stages of students experiencing difficulties and what action was taken to address their difficulties. The three themes included in chapter 4 are: identifying difficulties in learning, testing to diagnose a disability, and, searching for alternative learning settings. Chapter 5 includes one theme, learning and teaching. This theme includes several patterns noticed in relation to this topic. These four first themes answered the first two questions regarding perspectives and experiences of learning disabilities as reported by students and parents participated in this study. Chapter 6 includes the last theme, strengths and challenges. This theme answered the third and fourth research question asking about experiences of strengths and challenges of students with learning disabilities as reported by students and parents.

The next three chapters include a presentation of the interview data organized according to subthemes within each of the five themes. Following the presentation of the interview data, Chapter 7 includes a discussion of these five themes and related issues. Finally, Chapter 8 articulates conclusions and educational implications based on this study, as well as limitations, suggestions for future research, and suggested significance of this study.

Chapter 4: Identifying, Diagnosing, and Alternative Learning Settings

Three themes are described in this chapter: identifying difficulties in learning, testing to diagnose a disability, and searching for alternative learning settings. These themes correspond with chronological phases I identified in the experiences lived and shared by the eight student-parent dyads who participated in this study. The first theme, and the first experience students and parents reported in relation to their learning, was that students identified their own learning difficulties while struggling academically prior to teachers' noticing their difficulties or formal diagnosis through testing. The second theme describes the next phase they experienced and reflects parents' pursuit of psychoeducational testing in order to ensure that students are being noticed and to gain recognition through a diagnosis of learning disability. Students and parents used the term "testing" to describe this process. The third theme describes the next phase in students and parents' lived experiences. Following the diagnosis of learning disabilities students and parents were searching for alternative learning settings that would promise to provide students with the pedagogy they needed in order to learn. These three themes serve to partially answer the first two research questions: 1) How do students describe their experiences of and perspectives on having learning disabilities? 2) How do parents describe their experiences of and perspectives on their child's learning disabilities?

4.1. Identifying Difficulties in Learning

All of the eight students became aware of their academic difficulties during their early years of schooling. Their parents also realized that their child's academic and emotional struggles in school indicated that these difficulties in learning needed more understanding and attention. Four sub-themes were constructed across the interview data to reflect these early school years before formal identification. In the first sub-theme, "What is wrong with me?" students described their inability to complete class work compared to their peers and were frustrated as they did not

understand the reasons for their difficulty. In the second sub-theme, “Emotional impacts of learning difficulties,” students and parents described other people in addition to students who were negatively impacted by students’ academic difficulties. In the third sub-theme, “Parents’ requests and expectations from schools before diagnosis,” students and parents described their requests of the school to support their child. In the fourth sub-theme, “Schools’ responses to students and parents’ requests for support,” students and parents described the support or response of school personnel to students’ needs.

4.1.1. What is Wrong with Me?

As early as Kindergarten or Grade 1, students and parents noticed that students were experiencing difficulties to meet academic expectations. Not understanding the reasons for that difficulty, students stated that they were frustrated, embarrassed, and felt stupid. Students reported that they were aware of the gap between their own academic performance and that of their peers. James was a Grade 10 student who was privately diagnosed with severe dyslexia in Grade 2. His mother, Barbara, described James’ awareness and harsh judgment of his own abilities:

He is acutely aware of what he can and can’t do and how he compares to other kids (. . .) in Grade 1 or 2 he basically said to me, ‘I’m the stupidest kid in this whole school. I should die.’ That’s what his words were. (Barbara, P2, 56-59)

Similarly, Elizabeth, a Grade 12 student, who was diagnosed with dyslexia in her private school in Grade 3 said, “I think, I just, in my memory I felt very stupid in elementary school” (Elizabeth, S1, 578-579). She further explained, “I guess, when I was younger (. . .) I was hearing from other people I’m not smart” (Elizabeth, S2, 197-199). Both James and Elizabeth were aware of their abilities in comparison to their peers and were critical of themselves in interpreting this difficulty.

Kira and Jonathan described the frustration of not knowing why they fell behind academically. Kira, a Grade 10 student who was privately diagnosed with dyslexia in Grade 2 said:

Even in Grade 1 when I hadn't been tested I always thought I was stupid (. . .). That carries with you and you just feel like embarrassed (. . .) I could get so embarrassed and really upset. I would just feel like really I didn't know what was going on that I didn't get it. And that frustrated me so badly. (Kira, S2, 435-441)

Kira described her frustration, being embarrassed and regarding herself as stupid. Cora, Kira's mother, shared that, "We knew pretty early because she didn't want to go to school, and she couldn't read" (Cora, P1, 333-334).

Similarly, Jonathan was a Grade 10 student who was diagnosed with dyslexia in his public school in Grade 3. He described that he was falling behind in his reading in spite of his hard work:

In elementary school, I guess, Grade 1 and 2 I didn't have a test yet, so I didn't know I had a learning disability. And, it really bugged me because I'd always be staying in for like lunch and recess doing work that I was supposed to be doing in class, but hadn't finished yet. (Jonathan, S1, 43-46)

Not only did Jonathan not know about the reason for his difficulties, but also his teacher who had instructed him to stay in class during lunch and recess to hone his skills, did not know, as it appeared, that working harder and longer would not help. Jonathan further elaborated, "In Grade 1 we did this where you start at a reading level, and then you're supposed to progress throughout the year, but I'd always stay in the same spot" (Jonathan, S1, 50-52). Jonathan compared his performance to his peers: "Yeah, I remember it. It was annoying, because everyone is like all the way up here, and I'm still at the beginning trying" (Jonathan, S1, 54-55). Jonathan expressed his

doubt in the effectiveness of his strenuous efforts early in Grade 2. He said, “being frustrated with myself, and getting MAD at myself because I can’t do it, and not knowing why not, and thinking that I’m trying my best, but not knowing if I actually am” (Jonathan, S1, 431-433).

Jonathan’s motivation to try hard and read more only increased his frustration regarding why his reading was not improving and resulted in a self-identification of being stupid.

Alexandra, a Grade 10 student, who was privately diagnosed with dyslexia in Grade 2, gave an example of identifying her spelling difficulty: “I remember I had a spelling test, and I was really young, and it was ten words that I had to spell, and I stopped there. I did nothing [laughing]” (Alexandra, SP3, 253-254). Her mother, Kate, refined her experience, “You did do some stuff. By the time she came home, [Alexandra said] ‘I worked so hard, why can’t I do this, Mom? I don’t understand [crying voice]’” (Kate, SP3, 254-256). Kate shared that when Alexandra was young and saying, “I’m stupid, I’m stupid” (Kate, P1, 66), Kate encouraged Alexandra by reminding her of her strengths as a soccer player.

Annie described feeling unguided and uninformed. She was a Grade 10 student who was privately diagnosed in Grade 8 with auditory processing disability. She attended an alternative high school in Grade 9 due to frequent absences and emotional difficulties during Grade 8. She described her elementary school years: “It was just like I didn’t know what to do. I just felt like I didn’t have anything in my favour and things were always like more difficult than they had to be” (Annie, S1, 24-25). Gayle, Annie’s mother, indicated that, “She couldn’t fulfill those expectations” (Gayle, P2, 77). Gayle referred to school’s academic standard expectations of Annie. Annie could not meet these expectations due to her learning difficulties and minimal understanding of her own abilities and difficulties.

Anthony was a Grade 10 student who was diagnosed with dyslexia when he moved to high school in Grade 8. While he described his high school experience within a drama specialization

program as positive, he also spoke about his academic difficulties during his early years in public French Immersion School:

It was pretty difficult I didn't fully learn material that well because the teachers in our elementary school passed through it quite quickly. And ... Sometimes I didn't finish my tasks because I didn't have enough time and then got very poor scores. (Anthony, S1, 32-34)

Anthony, who struggled academically all his elementary years with no identification of his difficulties, rationalized the problem and solution for his difficulties as needing more time and a slower pace of learning and teaching.

Oliver was a Grade 11 student who was diagnosed in Grade 5 with learning disabilities in math and writing in his school. His father, Mark, mentioned that Oliver's difficulties were noticed as early as Grade 2. Mark said: "We [parents and teachers] were just beginning to talk about it [learning disabilities] in Grade 2" (Mark, P1, 35). However, he clarified that "To get psych-ed in the public school system can take three or four years" (Mark, P1, 37-38). For Mark, understanding Oliver's learning difficulties meant waiting for a psychoeducational assessment from Grade 2 to Grade 5. For Oliver, it meant developing anxiety and being frustrated.

In these excerpts, students and parents described that they identified their learning difference early when they experienced academic difficulties that resulted in emotional challenges. Anthony attempted to rationalize difficulties as needing more time, and Mark patiently was waiting for psychoeducational assessment to understand Oliver's difficulties. Kate, Alexandra's mother, summarized the need to identify early: "If we didn't tell her she had a learning disability or dyslexia, she's ... she knows there's something wrong with her, than you just, 'Oh I'm stupid. I can't do this'" (Kate, P1, 527-528). Kate discussed the risk of students experiencing anxiety and low self worth when they do not understand the reasons for their

difficulties and assign self-identification to explain their delay in learning and meeting academic expectations in early grades.

4.1.2. Emotional Impacts of Learning Difficulties

Parents shared how their child's difficulties meeting academic expectations in early grades in school caused the family, and the child, to feel a range of negative emotions: frustrated, stressed, anxious, and overwhelmed, and even suicidal, as was the case with James. Students' experiences of learning difficulties and the lack of the school's recognition or assessment of the nature of these difficulties impacted parents' wellbeing. Gayle, Annie's mother, said, "I feel ... I'm frustrated because I feel that it wasn't recognized in elementary school. The teachers were labeling her with certain labels that were incorrect like maybe difficult, or not participating or not listening, or so that kind of thing" (Gayle, P1, 13-16). Maria, Anthony's mother, described feeling anxious:

At the beginning, I felt anxious, stressed and even if I work as a resource teacher, I felt like what can I do to help. Also to me it was, is it something that he's going to have for the rest of his life and it will always be difficult? (Maria, P1, 14-16)

Maria explained why she was anxious: "Anthony, he didn't learn how to read before Grade 3" (Maria, P1, 37-38). Kate, Alexandra's mother, described feeling upset:

When I first found out about the younger one, I was very emotional and upset a lot. Like I would just cry [laughing] because I wasn't sure how I was going to deal with it because the school wasn't recognizing it at all. I ... I ... knew there were issues. (Kate, P1, 20-22)

Mark described his own worse experience around Oliver's schooling: "Well, I think the worse was when Oliver would come home from school and he'd just melt down" (Mark, SP3, 430-431).

Barbara, James' mother, shared, "My son's talking about suicide, and all these things were coming along. I was completely overwhelmed" (Barbara, P1, 139-140). Gayle, Maria, Kate,

Barbara, and Mark described experiencing emotional hardship when their child's learning needs had not been noticed, assessed, and addressed in school.

Dewayne, Jonathan's father, was grateful for the support he was able to provide for his son. He said, "We were lucky we did have resources financially to help Jonathan" (Dewayne, S1, 1006). However, his deep concern was extended to another student noticed by his wife, who worked in the school, and witnessed a Grade 12 student who struggled with exam writing. He described the situation:

The assistant (. . .) sat down and said, "Just answer it the best way you can." The student looked at her and said, "You don't understand I can't read the question." She's in Grade 12, Dina said, "I see her all the time, she's very bright. Outgoing and here she's trying to do an exam on the computer and she couldn't read the question in Grade 12." [crying]

_____ [crying]. (Dewayne, P1, 1011-1015)

Being pleased with the support he made available for his son, Dewayne expressed his deep concern for the Grade 12 student, who although had an IEP, was required to read, but could not.

Participants noted that students' learning difficulties had a negative impact on the whole family as Gayle said, "I always say to people, 'Unless you have a child who has a learning disability, you have no idea how challenging that becomes and how it carries over within the family as well'" (Gayle, P1, 445-447). Gayle continued to describe how it affected her family: "It also affects the relationships within the family because, I didn't know what was going on, she didn't know what was going on. (. . .) it definitely increases the stress in the household" (Gayle, P1, 23-29). Miriam, Elizabeth's mother, also indicated that difficult experiences in school mattered to everyone in her family: "For the whole family, and especially for Elizabeth, and especially for Elizabeth's dad. Oh my gosh, even today he gets upset [laughing]" (Miriam, P2, 323-324). Elizabeth shared that she preferred to stay home and was avoiding school, "it was the

first year that I told my parents I don't want to go to school today" (Elizabeth, S1, 100). These excerpts show that students' learning difficulties in school negatively affected their families.

Students and parents described how students were emotionally affected by their own learning difficulties. Mark shared how frustrated and unengaged Oliver was in class:

He would sit in front of a piece of paper and look like he was doing something. In all likelihood, he was drawing little characters around the page. Lots of intricate little characters, but characters nonetheless. It looked like he was busy and there nothing was being done. Then, when he would be asked about it, he would dissolve in to tears. That has changed now. (Mark, P1, 301-305)

Oliver continued to remain unnoticed as he escaped to his drawings during class time. His frustration lasted throughout elementary school. Mark said, "His earlier tests, and throughout his elementary school years, even into early secondary school, he would dissolve into tears when he was frustrated or completely didn't understand" (Mark, P1, 191-197). In the last interview that included both Oliver and Mark, they mentioned that Oliver experienced stress in elementary school. I asked Oliver if he remembered those days. He replied: "Don't really want to" (Oliver, SP3, 447), indicating his despair. Barbara, James' mother, shared, "it was Grade 1. I came to pick him up and he just sat and cried. I said, 'What's going on, buddy? What happened?' (. . .) He's just like, 'I'm stupid. I can't do this'" (Barbara, P1, 122-124). James, like other participants, was sad and labeled himself stupid, as there was no other explanation presented to explain the experience of learning difficulties. Parents and students shared the emotional distress that was associated with and resulted from their experiences of academic learning difficulties.

4.1.3. Parents' Requests and Expectations from Schools Before Diagnosis

In light of the uncertainty students and parents felt about students' academic difficulties and developing emotional difficulties, they approached school personnel asking for help. In the early

years of school, parents asked teachers to recognize that their child experienced difficulties meeting academic expectations and to identify or assess the nature of their difficulty. First, they asked school personnel to validate their concern that there was an issue with their child's learning abilities. Second, they expected school personnel to have a professional understanding of learning and teaching. Third, they expected teachers to use methods of teaching targeting their child's difficulties. The following excerpts show what parents requested and expected from school personnel.

Parents approached teachers to validate their concerns regarding their child's learning difficulties. Maria, Anthony's mother, shared her concern about Anthony's reading ability with his teacher: "In elementary school, em ... I always ... Grade 1 it was fine but Grade 2, I started telling the teacher, 'Anthony is not reading.' The teacher said: 'No, no, no, he's reading' because he was memorizing everything" (Maria, P1, 77-79). She further described that she requested the school personnel to examine Anthony's reading:

Grade 2, Grade 3, every time, I was like, "Are you sure like, Anthony, he's not reading."
"No. He's fine. He's fine. It's okay." He's very smart. He was able to cope. And ahh...
Grade 4, then the teacher said to me, "Anthony is not very strong in reading." I said,
"Thank you. I know" [laughing]. (Maria, P1, 83-86)

Maria referred to the lack of systemic academic assessment of Anthony that could have indicated her son's learning needs as early as he experienced them. Kate, Alexandra's mother, also described what teachers told her when she consulted with them about Alexandra's reading in Kindergarten and Grade 1: "they said, 'oh don't worry, don't worry. She'll catch up'" (Kate, P1, 25). Kate continued describing that at the beginning of Grade 2, the teacher identified Alexandra's difficulties and told her: "'she can't really write things and then she can't read what she's written.' I looked at her and I said, you know what, I've been saying this for two years"

(Kate, P1, 26-29). Dewayne, Jonathan's father, said that they noticed learning difficulties in kindergarten through Grade 3 but teachers' responses were, "He'll grow out of it. (. . .) Don't worry, he'll grow out of it" (Dewayne, P1, 130-131). Barbara, James' mother, talked about requesting validation for James' learning abilities:

I talked to the teacher and they were kind of like, "Yeah, kids learn at different rates." They gave me all the platitudes [laughing & crying]. But I was pretty clear, (. . .) that there was something pretty serious wrong. I kept asking them, like, "What can I do? What's happening? What's happening? What's happening?" They're like, "Really, we can't do anything because he's too young." (Barbara, P1, 125-129)

Barbara continued to describe her requests to get professional validation for her concerns:

And so I started saying to my husband, "We got to get him tested." The school system here will not test a kid unless they're two full years behind. (. . .) That puts him in Grade 3, I'm not sure he'll survive [crying & laughing]... psychologically. (. . .) So [crying] ... so I started phoning people [crying] to talk to and doing research and I asked the school system and they're like [crying], "No, we can't really do anything." I'm like, "Look, there's clearly a problem" [crying]. And the teachers were, [crying] they were nice to me [crying], but they can't really say anything right? They can't say, "Yeah, there's a huge problem." (Barbara, P1, 135-149)

Barbara noted teachers' inability to recognize through assessment and, thus, validate James' learning difficulties.

Parents described contacting teachers as soon as they noticed that their child had learning difficulties and then not receiving a response. Mark, Oliver's father, emphasized that only through testing Oliver's difficulties would their concerns be validated, "Teachers began to recognize it in the Grade 2-ish area (. . .) I knew that there was value in having a psych-ed, only

to have that recognized” (Mark, P1, 103-106). Mark explained that as a parent he needed the psych-ed as a professional language to argue for his child’s needs: “be able to, as a parent, follow up where I needed to ... Unfortunately, without that, there’s not a lot of weight that a parent’s word has” (Mark, P1, 108-109). Mark alluded to the need of a systemic early assessment procedure to help teachers and parents recognize and identify specific learning difficulties.

The second request parents had for teachers was that they have and apply professional understanding of their child’s learning abilities. Annie’s mother described:

Teachers could have done a lot of things different, before she was diagnosed, between Grade 4 and Grade 7. There seems to be a lack of understanding of the teacher at the time, why she was doing the things that she was doing. That kind of surprised me, because I thought they were the experts on kids that learn differently, but they really did not support her very much. (Gayle, P2, 49-54)

Gayle expected Annie’s teacher to be the expert in learning difficulties. She further said in the following excerpt that Annie felt that teachers did not understand her needs:

She was only little, eight actually. I think it has affected her in elementary school with learning and it just, generally got her further and further behind ... at the time, it really was difficult for her because she felt like the teachers didn’t get her, understand her. I think this has been a vicious cycle of not wanting to go to school, “it’s too difficult, people don’t understand me.” To me, that was the most frustrating part to see that that it wasn’t recognized. (Gayle, P1, 16-22)

Annie and her mother argued that teachers did not have the professional understanding to support Annie’s learning difficulties.

In contrast to the examples describing teachers who were not experts in learning

differences or difficulties, Dewayne argued that a trained teacher created a positive change for Jonathan in Grade 3. He described, “She had just taken a course in learning disabilities and learning challenges and she was noticing Jonathan took a test and just BOMBED it. You know! And she kind’a thought, ‘Geeze he’s brighter than that’” (Dewayne, P1, 132-134). Dewayne excitedly reported that Jonathan could not show his knowledge in writing, but he could show it well verbally. He said, “he almost verbatim gave her the answers back in detail!” (Dewayne, P1, 138). This teacher used Jonathan’s strengths of speaking to show his learning despite of his difficulties in writing.

The third request of parents was that teachers use effective pedagogy that will result in students’ progress in showing their academic outcomes. Miriam, Elizabeth mother, indicated that she expected teachers to help Elizabeth like her older daughter received help in the province they lived in prior to moving to BC. She said:

We knew that she had a difficult time to read. (. . .). the teacher realized, “Oh my gosh, your daughter doesn’t know how to read.” I tried to explain to her, if she was living in the other province she would have gotten some additional help. (Miriam, P1, 62-66)

Based on her positive experience with her older daughter, in Manitoba where she received specialized support at early grades with no attempt to diagnose her, Miriam expected that teachers intervene at early grades to insure better academic outcomes. Relatedly, Annie explained what she expected from her teachers: “If they actually sit down and help you and make sure you’re on the same page, that’s when it’s like a positive way. It makes you like want to do work” (Annie, S1, 209-211). Anthony recalled his own request for accommodations from teachers: “I’m pretty sure I asked my mom if I could get more time on test and stuff, and then she asked the teachers and they were like “oh no, it’s fine”” (Anthony, S1, 64-65), indicating that he should be fine without extra time.

Based on interview data presented above, parents expected teachers as early as in Grade 1, first, to validate the learning delay, second, to professionally understand their child's learning needs, and third, to apply a specialized pedagogy that is shown to result in improving academic outcomes. These requests were a necessity for students and parents who were not able to make sense of students' learning abilities and to plan for appropriate support. It appeared, from interview data, that parents had hopes that testing would provide the validation of difficulties, understanding of learning differences, and informing teachers in how to teach their child, and thus requested the psychoeducational assessment that would result in a diagnosis of learning disabilities. It is unclear from interview data whether parents would have requested testing as if it was the single professional form of validation, understanding, and potentially basis for teaching, if their children had received help, like Elizabeth's sister in Manitoba received.

4.1.4. School Responses to Students' and Parents' Requests for Support

Parents shared the various responses of school personnel to their requests that teachers validate, understand learning differences, and apply specialized teaching as reported in the previous section. Four patterns of school response were reported in the interviews. The first type of response was not offering any support prior to diagnosis. The second type of response was not addressing students' needs although they were diagnosed with learning disabilities. The third type of response was blaming and negatively labeling students with learning difficulties before and after a diagnosis. The fourth response was empathetically addressing the needs for academic learning and emotional wellbeing of the student before or after a diagnosis. The student and parent perceived the manner of this response as effective and positive for them.

The first pattern of school personnel response was not responding while students experienced difficulties prior to diagnosis. Gayle explained that Annie's issues were not recognized and understood: "That was never picked up on (. . .) I was somewhat disappointed

that they wouldn't have just picked it up, because you would think they would" (Gayle, P2, 80-84). Gayle summarized her experience with Annie's teachers:

The teachers that she had did not pay much attention to her difficulty. If that's not caring, or no time, or no resources, or no support of the teachers, I don't know what the cause of that is. I just felt that she was definitely let down between Grade 4 and Grade 7. (Gayle, P2, 342-345)

Gayle indicated that during four grades teachers were not responding to their requests perhaps because they were not equipped to address Annie's learning needs. Mark, Oliver's father, who was a teacher in an alternative high school, also described the pattern of parents' requests for assessment and school not responding, "parents fighting and fighting to get that assessment done. 'I need that assessment done!' Teachers are noticing there's a problem or someone's noticed. 'I'm noticing there a difficulty, can I please have the testing done?'" (Mark, P2, 540-543). Mark reported waiting from Grade 2 to Grade 5 for testing Oliver, while he was frequently melting into tears in class and at home due to his academic frustrations and not being recognized.

Kate, Alexandra's, mother, described the negative impact of school taking no action in responding to her requests to assess Alexandra's learning abilities:

She could've been identified, I think, in Kindergarten, because I knew. I think if we'd started in Kindergarten trying to help her ... I'm not saying that she wouldn't still be ...[laughing] She'd still be dyslexic. But she was broken by the time we got her out in Grade 3. That only took three years to make her feel really bad about herself. (Kate, P2, 173-176)

Kate noted that waiting three years before Alexandra was tested privately resulted in uncertainties and emotional damage for Alexandra. Kate shared that school personnel said they were not able to assess or diagnose Alexandra at an early age in a timely manner:

I had already hired a private Phonics Tutor for all of Grade 1 for my daughter. Emm... and I brought up the fact that this private Phonics Tutor was telling me to get her tested for learning disabilities. The teachers looked at me and said, “That would be wonderful, please do that.” When I told the principal that, she said, “Oh no, we don’t test until Grade 3 or Grade 4. Even at that, we don’t really do anything. There is not much in the district and your daughter’s strengths are so great that she won’t get any help here.” I was discouraged to try to figure out what was going on, but I did it anyway [laughing]. (Kate, P1, 31-39)

No response from school meant for Alexandra more anxiety in school and that Kate had no choice but to approach private services for both assessment and intervention.

Barbara decided to test James privately to find out more about his difficulties, she described her surprise at why the school was not testing James:

Well, I don’t know, they just won’t! They won’t! Like I flat-out asked them, like, “This is not right.” I think it’s just ... I don’t know if it’s legally, if they can’t do it, whatever, anyways. I found a psychologist who tested him. We paid for it privately. (Barbara, P1, 151-154)

I further asked if there was academic assessment provided for James and Barbara indicated: “No, they didn’t do anything. They didn’t do anything” (Barbara, P1, 157).

Barbara, like other parents in this study, described that school personnel did not administer any type of academic assessment in order to understand James’ learning needs. She chose to seek a private psychologist to test James and then enrolled him in a private specialized school. Annie also described her perspective on her teachers support:

They honestly, I feel like they just didn’t really. I don’t want to say they didn’t know, but they kind of (. . .) it wasn’t their top priority (. . .) They didn’t actually fully comprehend. (. . .) I never really got that, “She has a learning disability. Help her out.” To this day, I

still don't. (Annie, S1, 144-151)

These excerpts show that prior to diagnosis, requests to for assessment of students' learning differences, at early grades, were not met.

The second pattern was that although students were tested and diagnosed with learning disabilities, they did not receive specialized support in accordance with their diagnosis. Miriam indicated that as soon as they moved from Manitoba to British Columbia, "In this new school, she was assessed. That's when they diagnosed her with dyslexia. At least we knew what it was" (Miriam, P1, 75-76). Miriam appreciated Elizabeth's diagnosis in Grade Three but noted that although she was diagnosed her teacher did not provide support in accordance with the diagnosis. Elizabeth described:

I had my Grade 3 teacher was ahh terrible! She was just she wasn't a good teacher (. . .) she would be very good if a student at normal average learner (. . .). But emm anyone who was like under the standards and or like exceeded she just could not handle them. So she would just like tear me down and then like you know? Like, would like yell at me get mad it was very aggressive. (Elizabeth, S1, 84-90)

As Miriam noted, formal diagnosis served in validating the reason for the difficulties, but did not lead to teaching that would help her learn. Dewayne reported, "Going through Grade 4 and realizing that there was no resources given to students who had a disability" (Dewayne, P1, 250-251). Dewayne emphasized that the positive support he experienced with the trained Grade 3 teacher who noticed Jonathan's strengths and difficulties did not continue with another teacher in Grade 4 although Jonathan was diagnosed with a learning disability.

The third pattern of school response was blaming and negatively labeling students who were not meeting academic expectations. Gayle, Annie's mother, noted the negative ways teachers responded to Annie's lack of academic progress. She said:

From Grade 4 to Grade 8 pretty much, I think there was more finger pointing by the teachers rather than embracing of her issues. I think over time that really caused some damage in regards to her motivation to learn. (. . .). Teachers, they said all kinds of things to her...it was very accusatory and very, very negative. Very negative. I can only imagine what that would have been like for a child who's eight, nine, 10 years old. You know?
(Gayle, P1, 179-185)

Like Gayle, who described teachers' accusations, Maria described that Anthony's teacher in elementary school used labels to describe Anthony. Maria reported teachers' comment:

“Look Maria, he never stops moving. He can't stop moving.” I felt because I'm a teacher and I knew what she wanted to tell me that might be ADHD. And yeah! She wanted to help but maybe not in the right way [laughing]. (Maria, P1, 215-217)

Maria further explained what she did not appreciate in teachers' communication: “There was judgment; Grade 2, Grade 3, even Grade 4. Yeah!” (Maria, P1, 224-225). Maria shared that teacher's judgment affected Anthony's motivation: “Then it became, ‘I don't like reading. I don't like it’” (Maria, P1, 242). She further shared that in Grade 4 Anthony was reading comics “I was happy. Great, but there was a comment being said, ‘he reads only comics’ but great, it's the beginning” (Maria, P1, 244-246).

Maria shared her perspective that some teachers unintentionally blamed instead of identifying learning difficulties, “I think it happens, you know, sometimes that not that teachers want to but they start labeling the child” (Maria, P1, 229-230). She gave examples of what teachers said about Anthony: “‘he cannot read, cannot move all the time’. It's all linked together too because if you cannot read at the same pace as others and you compensate then you will get nervous, stressed and you move away [laughing]” (Maria, P1, 229-234). Maria also indicated a contrast between two teachers' perceptions of Anthony, “In Grade 7, I saw he was getting

labeled, the ‘Trouble kid’” (Maria, P2, 292), while another teacher in Grade 5, “She was very creative, thinking of outside the box and also no judgment. Really, she saw his gift. Instead of seeing what he could not do, she saw what he could do” (Maria, P1, 138-140). Mark, Oliver’s father who is a teacher, described how some teachers responded to students’ difficulties, “Yeah, there is a tendency to blame disability on laziness. We see that in teachers’ report card comments all the time” (Mark, P1, 390-391). As reflected in excerpts, teachers’ negative judgments and focus on students’ deficits, with no reference to their strengths, were not helping students improve their learning or teachers improve their teaching.

The fourth pattern shows how teachers responded empathetically in the case of one dyad. Cora described receiving positive one-on-one support for Kira and other students who needed support at a private Catholic elementary school:

We’ve had a lot of people from other communities that have come to that school because that principal’s really open to that. She’s, “I do not turn people away.” I think that initially started because there was a mother whose son was autistic and she started bringing in somebody. As time went on he was helping other people. She saw so much improvement and realized that that’s what some of these kids need. It’s the thing to do. A lot of the kids at that school get a lot of support. (Cora, P1, 145-151)

Cora continued to describe how Kira’s private elementary school supported students:

Before the anxiety came up, they allowed them to walk outside and take a walk and talk about it, or calm them down because there’s a lot of anxiety that comes with “I don’t get this,” and then you can’t even go beyond that. (Cora, P1, 174-176)

Kira also described her positive experience of receiving support in elementary school, “Everyone was really supportive. I think that they only wanted you to do well. That’s kind of like where I got my work ethic” (Kira, S1, 287-288). Kira and Cora appreciated teachers’ support and

awareness of students needs. They shared that this positive support, unfortunately, was not available for Kira when she moved to public high school.

Participants shared that teachers' abilities to respond to the needs of students with learning difficulties were limited. Miriam and Dewayne described that although their children were tested in Grade 3 by the school and were diagnosed, teachers did not address their child's diagnosed learning needs. All parents noted that teachers did not respond to their requests for help in early grades prior to diagnosis. Maria, Gayle, and Mark indicated that their children experienced being blamed and negatively labeled. Cora reported fondly about the support Kira received in her private elementary school that left a long-term positive impact on both Kira and Cora.

4.1.5. Summary

During the first years of elementary school, students described that they noticed their difficulties performing in class at the level of their peers. Parents also noticed emotional distress that was associated with their child's academic struggles. Feeling different, stupid, or just wondering what was wrong, at the very beginning of their school experience, was reported by all participants. Parents' requests for validation of difficulties, teachers' understanding of learning differences, and effective teachings, concluded with pursuing a psychoeducational assessment. Parents described psychoeducational assessment as the necessary step that must be taken, yet, it was not available at an early age. They also did not have an alternative available diagnosis method to precisely diagnose specific academic difficulties and offer pedagogical interventions that addressed the specific identified and clearly defined students' academic abilities.

Regardless of testing or diagnosis, Kate summarized how she believed schools ought to respond, "everybody needs to get what they deserve to be successful" (Kate, P1, 50). Rather than, saying: "'she's going to be okay'. What does 'okay' mean? You know? She is coming home crying every day because she can't spell and read like her friends can" (Kate, P1, 51-53). In sum,

students and parents requested that their difference in learning would be recognized early and addressed effectively in a professional fashion that includes emphasizing students' strengths and dignity and avoiding negative labeling. In the next section, students and parents' experiences and perspectives reveal the anticipated value associated with the psychoeducational testing.

4.2. Testing to Diagnose Disabilities

The second theme, testing to diagnose a disability, corresponds to the next phase in students' stories. "Testing" was the term used by students and parents to refer to the process of diagnosis through psychoeducational assessment. Within the theme of testing for diagnosis, I identified three sub-themes. The first sub-theme, "Recognizing learning difference or disability," reflects the function of testing for recognizing students' learning difficulties, or perhaps disabilities. The second, "Assessment to inform learning and teaching," highlights parents' expectations that test results would inform effective instruction for their child. The third, "Assessment of learning profile: strengths and challenges," emphasized the use of a student's learning profile included in the psychoeducational assessment results. Ideally, all these three functions of testing are for the purpose of promoting successful academic outcomes for students in school.

4.2.1. Recognizing Learning Differences/Disabilities

The period between self-identifying students' learning difficulties and attaining formal recognition for these difficulties was a time of struggle for all involved. Students reported feeling sadness, anxiety, or being negatively labeled prior to the diagnosis that served to recognize their learning needs. Testing and diagnosis resolved this one aspect of their struggles — not being recognized for their learning difference or difficulties. As, a Grade 10 student, James said, "... if this was 50 years ago they wouldn't say, 'That kid's is dyslexic.' They'd just say, 'That kid's dumb'" (James, S2, 353-354). According to students and parents, recognizing students' learning difference helped in ruling out negative labels and legitimized students' requesting help. James

talked about ruling out the label ‘stupid.’ He said:

At least I knew what the problem was. Because like I couldn’t read as good as all the other kids in my class and I didn’t know why. Now I did, so that kinda helped in a way because if someone asked, “Oh why can’t you read as good as me,” or whatever, I wouldn’t have an answer. Then I’d just be like, “Oh I guess I’m stupid or something.” Now I know, oh yeah, I’m dyslexic, that’s why. That helped I guess in a way. (James, S1, 317-321)

Cora, Kira’s mother, described her historical view on the development of recognition: “Now people are better educated, and understand that, ‘Oh, this is actually the way someone’s brain works.’ I think there is two sides to it. I would never take it away. I think it’s important to have that title” (Cora, P1, 503-505). Miriam, Elizabeth’s mother, explained why diagnosis is necessary, “to say: ‘I have a learning disability so now I know why I can’t do certain things,’ rather than, ‘I just can’t do it. I don’t know why I can’t do it’” (Miriam, P1, 526-528). Diagnosis explained their difficulty as Kate said that recognition was important for herself as a mother and for Alexandra, her daughter:

Back then in Grade 2. Like I said, I would cry. I was depressed. I would cry at the drop of a hat. (. . .) How do I do this, the school doesn’t even really recognize it? (. . .) overwhelms because nobody was telling me, this is what you need to do with her, nobody. Nobody sat me down. I pretty much had to figure out what to do on my own, (. . .) for someone like Alexandra, she’d become even more invisible in the system if you take her label away. (Kate, P1, 762-772)

Recognition of their learning needs through testing meant noticing and not ignoring them.

The second aspect of their early struggles that testing and diagnosis resolved was students’ and parents’ confidence to ask for help and request an IEP and ongoing application of the IEP. Acknowledging students’ difficulties through diagnosis gave parents hope to begin working

towards finding ways to teach their child the way they learn so they experience successful academic outcomes. Gayle, replied to my question of how the diagnosis was helpful:

I think it was helpful because she realized, you could finally work with something. Or that maybe there was some support available or a better understanding of what was going on rather than the labeling and finger pointing as to the “bad behaviour” that the teacher saw. (Gayle, P1, 221-224)

Ruling out accusatory negative labels, better understanding, and support for Annie were the benefits Gayle associated with diagnosis. I asked Gayle if she felt relief when finally Annie was diagnosed in Grade 8. She replied:

I don't feel like it's a relief. It's a relief that there is something there, that it's just not her attitude. In that way, it's a relief that now we can talk to the school and there should be certain steps in place but when it comes to a more general thing, it makes me frustrated and it makes me worried! (Gayle, P1, 430-433)

The diagnosis was not a relief in a way that the learning difficulties were addressed, however, it gave Gayle the justification to ask for help. We further discussed the labeling aspects of diagnosis beyond recognition that allowed her to request help:

Hadas: Do you think if there was no label, it would have been different?

Gayle: No it would have been harder.

Hadas: The label is serving a purpose.

Gayle: It's serving a purpose to get some understanding from a school system level. There are some extra things that are done for her and increase in understanding. (Gayle, P1, 436-441)

Regarding her label, Annie said: “I think it made me realize that, ‘Okay, I actually need help.’

And I'm not going to be able to get through all this on my own. I need to actually have someone

to work together with” (Annie, S1, 233-235). Gayle emphasized that the reason for needing a diagnosis is to get support: “if you’re slightly behind, you fall behind, unless you’re designated with a learning disability or whatever else. But if you’re not, you just fall behind and there’s no support at all. It’s all on the parent’s shoulders” (Gayle, P1, 87-89). For Gayle and Annie who waited to Grade 8 to privately assess Annie, testing, diagnosis, and labeling with learning disabilities, marked a positive improvement in Annie’s confidence in requesting and receiving help.

Anthony emphasized that the diagnosis afforded him opportunities to receive accommodations: “I know it benefits me that makes me happy because I know that I’m getting better, so that’s a positive” (Anthony, S1, 392-393). His mother Maria said: “. . . he knows that he’s entitled of asking for help or more time or (. . .), ‘I’ve got challenges in spelling’” (Maria, P1, 263-264). Maria alluded that the gain lies in the accommodations and perhaps not in the assessment alone: “I don’t, if it’s the assessment but it’s just like I think now, he’s more confident to go to the teacher and ask for help or support or more time, adaptations” (Maria, P1, 285-287). Similarly, Alexandra talked about how recognizing her learning difficulty allowed her to ask and receive accommodations:

I guess in a positive way it kind of makes me think like you know I do have this disability, and I have people who are trying to help me out. Getting it tested to see what I can do more in school to get more support and stuff like that. It’s good to just know that like I’m not just left there to be there. I have people that are going to help me and stuff like that.

(Alexandra, S1, 187-191)

Jonathan also appreciated being diagnosed. He said:

So being diagnosed allowed me to have the adaptations that I do now, and the assistance that I’m getting in my classes with my teachers. It’s just all around everyone’s kind of been

like, okay, you have like a learning difference disability. This is how we can help you.

(Jonathan, S1, 521-524)

Jonathan particularly indicated that the accommodations that resulted from the testing helped him. Kate, Alexandra's mother, also clearly linked the diagnosis with academic help: "I don't mind having the label... I came to the realization a long time ago that she wouldn't get the help that she needed if it [the LD label] weren't there" (Kate, P1, 755-756). Kira also appreciated the accommodations documented in the IEP and also understanding the reasons for her difficulty.

She said:

Emmm, well. It helped because now I can ... I have my IEP, but also it made me less frustrated I think, a bit, like at myself, because I would always get really upset if I couldn't get things as fast as other people, or if I worked really hard and didn't do well. (Kira, S1, 361-363)

Kira and Kate emphasized that documenting students' learning abilities and accommodations helped reduce their frustration.

James, Grade 10 student, and Kate, Alexandra's mother, expressed opposing opinions about the benefits of testing. James was grateful for the recognition and diagnosis as mentioned earlier, but he also questioned the necessity of the testing:

Emmm ... They kind of just make you do a bunch of stuff that I don't find that helpful. You have to do a bunch of things with different coloured blocks. They're like, "Okay look at this pattern. Now I'm going to take it away and remake it." You have to do that for 30 minutes. I don't really see a point in that. Don't know how much that really helps. I don't really know, yeah. (James, S1, 308-312)

Kate, unlike James, linked the testing, diagnosis, and support, as one package:

I do hear all kinds of talk that psych-eds are expensive and that kind of thing. But from a

parent perspective (. . .) I have proof that there's a problem, so for me taking away this psych-ed, although it would save a lot of money, it would have made my life difficult and Alexandra's as well. (Kate, P1, 482-488)

Like Kate, Mark also talked about the use of testing: "Unfortunately, without that, there's not a lot of weight that a parent's word has" (Mark, P1, 109). Kate and Mark valued diagnosis as a proof for the difficulties or a 'weight' for parents request for help.

Finally, Kira thought about other students who have learning difficulties but were not diagnosed in school or privately, "That will be really hard and sad for a lot of people and especially if you can't get tested. If I didn't know I had dyslexia I would probably be so sad" (Kira, S2, 430-431). Kira equated testing with the knowing that she had dyslexia. Assuming that one would know they have dyslexia only through the exclusive and expensive testing, she pointed out the unfortunate potential neglect of those who did not have the privilege of being diagnosed through testing in school or privately.

Recognition of students' learning difficulties and parents' requests for support, by professionals who can make sense of their abilities and difficulties, was critical. Students explained that if their difficulties were not recognized as a learning disability, they were likely to believe that they were stupid, but also, they were not feeling confident asking and receiving support or accommodations. Through recognizing their difficulties they were hoping to get their dignity intact and to be taught the way they learn and produce better academic outcomes. They considered testing as their ticket of recognition their difficulties or disabilities, dignity, and future successes. The exclusiveness in obtaining testing means that only the privileged are recognized and the unprivileged—those who were never tested—remained unnoticed and unrecognized with a learning difference.

4.2.2. Assessing to Inform Teaching and Learning

The second potential benefit of understanding a person's cognitive, academic, social emotional, and background history included in the testing results is to use that vast information to support students' academic experience in school. Testing results cannot be used merely to diagnose, but also to plan pedagogy. In the school context supports for diagnosis of learning disability would be an individualized plan of teaching. Mark, Oliver's father, a teacher in an alternative high school, argued for the potential benefits of testing: "I think the report ... Emmm _____ It doesn't really validate ... It reaffirms what we already know about him (. . .) Everything, that as a parent, I already knew" (Mark, P1, 273-276). He further said:

The testing itself, or the information that was given to him [to Oliver in Grade 5], probably wasn't very useful (. . .) Now, having said that, at the secondary school age, the psychologist that did the testing was able to explain to him, very clearly, what he was able.

That's a level of maturity. (Mark, P1, 357-362)

I asked his son Oliver how the testing was helpful for him. He replied: "Emmm ... I mean ... it was definitely a test of my abilities and I was trying my very best. Emmhmm ... I can't say it really helped me, in many ways really" (Oliver, S1, 272-273). I distinguished testing from diagnosis and further asked Oliver how the diagnosis was helpful for him. He replied: "Being diagnosed doesn't really do anything for me... I mean... The IEP does something for me, the benefits that I get from it help me, but like, diagnosis doesn't change anything" (Oliver, S1, 282-284). Oliver claimed that testing and diagnosis have no direct beneficial value for him, the accommodations that he receives are valuable. I explained to Oliver that sometimes the IEP is conditional to the diagnosis that is conditional to the testing. He said in response: "Oh, okay so if I didn't have a diagnosis I wouldn't have an IEP. So ... Yeah, I guess it did help me in that way [laughing]" (Oliver, S1, 289-290). He then clarified his need of the IEP: "I think it was definitely

helpful. I think if I didn't have a diagnosis or IEP it would be a lot worse and a lot harder for school so I think it was good" (Oliver, S1, 301-302). For Oliver, the extent that testing informed teaching was the accommodations included in the IEP.

In Elizabeth's case, the psychologist used testing results to report on her potential.

My husband and I were a little upset after the report of what the conclusion with the way this psychologist told us, "Oh she could be a teacher." If you talk to my husband, he'd be furious right now, because he just ... he didn't want to talk to her anymore after that, because it was like, I think pinpointing someone and saying, "You can only do this." (. . .) a lot of people with learning disabilities can do much more if they're given the right tools.

(Miriam, P1, 589-595)

Miriam's belief was that if given the right tools Elizabeth's future was not limited to her present abilities of low reading test scores, particularly given her average and above average scores we noticed in her testing results.

Maria described a positive experience with the psychologist reporting test results:

It was the psychologist and the resource teacher at [name] school with Anthony and myself. They had meeting and they were not only talking to me but to Anthony as well. It was presented very positively and that not like it's a learning disability but it's just something that, "Okay, like this is what we can do to help you and what can you do to help yourself?"

(Maria, P1, 176-180)

For Anthony, testing informed his accommodations in the IEP and the positive presentation of testing results created supportive settings that benefited Anthony. In contrast, Dewayne argued that the focus in reporting test results was on the diagnosis:

When we went through the psych-ed test the first time, all it did is say that he did have a learning disability. That was really the extent of it. You know, not the fact that he would

have a reading challenge and a writing output challenge. That was it. (Dewayne, P2, 371-374)

Dewayne was disappointed when he expected to learn about his son's learning abilities, but heard only about his diagnosis. In contrast, Kate was interested in the diagnosis and was disappointed that Alexandra's first testing results did not yield a diagnosis:

The first tester didn't want to label her. But said she needed an IEP, said she had difficulty reading. She said to the school what they needed to do, but because she wasn't given the diagnosis completely ... It really didn't lend itself to getting Alexandra help early. (Kate, P1, 496-501)

The private psychologist recommended providing support through IEP documentations. However, the school considered the diagnosis as prerequisite to the IEP.

Gayle indicated that an IEP was done for Annie in Grade 8 only after she was tested privately. She said: "Nothing before that, but she wasn't diagnosed before that" (Gayle, P1, 30). After testing, Gayle indicated that her expectations of the testing were: "some support available or a better understanding of what was going" (Gayle, P1, 222-223). Kira also noted the link of testing to her IEP. She said: "It was a private thing, yeah. It was good. It helped, because my IEP was ... I got more on it, so I could like ... use it for more classes. That was good" (Kira, S1, 166-167). Kira linked testing to accommodations she could have based on her IEP.

Although for Kira accommodations were beneficial, Dewayne, Jonathan's father, explained what he thought was missing in the use of testing results: "There's the problem: It's not designed to figure out how to teach him. It's designed to figure out how to ACCOMODATE his disability. And ... that right there is the whole crux of the problem" (Dewayne, P1, 178-180). For Dewayne, accommodations do not suffice. Dewayne was interested in using test results to inform how to teach Jonathan.

In a similar fashion of distinguishing early support for learning from early diagnosis, Miriam shared her experience with her older daughter in the province of Manitoba who got help early in Grade 1 and 2 but was not tested or diagnosed. Miriam said:

I don't know if we stayed in the other province if it would have been the same results, and she would have just gotten that same training that her older sister got, and we would have never known that she was dyslexic. I have no idea, but we did have all these tests done and they did say she was dyslexic. (Miriam, P1, 160-163)

Dewayne, further emphasized the difference he suggested between support to meet academic expectations and support for learning how to learn. He said: "He does have a block where he can go in to do homework. But, it's really to help him get his homework done. They really don't do anything to help further his ability to read or write" (Dewayne, P1, 328-330).

In contrast, he described the improvement Jonathan had in the private school: "He's got a very good foundation now. And when he left [name] school [private specialized school] his reading ability was above his grade average which was ... [crying]... _____" (Dewayne, P1, 330-333). He continued describing that following Jonathan's diagnosis in the public school in Grade 4, "We've gone through it [the IEP] every single year that it's put together" (Dewayne, P1, 333).

Dewayne reported clarifying a nuance with teachers regarding whose responsibility was it that Jonathan's academic outcomes improve. He said: "we had to rewrite some of it [the IEP] because it said, "Jonathan will do this." It's like, "NO, NO what are WE going the do for Jonathan?" (Dewayne, P1, 335-337). Moreover, Jonathan's parents provided his teachers at the beginning of each year with a package of information about dyslexia, "he would give them the package of his IEP the first day of class. Because it usually takes till October, November before they finally realize, "Oh he's got an IEP" (Dewayne, P1, 349-350). Dewayne emphasized the

need to ask what teachings would be provided for Jonathan so he would learn. He also clarified how Jonathan's diagnosis informed his teaching at home but not at school: "We now knew what we needed to do to help him. As far as the school, public school it was not helpful at all. It didn't make a difference to them" (Dewayne, P1, 523-525). He further elaborated that the diagnosis made him and his wife, "research, and we looked, and googled, and called, and watched videos and did everything we could to figure out what it was all about" (Dewayne, P1, 526-529). However, he noted, that the school was not as informed and proactive as they were, "the school system implode and ... and end up in the most disappointing outcome" (Dewayne, P1, 530).

Dewayne explained that Jonathan's school did not use testing results to plan teaching:

They didn't do anything different to help him learn to read. It just ... You can actually get to Grade 12 and be illiterate in BC. And we've seen it. Because they accommodate they don't TEACH and that's ... criminal! (. . .) It's criminal! Yeah! _____ Yeah! So it had two outcomes a very positive outcome because we were able to help him. But, it had no impact as far as the public school goes, because nothing really changed as far as teaching him. (Dewayne, P1, 536-541)

Dewayne shared that diagnosis did not inform teaching for other students, "I've seen it time and time again. In talking to others when we would have meetings with the parents when Jonathan was going to a private school" (Dewayne, P2, 80-81). He described the cost parents had to pay to send their child to a private school so that their child's learning needs would be met, "Some of them had actually mortgaged their house or sold their houses to send their kids there because they KNEW that nothing's happening in schools" (Dewayne, P2, 83-84). He further justified the cost for private school: "They do that because the system's failing them. (. . .) it's because if they don't, they're never going to learn to read _____ That's a... that's a systemic issue" (Dewayne, P2, 87-90).

Barbara, James' mother, reported a similar experience to Dewayne, indicating that the school was not able to change the way they taught James after he was tested. She noted that, "We have an IEP meeting, usually, my only experience with them is that they're of limited value [laughing]" (Barbara, P1, 433-434). Barbara noted the legality of the IEP:

I understand that it's about resources and time and money, and all of that. I get it. So I want him to have an IEP so that if something goes really sideways I, at least, have something to stand on and say, "Look, you were supposed to do this and this didn't happen, and now, this is what we're dealing with." My reality is, I don't have a huge expectation that they're actually going to do it, to be honest [laughing]. (Barbara, P1, 454-458)

The IEP functioned as a legal generic, rather than individual document that resulted from individual testing. Parents expected that testing would generate individualized plan—informed by results of the expansive and exclusive testing—for how to teach based on students' particular profile. In public schools, the function of the testing was mostly as a foundation for diagnosing learning disability rather than a foundation for teaching students how to learn better so they may improve their academic outcomes. Private specialized schools were designed for providing the teaching students needed to learn how to read, based on a general diagnosis, regardless of particulars of testing results.

4.2.3. Assessing for a Learning Profile: Strengths and Challenges

The third potential function of the results of the psychoeducational assessment that was expected by parents was to have a better understanding of students' learning profile, including their strengths and challenges. In practice, out of the 16 participants, only Kate and James remembered information from the report about their strengths. It was inevitable that all participants were aware of their academic challenges, as they have experienced them daily, regardless of the testing results. The following are excerpts describing beliefs of students and

parents regarding great value to knowing and using the information generated from the psychoeducational testing about their strengths and challenges. However, in practice, 14 out of the 16 participants did not recall their strengths as documented in the report of their test results.

While looking at Elizabeth's psychoeducational report with her I showed her that her cognitive abilities were in the average and above average range. She said:

I don't remember them ever telling me that. They probably did, but I just like, it never stuck with me ... It was never told to me that I, "Oh, you actually scored above average in this. You're actually pretty smart but you just have some difficulties." But like everyone has difficulties too. (Elizabeth, S2, 240-245)

Throughout her school years, Elizabeth has not been benefiting from the information indicating that she performed within average and above average in most test scores. I asked Annie, who was tested two years prior to the interview, if she remembered what were her strengths. She replied: "No, I don't remember" (Annie, S1, 224). Following that realization she reflected on the potential use of test results: "... if you have like this whole booklet [psychoeducational report] then you should take like the opportunity and, yeah, you should go in" (Annie, S1, 172-173). To the same question, her mother replied, "Her strengths. She's a visual learner so that's where her strength is. Emmm ... Let me think_____ She did really well on some memorization of something and I can't remember what it was" (Gayle, P1, 199-201). Both Gayle and Annie were not clear about tests results indicating cognitive strengths.

Cora, Kira's mother, emphasized the potential benefit of testing: "I think testing is good for breaking it down, and pinpointing what certain things and you need to work on those things" (Cora, P1, 299-301). I asked her about the results of the two private psychoeducational testing:

Hadas: What do you think it [psych-ed report] tells you about her strengths?

Cora: I got to look at that again. (Cora, P1, 187-188)

Cora and I looked at the report together and noticed Kira's strengths. Cora responded, "It's [the results on the report] better than I actually thought. You've revealed to me it was better than I even thought" (Cora, P1, 312-313). Regarding her strengths, Kira said: "Emmm ... There's some things that I was better at than other things. I didn't really know what it meant, but I guess it just showed that you learn differently" (Kira, S1, 367-368). While academic deficits were clear to Kira and Cora the specific strengths were unclear.

I asked Anthony about the strengths reported in his testing results from two years prior to the interview. Anthony replied, "They told me, but I forgot [laughing]" (Anthony, 197-199). Anthony had a positive experience receiving the test results, however, the focus in reporting was on the accommodations and the IEP. Mark argued that the exclusive and expensive testing was not a ticket to success, but it has a potential to inform learners about their profile of strengths and challenges. He said:

The difficulty of course, in the public system, the funding is not there. There should be testing centers for hundreds of kids going in and out. Not because I think the testing is some kind of ticket to success, but it allows educators, parents and the students themselves to see what they can and what they will always face difficulty with. (Mark, P1, 338-341)

Although Mark argued for early testing for identification he also clarified that, "I don't know if there are other parents that are surprised by testing. There were no surprises" (Mark, P1, 282-283). Meaning, that students' academic performance already provided valuable and accurate information to work with for both diagnosis and intervention. Like Mark, Dewayne argued that test results did not reveal new details about Jonathan.

It was eye-opening and it wasn't a surprise for us. (. . .) there was no surprises! It (. . .) What it did is it reaffirmed what we knew was going on, which was his reading and writing side of stuff. (Dewayne, P1, 491-497)

Testing had the potential of informing individuals about their learning profiles, but practically, tests results remembered vaguely if at all. On the other hand, academic abilities had practical daily utility that related to school tasks in the classroom, thus, students easily remembered their spelling, or reading difficulties.

On the other hand, Alexandra's mother, Kate, expressed the importance of testing in revealing strengths, "The biggest thing is it shows her strengths and how smart she is" (Kate, P1, 481). Unlike other parents, she reported in detail what were Alexandra's strengths and challenges:

She was 80th percentile for perception reasoning and second percentile for reading comprehension, third percentile for reading ability, fourth percentile, all those reading stuff just low, low like less than five percent. But you know her math reasoning was high. Her new psych-ed test said she has a math disability. Her earlier one said that her math reasoning was fine. (Kate, P2, 434-438)

Kate remembered a single high cognitive ability score along with the other academic low scores that could have been obtained through academic testing in class by the teacher, as early as kindergarten and as often as three times a year if needed. Interesting to note also the inconsistency in Alexandra's math performances in the various tests. I asked Alexandra the same question that I asked her mother, she replied: "Emmm ... I haven't seen the report I don't think, sorry [laughing]" (Alexandra, S1, 174).

James also remembered his strength. He said: "... It was kind of good that I knew what my strengths were, because they told you that too (. . .). They said that I had a really good memory for what people say. So that was like good to know" (James, S1, 296-301). James, who demonstrated his high ability by remembering reported results, was proud of that significant high score. This ability could have been translated to his teaching through social learning of group

discussions and peer tutoring, or story telling.

As can be seen in interviews, the potential value of applying cognitive testing results of students' strengths and challenges in learning and teaching was emphasized to justify their commitment for the process of testing. In fact, 14 out of the 16 participants did not remember information about students' cognitive strengths as indicated in the psychoeducational report or as was likely reported to them verbally. The two participants who remembered tests results of students' cognitive strengths were not able to make use of this information to inform learning and teaching.

4.2.4. Summary

Participants described similarly their reasoning around obtaining psychoeducational assessment in school or privately. The assessment and formal diagnosis, according to all participants, was needed for establishing recognition in the difficulties students experienced. Recognition served the purpose of ruling out negative labels and justifying their requests for help. Testing also was believed to inform teaching, so to have a better understanding of how to mediate learning for each student based on the way they learn. Testing was believed to potentially inform learning with better understanding of students' profiles of strengths and challenges. It was evident that in fact recognition through diagnosis of learning disabilities effectively replaced the 'stupid' label, yet, was not sufficient. After the diagnosis that freed them of the negative self-labeling, participants were back to square one with no specialized teaching, but with a little more dignity. Students who were privileged to attend private specialized schools at a great cost for their families were more likely to receive the educational support they needed. Because testing did not inform learning or teaching for those who stayed in the public schools, they were again wondering; how and where to learn and who can mediate their learning the way they learn so they can experience academic success.

4.3. Searching for Alternative Learning Settings

The absence of individualized and specialized teaching to support students with learning difficulties, before and after their diagnosis with learning disabilities, stirred parents to explore learning settings alternative to the mainstream classroom in public schools. Alternative learning settings included supports within their schools, private tutors, after school programs, online courses, or schools that are specialized in teaching their child the way they learn. The search was complex and dynamic as some learning settings demanded sacrifices of financial cost, departing from friends, feeling different, or compromising limited social life or sports programs in the specialized schools. The parent's and student's paths of searching for a fitting learning setting were unique and some paths overlapped. However four unique critical factors that appeared to generate growth and support for students were identified. Annie and Anthony stayed in the public school system but enrolled into a small class program in which teachers' attention was accessible to them. Elizabeth and Alexandra chose a high school in which the stigma they felt in elementary school was neutralized and they could thrive by expressing their strengths. Jonathan and James chose to attend a learning disability specialized private school during their elementary years focusing on honing their academic skills. Kira and Oliver remained in their local public high school enjoying their network of friends and relying on private tutoring, online courses, and IEP's accommodations.

4.3.1. Teachers' Time (Annie and Anthony)

Both Annie and Anthony had a significant positive turn in their new public high school that was a relatively small class setting with more access to teachers support. This setting helped them engage more actively in academic learning and benefit from teaching that together created successes for them. Annie appreciated her teachers in a small class context as she described her learning environment after being diagnosed in Grade 8:

Now, that I'm in an alternative program. I can just get through what I know and what I need help with, I'll be like, "Hey, can you help me with this?" And I can just get help for as long as I want. (Annie, S1, 134-136)

Annie described her success in one learning setting compared to another: "I failed Grade 9 Math three times and now in like a year, I've finished like my Grade 9 courses and I'm almost in Grade 11" (Annie, S1, 333-334). She specified her preferred setting:

Alternate ... I feel like alternate program you can work at your own pace. If you want to go quick you can go quick. If you want to go slow you can be in there for five years. It's just what you want to do. (Annie, S1, 338-340)

Following her improved learning in the alternate program, Annie decided to move back to a mainstream high school of her choice for Grade 11 as she was missing social life in a large high school context. Her mother reported in a follow up phone conversation that Annie was doing well in her new high school.

Anthony described a negative learning setting in his elementary school: "At one point [Grade 7] my like confidence in learning wasn't very big, because like I let the negativity of some of those negative teachers get to me" (Anthony, S1, 171-172). Anthony gave an example: "Like, let's say a student needs more time or help on a question, they would be like "oh, well you should know this" and stuff like that. Instead of just trying to help you to figure it out" (Anthony, S1, 164-166). When Anthony moved in Grade 8 to the mini program in a public high school his learning experience changed drastically. He described his relationship with teachers in the mini program: "I feel like my teachers always have my back" (Anthony, S1, 140-149). As apposed to his elementary school experience where: "I didn't feel like I was getting enough help, and I was feeling down because I was getting bad marks at school and all my friends were doing quite well. And I was kind of embarrassed too" (Anthony, S1, 180-182). Maria described how he

experienced the mini program in high school: “When he went to [name] school, he was so happy (. . .) that’s what he told me, ‘At lunchtime, I can go play basketball. I can do anything I want!’” (Maria, P2, 260-263). She further explained that lunch time was strictly for eating in his previous school: “No, no . . . no . . . because lunchtime, you sit down, you eat your lunch, you know, it’s the French way [laughing]. You’re expected to . . . for 30 minutes, you sit down and you eat your lunch” (Maria, P2, 264-266). For Anthony positive relationships with teachers and participating in sports in high school was critically positive for his wellbeing.

4.3.2. Avoiding the Stigma (Elizabeth and Alexandra)

Elizabeth and Alexandra described the feeling associated with the learning disability diagnosis as a source for shame and embarrassment. For them, deemphasizing the condition of learning difficulties and the diagnosis allowed them to show their strengths and excel academically with the help of their choice. Miriam, Elizabeth’s mother, noted that at a nearly age she received private Orton Gillingham tutoring: “That was a big thing they wanted her to [do] (. . .). She did it for a little bit (. . .). We had extra help for her” (Miriam: P2, 585-589). Elizabeth continued attending that same school and received remedial support from a resource teacher that although was helpful academically was also embarrassing as she described: “In elementary school it was a lot more predominant (. . .) I was taken out of class to get help and stuff like that, so everyone kind of knew which like made me become like an OTHER” (Elizabeth, S1, 17-19). When Elizabeth moved to high school, Miriam indicated that: “when she went to high school and she really didn’t want them to know that she was diagnosed with dyslexia” (Miriam, P1, 263-264). Elizabeth also noted: “in high school it’s kind of just been normal because I kind of just kept it more under the radar so it’s only like this year [Grade 12] people had found out that I have a learning disability” (Elizabeth, S1, 20-22). Elizabeth graduated a mainstream high school with honour roll and she began studying environmental studies at a university. Removing the stigma

afforded her development.

Like Elizabeth, Alexandra did not want to be noticed as different or to be excluded from her peers. She described her feelings when she got extra support after the diagnosis:

When I was at [name] the public school and stuff, it was just weird that like I would have to leave the school to go get tutoring in the middle of the day and all the kids would be like, “Where’s Alexandra?” I was the only one too and so it was just weird I guess. (Alexandra, S2, 74-77)

Alexandra’s moved to an elementary private school specializing in learning disabilities. She described that the special need student population was not a good fit for her:

One day I went to the bathroom and I came back, and the kid was sitting on my chair. (. . .) and I was like, ‘Can I have my chair back?’ When she got up, there was a pool of pee. She peed on my chair. (Alexandra, SP3, 270-273)

Kate described how unhappy Alexandra was: “when you didn’t want to go to [name] school. We couldn’t even get her out of bed” (Kate, SP3, 237). Kate described what were the reasons that Alexandra was not happy in the specialize private school.

She teared up and she said, “The number one reason is because it makes me feel like a baby. Nobody can read but it’s all these other issues, and I just want to learn, and I can’t learn.” (. . .) “we don’t even play sports anymore, because the kids aren’t capable of playing sports. (. . .) For Alexandra, there was nothing about her six or eight-hour day at school that was...was... normal. (Kate, SP3, 280-286)

Kate emphasized Alexandra’s need to “have fun with her peers” (Kate, SP3, 291). She said:

“Part of her life, her social life, up until Grade 3 was going out at recess and lunch and playing soccer. [In the specialized school] She wouldn’t even talk to anybody” (Kate, SP3, 292-293).

Kate further explained that: “For her to have all that [sports] cut out because all of a sudden the

kids weren't interacting that way, even in specified gym class, it made her day really long" (Kate, SP3, 295-296). Upon Alexandra's move to a mainstream private school that addresses learning needs by grouping all students by abilities in different subjects, she flourished. Grouping to KEY classes may have blurred the stigma and made her feel less different as everyone was grouped.

Alexandra said:

All the classes were all KEY. There was seven of us and it was very good and I got all the support I needed. (. . .) so any question I had the teacher was right there and could answer it right away because she's not helping someone else. (Alexandra, S2, 35-39)

Alexandra described her parents' devotion regarding commuting to [name] school:

My mom has always pushed for the right emm ... support, support, for me, and made sure that I have it. I've moved schools to get more support and you know they support me a lot ... They drive two hours everyday (. . .) ... It makes me feel super supported and that [crying] I know they're there [crying] Sorry [crying]. (Alexandra, S1, 378-383)

Alexandra excels as a lead player in the school's highly competitive soccer team and meets her academic expectation while receiving support from her teachers and parents. Both Alexandra and Elizabeth referred to notions of exclusion and stigma and limiting and notions of inclusion and being normal while emphasizing their strengths as helpful. They both excelled academically in their new high school in spite of their reading difficulties.

4.3.3. Tutoring, IEP, and Online Courses (Kira and Oliver)

Cora and Oliver preferred to attend their neighborhood public high school and manage their academic learning through negotiating their IEP's, receiving tutoring support and taking online courses to avoid negotiating expectations in the classroom. Cora appreciated the support Kira received in her private elementary school: "was fantastic for it. (. . .) ... whatever we needed they supported at her old school" (Cora, P1, 135-138). Nevertheless, in Grade 2 Kira needed to

move to a specialized school to receive support. Kira described that the specialized private school helped her beyond academics:

I called it a disability. I thought when I was younger that that word didn't really fit right for me. I went to [private school specialized in dyslexia] for Grade 2, and that was good.

That's what I think helped me like realize that it's not bad to have dyslexia. I thought it was something like a disease [laughing] that makes you sick or something [laughing].

(Kira, S1, 392-396)

Further to conceptualizing her reading difficulties as a dyslexia rather than a disease, the benefits of the private school for Kira: "make her feel good. [name of school]. Took the load off" (Cora, P2, 306-308). However, Kira could not stay in that school. She explained why she left: "I missed my friends and the classes were too small for me [laughing]" (Kira, S1, 398). She elaborated: "My Grade 2 class had I think five, (. . .) I went halfway through Grade 2, and then my Grade 3 class had I think like seven. It was really small" (Kira, S1, 402-403). Upon leaving the specialized school Kira received daily private tutoring: "She's always had support. Always had support! I think as much as all the tutoring's been good, because it's helped her always" (Cora, P2, 309-310). In Grade 8, Kira moved to the neighborhood public high school, as being with her friend was important for her wellbeing however, the academic aspect suffered. Her mother Cora said: "once they get into high school, it's just like, you're on your own program. You're on your own!" (Cora, P2, 84-85). To support Kira they hired a math tutor four times a week. She said: "Luckily, we've got a great math tutor, so Kira's getting pulled out from math and she's going to do online math" (Cora, P2, 364-365). Currently, Kira is attending mainstream high school and taking math, science, and English online. She has been negotiating her accommodations at school, based on her IEP, as they were denied by some of her teachers.

Oliver was diagnosed in Grade 5 with learning disabilities in math and in writing. He

stayed in the same French Immersion elementary school and moved on to his neighborhood high school. Mark, his father, described Oliver's relief of math: "when I removed him from doing math at school, the level of anxiety around school changed so dramatically. It was almost like a different student (. . .). The stress just wasn't there" (Mark, P1, 512-520). The class context and the need to negotiate IEP terms and conditions added stress to Oliver, so he enrolled to online English and Math. Oliver explained why he enrolled to online English: "it's wasn't really the subject English that I have a problem with, it was more the teacher (. . .) basically he was ... ahhh ... I don't know, he's really not good with different learning styles and stuff like that" (Oliver, S2, 28-31). Throughout the year Oliver also received ongoing academic support from him father. For Oliver's artistic talent, he received an award from his school recognizing the excellence of his art. Oliver and Kira managed to experience successes in public high school by enrolling in online courses, receiving tutoring support, and enjoying their social life in school.

4.3.4. Specialized Private Schools (Jonathan and James)

For both Jonathan and James the specialized school in elementary years helped them in mastering the foundation of reading and developing work habits and learning to accept their different condition of learning difference. After diagnosing Jonathan in public school in Grade 3, Dewayne said that he thought that: "going through the psych-ed (. . .) that the lights would come on, the resources would come in, our son would finally get the teaching he needs. Ahh that was the beginning of the frustration" (Dewayne, P1, 208-210). He explained that: "Going through Grade 4 and realizing that there was no resources given to students who had a disability like that, or had an IEP. That all they were doing was accommodating and not teaching" (Dewayne, P1, 250 -252). Although Dewayne reported, "Jonathan was, I'm going to put this in quotes, 'lucky enough' to get chosen to go to this program in the [name] school district for kids with learning disabilities" (Dewayne, P1, 173-174). Jonathan did not improve his reading in that

program. Dewayne's priority was to insure that Jonathan learns effectively the foundation skills of reading and writing. He realized that he was "not going to get what he needs out of the school" (Dewayne, P1, 260) and he also realized the magnitude of improvement Jonathan had as a result of private tutoring in phonological awareness from a trained specialized tutor during the summer. Therefore, he decided to explore private specialized schools: "[private specialized] school seemed to be the one that would work for us. (. . .) we'll put our pennies together and see what we can come up with and pool our money" (Dewayne, P1, 263 -265). Jonathan attended the [private] school for three years from Grade 5 to Grade 7. Dewayne described Jonathan's learning progress: "when he left [name] school his reading ability was above his grade average ... [crying]" (Dewayne, P1, 330-331). He further said: "If we hadn't done that, he would have a Grade 3 reading level. (. . .) ... I'm not going to say we could afford because we went in debt to do it" (Dewayne, P1, 95- 99). Dewayne reported about Jonathan's public high school setting: "He's in the mainstream program right now. Last year he was in an adaptive program" (Dewayne, P1, 313-314). He described that they managed the content and application of the IEP by providing teachers with information about Jonathan's learning needs and about dyslexia in general.

James' difficulties in school in Grade 1 urged Barbara to find alternative settings. She said: "That motivated me to try many different things for him and to find a place that was safe for him to be in [crying]. It's a really hard thing to have a kid like this [crying]" (Barbara, P1, 49-51). Barbara further said: "So I pushed really hard and figured out how to get him into the private school. I put him in [name] school for two years" (Barbara, P1, 221-222). She also indicated that: "he attended million different schools [laughing]" (Barbara, P1, 239-240). James attended Grades 1 and 2 in a public school, Grade 3 and 4 in a private specialized school, Grade 5 and 6 in another private specialized school, Grade 7 in a mainstream middle school, and Grade 8 in

another mainstream middle school, and Grade 9 in his current high school. Barbara described his first year back in public high school after all his years in private specialized elementary schools: “Grade 9 was a tough year, we had lots and lots of support with tutors, which we pay” (Barbara, P1, 277-278). Barbara noted the cost of his schooling:

The first year was \$15,000 for the year, the second year was close to \$19,000, (. . .) Then, we couldn’t afford it after that, so we moved him to the [name of school] which was closer to 15, and we did that for two years. (. . .) He made good friends and felt confident and it was good. We don’t have a lot of money, so we had to move him out of that school, eventually [laughing], and back to public school. (. . .) [crying]. (Barbara, P1, 224- 233)

In his public high school, James is in the mainstream classes in most subjects and in an adaptive class for math. In our last interview I asked James what was his best memory from his school experiences. He replied: “It was all pretty terrible, until the end” (James, SP3, 192). Although James attended the best available private specialized schools his experience was harsh. James reported to find pleasure after school in creative and innovative building of a motor cart/bike, electric guitar from a cigar box and other used materials, and a welding table for his future machine building work. In Grade 11, James was an honour roll student.

4.3.5. Summary

This third theme, searching for alternative settings, illustrates the various educational settings participants chose so they could meet their personal learning needs. The various characteristics of learning settings included; access to teachers support, eliminating stigma and feeling normal, enjoying their social networks, and mastering the academic skills in specialized school. These journeys shows the importance in meeting the various needs of each student such as, social, emotional, personal passions, sports, expressing their strengths, and honing their academic skills, to allow a healthy equilibrium in their life so they can flourish as a whole individual.

Chapter 5: Learning and Teaching

This chapter includes the fourth theme that introduces perspectives and experiences of students and parents about various aspects of students' learning and teaching in schools. Five sub-themes were identified in the interview data. The first sub-theme, "Academic learning and teaching," includes the purpose and implementation of accommodations and other assisting technologies. The second sub-theme, "Emerging beliefs and expectations," discusses the impact of low and high expectations on learning and teaching. The third sub-theme, "Social aspects of learning and teaching," discusses collaboration, relationships, and the wellbeing of students and teachers. The fourth sub-theme, "Expecting teachers' professionalism and training," discusses parents' and students' expectations of teachers. The fifth sub-theme, "Beyond half full or half empty," presents strengths, deficits, and diverse outcomes approach to learning and teaching. These themes serve to answer the first two research questions: 1) How do students describe their experiences of and perspectives on having learning disabilities? 2) How do parents describe their experiences of and perspectives on their child's learning disabilities?

5.1. Academic Learning and Teaching

This sub-theme includes four parts as reported by participants. The first part is a discussion on the purpose of accommodations. The second part includes the implementations of accommodations. The third part relates to the measurement of learning through a written output task. The fourth part is about assistive technologies for students.

5.1.1. Considering the Purpose of Accommodations

Students with a learning disability diagnosis are eligible in school for accommodations as documented in their IEP to help them meet academic expectations. Following this notion, Kate said, "everybody should get accommodations so that they reach their potential" (Kate, P2, 121). She further elaborated on what kind of accommodations, "A reader, a writer, assistive

technologies, Yeah! Basically so the child can do almost everything that everyone else is doing, just with a little bit of help” (Kate, P2, 62-63). Cora described that generic rather than individualized accommodations were available to Kira, “put your kid at the front. (. . .) or do retakes, give them more time. (. . .) There’s not much teachers can do” (Cora, P1, 83-85). Barbara shared the kinds of accommodations that James needed, “writing an exam, he can go to the resource room (. . .) he needs help with reading a big passage (. . .) needs to scribe, sometimes he needs to be able to do it on a computer” (Barbara, P1, 366-369).

Dewayne, Jonathan’s father, pointed to an underlying nuance regarding the accommodations, “There’s the problem! It’s not designed to figure out how to teach him. It’s designed to figure out how to ACCOMODATE his disability. And . . . that right there is the whole crux of the problem” (Dewayne, P1, 78-80). Dewayne contested providing students tools for meeting certain academic requirements of, for example, writing and exams. He advocated for providing tools for supporting learning and development of students. He further questioned the reliance on giving more time, a reader, and a scribe as the ultimate assistance for students so they are more able to meet standard expectation of exam writing. He said, “You can give twice as much time. (. . .) a recorder and he reads the questions and reads the answer that comes to his mind. (. . .) Why does it always have to be a written output?” (Dewayne, SP3, 285-287).

Regarding alternatives to writing and exams, Cora said that allowing Kira to present her learning in a project format rather than in a test would be helpful, however, she explained, “that would entail so much too for a teacher. It really would. If they had another teacher in the classroom, maybe they could take on her project. These teachers are really very busy. Some of them are checked out” (Cora, P1, 88-90). Kira shared her perspective on how she can better show her learning through projects, “[referring to projects] I know that I can do well that it makes me want to do well. I know I can prove to the teacher [laughing] . . . that I’m not just like, that I don’t

slack off. That I actually try” (Kira, SP3, 310-313). Kira, like Dewayne, argued that accommodations should help students express their learning in diverse ways and not only accommodate students within standard methods of exams writing.

Time was one of the most common types of accommodation reported by students. Oliver shared, “I get as much time as I want to do tests and assignments. (. . .) Not projects” (Oliver, S1, 107). Having more time was helpful for Oliver as he said, “that’s probably the biggest help ... for me. That’s definitely the main one right there, just having more time” (Oliver, S1, 108-109). Anthony described his difficulty before he received extra time, “It was pretty difficult I didn’t fully learn material that well because the teachers in our elementary school passed through it quite quickly. And ... Sometimes I didn’t finish my tasks because I didn’t have enough time” (Anthony, S1, 32-34). However, with accommodations, he said, “I have more time on tests” (Anthony, S2, 89). He emphasized that, “That helps. It gives me more time to plan out what I’m going to write down then write if I’m writing an essay” (Anthony, S1, 96-97). Anthony described more specifically how extra time helped him:

Because when I didn’t have more time towards the end of the test, (. . .) I get stressed and then panic. Then with more time, I feel a sense of relief and I can relax a bit more and then finish it more thoroughly. (Anthony, S2, 115-119)

Anthony described that his academic difficulties caused him emotional difficulties merely due to not having enough time.

Maria, Antony’s mother, who is a resource teacher, expressed her concern that students were not reaching mastery in learning, “Some kids in the class may not have time to finish their work and they’re moving on, (. . .) and it’s exhausting” (Maria, SP3, 326-327). Maria, as a teacher, wished that her students would have more time to master a concept before moving on to the next topic or skill.

The length of time that teachers spent with students in teaching was another aspect of time participants discussed. Annie described teachers in the alternative program, “They take their time. They’re not in a rush. If I want to sit there for an hour and I can’t understand something, they’re going to sit with me for an hour until I understand that” (Annie, S1, 352- 354). On the other hand in elementary school she reported that, “I don’t know I just kind of felt like they just didn’t want to put their time into me” (Annie, S1, 68). Anthony described the amount of time offered by teachers in his mini high school:

The teachers in mini school, (. . .) they spend a lot more time with the kids and do it more like hands on instead of just the teachers giving you a lecture and you just take notes and then do a test, big test. (Anthony, S2, 229-235)

He argued that hands on activities are better use of a teacher’s time than lectures and big tests. In sum, according to both parents and students, accommodations were also crucial in the life of students with learning disabilities in schools: a reader, a scribe, use of computer for a spell check, and other assistive technologies intended to help students meet the expected academic standards by compensating for their difficulties. Anthony noted, “I can use a computer if I’m writing an essay. I can use a calculator in math” (Anthony, S2, 92-93). Parents differentiated between accommodations to teach students so they learn and accommodating to create shortcuts for students to meet the expected academic standard. For example, a scribe accommodated students by compensating for their difficulty to master the skill of writing, so they could show their learned material in a written exam according to expected standards. The tool of a scribe, thus, was serving students in meeting the expected standards, but not serving them in mastering the skill of writing or in allowing them to show their learning independently. Some parents argued for the strengths-based approach to bypass a writing difficulty by allowing students to communicate their appropriation of and engagement with the material they learned verbally

through presentations or artistically through projects. Others argued that accommodations to bypass deficient skills to help students meet academic standards should not replace mediating mastery of the skills that are difficult for them while also allowing students' engagement.

5.1.2. Implementing the Accommodations

Participants expected teachers to implement the accommodations documented in the Individual Educational Plan (IEP) legal document formulated by the school-based team and sometimes based on psychoeducational assessment results. Discussing the implementation, Oliver described teachers' familiarity with his IEP:

A teacher never really came up to me and has been like, "Oh, yeah. Your IEP says this and this and this." It's always me or my parents emailing them and be like, "Oh, this, this, this." Sometimes they'll almost ignore it. One time my teacher came to me and was like, "Your IEP says you have extra time for tests so like you should go outside the class and finish your test." And all that so I was really happy to hear that ... so ... and that was only one teacher. (Oliver, S1, 165-171)

In addition to teachers' low awareness of the IEP, it was also the case that some teachers were opposed to it. Oliver reported that his science teacher told him, "You shouldn't have an IEP in Grade 10" (Oliver, S1, 190).

Kira also reported that, "a lot of teachers have no idea what an IEP even is" (Kira, S1, 69). One of her Grade 10 teachers told her, "He said, I don't think it's okay to give you more advantages than everyone else in the class, or I'd give them it too" (Kira, S1, 267-268). She further reported, "my English teacher this year didn't let me ... Was like, 'I'm not giving you extra time on this and stuff.' He didn't think it was fair" (Kira, S1, 60-61). Kira indicated her position when reminding teachers of her IEP, "you have to talk to your teachers in the beginning to say 'can I use the computer?' and 'can I do this and this?' but it's kinda like, I feel guilty

sometimes doing it” (Kira, S1, 66-67). Kira noted that although she could advocate for herself when teachers were not following her IEP’s guidelines, she felt guilty about it.

Mark, Oliver’s father, noted that some students who experience learning disabilities do not have someone to advocate for them to ensure that their needs are met:

I’ve found that once I make the teacher aware of the IEP (. . .) Then there’s usually a fairly quick response. Not in every case (. . .) So you can imagine there are students, as I said before, who do not have a psych-ed in place, do not have an IEP in place, or if there is and the parents don’t make the teaching staff aware of it, they will be ignored. (Mark, P2, 173-178)

Mark, Oliver’s father, who is a teacher in alternative high school, noted that not all students with learning difficulties are fortunate to be assessed and diagnosed to draw attention to their needs. Moreover, some parents of diagnosed students are not aware that some teachers do not implement the IEP. With no systemic advocacy for students with difficulties or with a diagnosis they are at risk of not being noticed. Barbara shared her communication with the public high school regarding James’ IEP:

I emailed the teacher at the beginning of the year, for every part of school, since we’ve been in public school, “This is James, these are the things he can’t do. Please be aware. Do not ask him to read in front of class.” I’ve had teachers do that. Despite my admonitions, and, “He may need slight significant support. If you can’t do it, let me know and I’ll figure out a way to make that happen.” (Barbara, P1, 316-320)

Barbara described a scenario in which teachers were not following the IEP so parents had to remind them regularly to apply the IEP’s guidelines. This raises a concern for students with an IEP, whose parents are not confidently advocating by reminding teachers regularly of the IEP. There is a possibility of students being ignored although they have an IEP because they do not

have someone, either at home or at school, to advocate for their rights documented in the IEP.

When Alexandra was attending a private high school, her parents advocated for her. Alexandra shared that her teachers also need reminders, “I would say (. . .) my teachers. (. . .) they all know my IEP, they have it. Sometimes I do need to remind them” (Alexandra, S1, 100-103). James also noted, “I’ve had teachers that haven’t known I’m dyslexic. I have told them, and they just forget” (James, S1, 69-70). However, he clarified if teachers are aware then “some teachers that are quite good about it and they offer to scribe whenever they can and stuff like that. Yeah it really depends on the teacher” (James, S1, 70-72). James described that if teachers know what students need support or accommodations they are likely to provide it. However, in some cases, the equity value underlying accommodating students based on their needs—grounded in the BC policy and documented in the IEP by school personnel—was either not agreed upon, ignored, or forgotten. Thus, the IEPs were not implemented systematically by all teachers.

5.1.3. Test Writing Measuring Learning or Written Output

Students had strong opinions about test taking and the validity of tests as a measure of their knowledge, understanding, and learning. Elizabeth described that preparing for tests and doing well on tests did not guarantee her appropriation or mastering of the material:

Pretty much, you know if you study the night before, really hard and you know the information, you can ace the test, but then it all goes out your ear. I don’t remember a lot of the stuff I’ve learned because I’ve been able to kind of like work through the system.
(Elizabeth, S2, 529-532)

Elizabeth who was at the end of Grade 12 at the time of the interview noted that high school, “it’s like not a place to learn right now. It’s a place to learn and forget” (Elizabeth, S2, 536-537), meaning that test performance is not a parameter for learning. Kira also expressed that, “My opinion on tests is they are really unfair. (. . .) A lot of people don’t do well on them because

it's not how they learn" (Kira, S1, 823-829). Dewayne shared that tests do not reflect Jonathan's learning, yet, he needed to write in tests. He said:

"When he's doing a test, he does the minimum amount of work." Every single time we heard that, we had to remind them, "By the way, he's got written output challenges, but if you were to test him verbally, I think you'd be surprised." [they replied] "Oh yeah, he's really good verbally." (Dewayne, SP3, 264-267)

Alternatively to measuring his limited written output, Dewayne suggested measuring his learning through his strengths of speaking, as his Grade 3 teacher did. Kira argued that tests are false measures of her learning. She said:

It's a false like... kind of judgment of what you know. Because it puts a lot of stress on you, (. . .) I would do so much better in school if I only had projects and homework. (. . .) because I do pretty well in those. (Kira, S1, 832-836)

Tests were not reflecting her learning because her reading and writing difficulties and the stress she experienced during tests hindered her ability to show her learning.

Mark also expressed his doubt in the validity of tests as a measure of learning, "I don't know that testing is always fair to begin with. It's like climbing the tree" [referring to the cartoon "Our Education System" see Appendix F] (Mark, SP3, 518-519). Mark shared what would be Oliver's preferred way to show his learning: "For a student like Oliver, if he were given the opportunity to present something in a video format or artistically, that's a completely different, then the table turns and you can see someone who can excel at something" (Mark, SP3, 521-523). Mark further indicated his hope that strengths of students would be used to show their understanding. He said, "So, I'm hopeful. I'm hopeful that for students that are in Kindergarten now that if they have strengths in other areas that they'll be able to use those strengths to show their understanding" (Mark, SP3, 524-527).

Participants expressed that test taking requires use of their weaknesses in written output, reading, and stress management during tests taking. Therefore, tests are not a fair measure of their learning. Parents suggested the possibility of students expressing their learning through projects or other formats that allow them to use their strengths.

5.1.4. Assistive Technologies

Students and parents described various types of assistive technologies provided for students in school. Videos, audio-books, hands on learning and teaching, explicit and individualized explanations, discussions, and other assistive technologies, were used and found helpful to support the learning and teaching processes of students with learning disabilities. Use of visuals or videos was noted by Alexandra, “I learn more hands on and actually seeing something happen, rather than reading about it I guess. Like watching videos about a war in Social or something, I find that more useful than reading about the war” (Alexandra, S1, 539-541). Kira was grateful for teachers’ use of videos, “my teachers have given me a lot of different ways to study (. . .) my Socials teacher. He would show a lot of videos about everything we were learning, and that really helped me” (Kira, S1, 279-281). Audio books were helpful tool for Jonathan and other students. Dewayne, his father, said:

We’ve downloaded the audio book, got the movie. We’re doing everything we can to help him get through that and still achieve what they’re trying to achieve with that. If he was to sit down and read it, he would get to the end of the page and wonder what the page was about. (Dewayne, P1, 313-318)

Videos or audios were described as effective technologies that teachers and parents provided to students. In addition, Alexandra noted, “I also have my laptop, which will read to me textbooks or if I need to Google stuff. I have programs on my laptop that I can highlight it and it will read it to me” (Alexandra, S1, 63-64).

Kate described a stressful situation and how it was technically resolved. She said:

Music, art class, Physical Ed. (. . .) Some of her biggest upsets have come from classes like that. (. . .) it was sheet music. (. . .) She'd be the last person to find her song. Then she CAN learn it, but she's going to be slower, but the teacher had no idea that she had an IEP, so I had to phone her up and say, "You do know she's dyslexic? Well your titles are stressing her out. Why don't we color code it?" (. . .) So we solved it. (Kate, P1, 114-125)

A tool as simple as color-coding sticker to mark sheet music made music class manageable for Alexandra and for her teacher. Teachers used assistive technology and other accommodations to assist the learning processes. Students noted the benefits of assistive technologies, such as, video, audio, scribes, and use of computer.

5.1.5. Summary

Based on the interview data implementing accommodation had the purpose of helping students to meet standard academic expectations of, usually, writing a test. Another purpose of the accommodations was to give students opportunities to show what they have learned by using assistive technologies, that is a different way then the standard test writing. Accommodations helped students meet the standard expectation but sometimes the focus on it neglected the importance of providing students with tools to learn the skill of writing for example, rather than by passing the use of the skill of writing. In addition, no accommodation could be implemented without teachers' agreement with the need of it based on an equity principal.

5.2. Beliefs and Expectations Shaping Learning and Teaching

Beliefs of teachers about students' abilities and beliefs of students about teachers' expectations of them carried emotional weight that affected students-teachers relationships that then affected the learning and teaching processes. Beliefs and expectations were entangled and overlapped in the interview data as shared by participants. Four patterns are presented in this sub-theme. The

first pattern is the potential positive effect of high expectations. The second pattern is the potential negative effect of low expectations. The third pattern is the unfair aspects of some expectations. The fourth pattern is the web of beliefs underlying people's interactions in the learning and teaching processes.

5.2.1. Positive Effect of High Expectations of Academic Outcomes

Participants' perspectives suggested that setting high expectations that reflect the beliefs in students' ability or potential helped students improve their standards of performance. Elizabeth argued, "Expectations are good though, because then you're held to a standard" (Elizabeth, S2, 400). For example, Jonathan described his teacher's words conveying expectations higher than his level of performing, "he's like really confident, and he's a confidence booster, I guess. He's like, 'I know you can do it. It can't be that hard for you.' Kind of jokes around" (Jonathan, S1, 375-378). Maria described Anthony's drastic positive change in behaviour and academic performance when he moved to high school. She attributed his improvement to his high school teacher's, "same guy, same Anthony. But she was very positive. She tell me, 'He's a funny guy, very social.' The approach there was different. (. . .) Then, he started to change. (. . .) felt good about himself" (Maria, P2, 304-309). Maria attributed Anthony's improvement to the change from elementary school teachers' negative interpretations of him to the mini high school teachers' positive approach to him. Mark, Oliver's father, summarized the effect of expectations on students' learning:

I think the teachers that he has admired and learned the best from, have given him the ability to realize that he can do anything that he would like to do. (. . .) I think those that have not have also, in the back of his mind, let him know that he can't do everything.
(Mark, P1, 247-251)

Elizabeth, Jonathan, Maria, and Mark reported that teachers' positive expectations of students

supported their improvement and, as Mark indicated, low expectations had also influenced students.

5.2.2. Negative Effects of Low Expectations of Academic Outcomes

The influence of teachers' expectations was evident also when teachers conveyed low academic standards for students. Barbara described what she thought one teacher believed about her son James, "there was a teacher last year, his math teacher (. . .) who felt that he was just a bad kid and was cheating and all this stuff" (Barbara, P1, 470-472). She further elaborated that the teacher's beliefs and low expectations of James did not match the high mark he produced on his math test. Barbara said, "essentially not trusting his abilities and it's not affirming the work that he had done and the effort that he had put in, and just basically accusing him of cheating. That was hard" (Barbara, P1, 531-533). Barbara interpreted the teacher's beliefs as reflecting low expectations. She said, "Essentially, the message was, 'You're not smart enough to have done that well.' Right? That was really negative" (Barbara, P1, 535-536). Barbara was adamant about the inaccuracy of the math teacher's beliefs and expectations of James to perform at a lower level than he performed. She said:

My husband and I went in there to talk to her about this, because James was devastated and hurt because he was working really, really hard [knocking on the table to emphasize] and was doing well, and she was accusing him of cheating, and was saying, "You can't do your exam in the resource room, because I want to watch you." So David went in there and was like, "Look, this is not okay." (Barbara, P1, 474-478)

James' parents noticed the negative impact that these low expectations had on James.

Kate described a scenario of teachers lowering their expectations of students. She said, "give up on them. You know? 'It'll be too hard for them to learn this, so why bother teaching them?' (Kate, P2, 29-30). She emphasized the impact of teacher's expectations and words of

encouragement that convey their beliefs in students' abilities:

Their expectations are lowered. So emm ... say if the teacher knows this student is gifted, they usually give them more work to do to try to encourage them to reach their potential, but with an LD student, "Oh well, just do three math questions. (. . .) Instead of giving them proper accommodations like a reader, "Let's read through all of those word problems. You can do this. I know you can," (. . .) So a lowered expectation. (Kate, P2, 35-42)

Kate described how teachers' beliefs of students' abilities dictated their expectations of students and elaborated on the negative effect of teachers' low expectations on students.

When someone else's expectations are lower, then it affects your self-esteem. Especially when you're little ... [laughing] because you're trying to get some of your self-esteem from that teacher. Their enthusiasm, their willingness to help you and their expectations of you, sometimes when you're a kid, dictate how you see yourself. (Kate, P2, 52-55)

Kate noted that the impact of teacher's beliefs go beyond academic outcomes to affect students' self esteem.

In the second interview, further discussing her perceptions of her teacher, Elizabeth explained her view that teachers' low expectations may inhibit growth:

Well if expectations are low I guess it's easy to surpass them. Also, that means you can't push yourself harder because it's like, you can just pass that expectation right away. Then, you're like, "Oh, I'm good." But then there's no other, because you want to keep climbing the ladder. And like ... If the ladder stops, then you're kind of there at your destination, but maybe that's not the destination you want to go to, if that makes sense. (Elizabeth, S2, 402-409)

Elizabeth's analysis of teachers' expectations linked with students' motivation reveals the awareness students may have in this subtle matter of how teachers' low expectations may be

inaccurate, inhibit growth, affect self esteem, and limit teachers' input.

5.2.3. Unfair Academic Expectations

Jonathan responded to the "Our Education System" (see Appendix F) cartoon by saying, "I don't know. It's an unfair battle. It's asking people that you know... like people I guess won't perform well to do something that you know they won't perform well in, but you're still asking them to do it" (Jonathan, SP3, 254-255). Jonathan argued that the expectation of a student, who is diagnosed with written output difficulties, to write a test and be compared to classmates with no written output difficulties was an unfair expectation. Jonathan did not refer to the expectations of students with learning disabilities to learn in general, but specifically, to the written output method used to show their learning.

Barbara, James' mother, also described a teacher who had unfair expectations of James to read out loud in class. She said, "There was a teacher in middle school who insisted on having him read it out loud in class [Grade 8]" (Barbara, P1, 536-537). A fair request was not to ask the same of all but to allow the same opportunities to learn and grow to all. Issues of what was fair to request of students with learning disabilities are woven in other aspects of learning and teaching and are also related to beliefs.

5.2.4. Students' Beliefs about Teachers' Beliefs

Teachers communicated their expectations of students about academic performance and behaviour they judged as acceptable or not, based on their beliefs. Students interpreted teachers' communications as judgment. Kira described the dynamics of beliefs she and her teachers held about one another:

I think that they think, I don't know, that I have a bad attitude I guess (. . .) because they've told me I need to work, I need to study more, or try harder, (. . .) being a good kid is doing your best all the time, and studying after school a lot. They don't think I study.

(Kira, S1, 225-232)

Elizabeth expressed a similar idea. She said, “If you weren’t up to standards you weren’t good enough” (Elizabeth, S1, 125). Meaning that students who were not able to meet academic expectations were viewed as lesser and were judged as not working hard enough. James also described that students who met academic expectations were privileged in teachers’ eyes and those who didn’t were not seen positively. He said:

In my class there’s a bunch of those kids that are straight-A students (. . .) So then she’s very like nice to them, but she’s exactly the same as them. For me and a couple of my friends, like . . . I guess she doesn’t like GET how what we do is fun and stuff like that. I don’t really know why she doesn’t. (James, S1, 138-143)

He further elaborated describing the kids who were loved by the teacher, “The kind of kids that on the weekends they’re always studying and doing stuff like that. She’s a lot nicer to them” (James, S1, 147-149). Performing well academically was the standard by which students felt measured not only academically, but also personally. Feeling accepted in the eyes of the teacher, as a positive citizen in the class deserving the teacher’s attention.

5.2.5. Summary

The underlying influences of beliefs swayed on a pendulum between promoting and inhibiting learning. Interview data excerpts included in this sub-theme showed the subtleness and yet the immense force held in people’s beliefs on one another. The impact of beliefs was shown in particular, in learning experiences involving a social dynamic where teachers were in a power position and students were in a vulnerable position.

5.3. The Sociality of Learning and Teaching

Students described their interaction and relationships during class time. Four patterns were identified regarding the sociality within the classroom settings were identified. First, they

described their interactions and teamwork with other students during class time. Second, they described student-teacher relationships. Third, they described the context and manner in which teachers offered support to students. Fourth, they described their concern for teachers' wellbeing. These patterns demonstrate that interpersonal relationships are part of learning in the classroom.

5.3.1. Collaborative Learning and Teaching

When students experienced difficulty keeping up with class activities the practical action they thought of was engaging with classmates to discuss and ask for assistance or perhaps to find a way out of the frustrating situation. Students reported that their social interactions in class were perceived sometimes as interference rather than a contribution to advance their learning or ease their stress. James described his views on teachers' views:

She always put me in the place where, in class, so I couldn't talk to anybody or anything like that. If I had a question for a friend I couldn't ask them. I couldn't be like, "Yo do you get how to do this?" or something like that. Then that sucks. (James, S1, 224-226)

Socializing served James' learning in class and being isolated inhibited his learning.

Oliver described class discussions as a form of interacting with classmates about the topic, "last year (. . .) we were doing a lot of discussions and stuff like that (. . .) we'd analyze books and stuff. He was just such an awesome teacher" (Oliver, S2, 48-50). Elizabeth also described an interactive and collaborative as her preferred way of learning. She said:

It's best to be in a collaboration, because if you're individuals, obviously, we're stronger as a team. We're all just going around as individuals looking out for ourselves. It's going to be a lot harder to like survive. It's best to work together. You can do more together as a team. (Elizabeth, S2, 763-766)

Alexandra also explained why collaborations in science class were beneficial for her,

"I'm really enjoying science this year (. . .) it's all hands on, there's no really reading except for

the instructions and stuff. You get to work with people that we're both doing the experiment and it's just fun" (Alexandra, S1, 237-240). Anthony described that group work, that was common in his mini high school, was more beneficial for him than listening to lecture in isolation from classmates, "they make us do more projects, group work. They make you learn in different ways instead of just, as I said, teachers giving you lectures" (Anthony, S2, 238-239). Anthony further gave examples of collaborative interactive learning activities that were effective for deeper learning as he said:

We spent more time on the subject and then the teacher got us to make a puppet show with a big group. (. . .) and we wrote our script on like . . . and we based the puppet show on what we got out of the book that we read in class. So it kinda . . . It helped us to help each other, to get a deeper understanding of what we were reading and it was a nice creative way to understand it more. (Anthony, SP3, 383-390)

Through structured activities towards a goal and collaborative communication with classmates, Anthony felt that his learning was deeper.

Kira explained that the talking aspect of group work was helpful for her learning, "I like group work because it's talking, and then it's someone telling you one-on-one, basically, or you telling them and you are teaching" (Kira, SP3, 681-682). She specified that, "it's talking, not writing and it's easier for me to learn like that" (Kira, SP3, 703).

Jonathan described the friendly learning atmosphere in the course support block he was attending in his public high school, "There's about . . . 20 kids in a class, and everyone helps each other out. It's good, I guess, community . . . It's a little community in the school, so you get to know a lot of the kids in that class" (Jonathan, S1, 241-243). James indicated what he would do in class when he was not able to complete a task, "I either will ask to go partner up with somebody like that and we could read it together, or I just won't do it in class. I'll just wait until

I get home and do it then” (James, S1, 53-55). According to students, collaborative structured learning with classmates was an effective method of learning.

5.3.2. Student and Teacher Relationships

Interpersonal relationships between students and teachers in the classroom were critical as described by students and parents. Positive relatable relationships were an asset in the learning processes while strict and distant relationships affected students’ learning negatively. Students reported the positive effect of teachers’ use of humour to discipline, regulate, teach and connect with students.

Barbara noted the critical role of James’ relationships with his teachers, “his connection is where it lives or dies – the teacher [laughing]” (Barbara, P1, 506). Alexandra expressed one of the reasons for the importance of student-teacher relationships, “I feel comfortable going up to the teacher and saying, “I don’t understand this. I need you to explain it in a different way” (Alexandra, S1, 31-33). Annie described that she learns better if there is a personal connection with her teachers, “your average teacher. Just going to school...to teach. Put it on the board and that’s it. I feel like I learn a lot better when my teachers are more creative and when I feel like I get respect or there’s that bond” (Annie, S1, 189-191). Barbara shared that James’ Planning 10 teacher, who read in one of his assignment on his hobby of building and welding, guided him to the apprenticeship program. She said: “I think things like that are very positive for him and go a long way into helping him feel like he belongs in the world that he’s in (. . .) I think he often feels like an outsider” (Barbara, P1, 516-521). James’ connection with his teacher helped with planning his future learning program.

Similarly, Alexandra described her ideal teacher, “A teacher that knows actually who you are outside of school” (Alexandra, SP3, 510). Jonathan’s father, Dewayne, described the course support space as a family like environment, “she treated these kids as her kids. (. . .) making

sure that all the teachers that had these kids fully understood what was going on. (. . .) Keep them motivated. (. . .) it was phenomenal” (Dewayne, P1, 427-433). Jonathan described the teachers he can relate to with ease. He said:

I find that having a teacher that I relate with, it’s a lot easier to talk to than a teacher I don’t have a relationship with (. . .) I know that they’re kind of I wouldn’t say laid back, but they’re calm, and they don’t freak out all the time it’s so much easier to ask them questions, and like ask for help on something than it is to a teacher you don’t like, and don’t want to talk to because you know they’re going to be, I guess, annoying, or frustrated, or something like that . . . so yeah, it’s a lot easier. (Jonathan, S1, 363-369).

Jonathan further explained that close relationships with teachers motivated him to put effort into his work, “If you get to understand them and you get to know them, you feel like there’s no point in not doing the work” (Jonathan, SP3, 351-352). On the other hand, he said, “If you don’t have a good relationship with a teacher, it really feels like they don’t really care about you, your education or anything like that. (Jonathan, SP3, 356-358)

In contrast, Oliver clarified that his connection with his teachers was distant and formal, “It’s not like there’s a connection between us. It’s just like . . . He’s there, and more like a university professor. He reminds me of that. He doesn’t really care about like your name” (Oliver, S1, 316-321). Jonathan also described a strict teacher who it was hard to connect with, “She has no leeway. You can’t really relate to her or talk to her. I really like to get to know my teachers” (Jonathan, S1, 346-347). James also described his difficult relationships with his English teacher:

My English teacher doesn’t really get along with me that well this year (. . .) She’s very micromanage-y. Everything has to be a certain way. And like, whenever I want to talk to my friends or whatever, I can’t really do any of that. Then she always gets mad at me

whenever I talk. (James, S1, 124-130)

James perceived his interaction with his classmates during class time as a tool he needed for learning as opposed to his teacher's view. It appeared that James and his teacher did not have a relationship that would allow discussing their different views on the meaning and purpose of interacting with classmates during class. Barbara, James' mother, linked a positive student-teacher relationship and academic engagement. She said:

I think if there is a good relationship with the teacher, I think he gets excited and engaged about learning. He wants to learn, he wants to do well, so if a teacher hooks into that, it can be amazing. But if they, on the other hand, shut him down that way, it's almost impossible, too, in my experience. (Barbara, P1, 574-577)

Both Barbara and James viewed student-teacher positive relationships as a prerequisite for learning.

Students noted teachers' use of humour in the classroom as contributing factor in building positive student-teacher relationship. Alexandra indicated what she liked about her teacher, "being able to joke around with her" (Alexandra, SP3, 511). Jonathan also explained why he liked his math teacher, "She was nice. I always get distracted in class. I always wander over to my friend, and start talking to him. She'd be like, "Really? Again." And kind of joke around with me" (Jonathan, S1, 323-325). Jonathan further explained, "She's really friendly, and really nice, really funny, so it's really good having a teacher that you can kind of joke around with, and not get in trouble, and not be super strict all the time" (Jonathan, S1, 330-332). Jonathan described his English teacher, "My English teacher talks a lot, tells jokes, so all the teachers that I have in my classes are good at telling jokes and stuff, and they're really relatable. You can kind of build a relationship with them" (Jonathan, S1, 346-356). He further noted that he could relate to teachers who use humour, "He was a very silly teacher which was great because I could relate

to him” (Jonathan S1, 146). Teachers’ use of humour contributed to building connections with students that helped in processes of learning and teaching.

As seen in students’ description of their relationships with their teachers, positive relationships made students feel loved and like they belonged as well as connected to the teacher and comfortable approaching teachers with questions about learning needs. Whereas they reported that relating to strict teachers was more difficult and it negatively impacted learning and teaching processes. Students appreciated teachers’ use of humour as it helped students and teachers to connect and establish better understanding of expectations of behaviour in the classroom.

5.3.3. Defining Respectful Support

Within the dynamics of learning and teaching, participants described a fine line between respectful support and embarrassing support that conveyed dependency of students on teachers. James said, “I’ve noticed that anything that has to do with people helping anyone with a learning disability or anything like that, they take all that pressure away, which is a bad thing, in my opinion” (James, SP3, 47-49). James felt patronized by the imposed support that was well intended but left no room for independent and interactive learning. He elaborated about his experience with and perspective on teachers’ support:

I went to this school for dyslexia and learning disabilities, and there was 14 kids in the class and four teachers. So I mean, like ... you understand every concept within 15 minutes of the class, but once you go back to public school, there’s one teacher and 35 kids. You’re kind a like, “What am I going to do?” So they say that it helps, but it kind of just makes stuff worst, I found. (James, S1, 241-244)

James indicated that teachers helped him complete class work but this support did not equip him with the tools and strategies to be an independent student. Barbara, James’ mother, described

how James responded to her offers to support him at home, “He’ll say to me, ‘I don’t want you to help me. I want to do this myself because I need to do this myself, because I’m almost 16 years old. I need to be able to do this’” (Barbara, P1, 77-79). James was not accepting support that accentuated his dependency on others.

Anthony described two different experiences of teachers’ support “I think in my previous school if like someone had a learning disability, they would (. . .) just baby them a bit (. . .) They’re still learning but they’re making it super easy” (Anthony, S2, 436-440). Unlike his mini high school where teachers’ support was, “They give you the tools but they expect you to do everything the same” (Anthony, S2, 444). He clarified, “they give you the tools too for yourself to go find the answer” (Anthony, S2, 454). Anthony distinguished between help to complete a task and help to learn a strategy.

Kate described her concern of developing dependency, “[name] school has been reading everything to them and I kept saying to them, what’s going to happen when she (. . .) goes to university? Am I supposed to hire a tutor to read for her?” (Kate, P1, 243-248). Elizabeth described her experience with teacher’s support and perception of it as dependency, “I got a lot of help, which was good because like I needed the help. But, they helped me too much that I became dependent on them. And then, I couldn’t really do work by myself” (Elizabeth, S2, 296-298). She further said, “they helped me to a point where they sometimes they would do the projects FOR me” (Elizabeth, S1, 137). Elizabeth shared her perspective of why too much support focused on completing projects was not beneficial for her in the long run, “it wasn’t going to benefit me because if I’m not going to be able to do it myself I’m not going to gain those skills and I would become depended (. . .) on these teachers (Elizabeth, S1, 139-142).

In high school, Elizabeth did not share with her teachers the fact that she had learning disabilities, “I’m glad that when I went to high school I cut that off because I’m now an

independent worker” (Elizabeth, S1, 139-144). She described a metaphor that reflected her decision to hide her diagnosis of learning disabilities in high school:

I was taking swimming lessons for so long and then so I decided now it’s my turn to test out the water and like either I would like be able to float and swim, or I would like sink and someone would come and save me. So I decided to go, go to high school and just try it out and I did fine. (Elizabeth, S1, 160-165)

Elizabeth became an independent participant in the learning experience as she described, “I have been able to take my learning into my own hands” (Elizabeth, S1, 517).

Gayle described another aspect of teacher’s support, “you don’t want to have (. . .) a teacher’s assistant with you. The question then is, how can you support a student that needs extra help, without them feeling different? That’s hard” (Gayle, P2, 381-383). In addition to having an assistant, Alexandra described feeling embarrassed if approached publicly by the teacher, “It also helps if the teacher does pull me aside, not saying it in front of the whole class” (Alexandra, SP3, 404-405). Kate described the risk in too much support or in not enough support, “it’s a fine line of being respectful and making sure that they reach their potential and making sure that we don’t lower our expectations for the overall goal of getting them to reach their potential” (Kate, SP3, 400-403). To address this tension in the optimal degree of support, Elizabeth suggested involving students by asking, “that would be like, ‘Hey, what do you need help with? Let’s help you.’ That would be a really good education” (Elizabeth, S2, 628-629). Annie discussed a type of support that helped her, “in the learning center it’s just like that push and that like motivation that you can do it and stuff like that (. . .) That’s nice! That’s what I want to hear” (Annie, S1, 183-184).

Dewayne’s perspective was that schools ask, “How do we figure out how to get them through the system rather than, how do we ensure they get to the end of the system and make

sure they read and write? It's a different dialogue" (Dewayne, SP3, 207-209). He shared his view that the nature of the support students received was not for the purpose of learning or teaching a skill, but for the purpose of passing students through their tasks and grades, and perhaps that purpose does not resonate as deeply with students.

Based on participants' responses, respectful support included the following four principles: first, considering the needs of students to be independent active learners; second, offering support with no embarrassment alluding to their difference or deficiency; third, teaching mastery of skills of reading and writing alongside providing accommodations to compensate for their difficulties in reading and writing; and fourth, negotiating needs and supports with students that allows ownership of their learning.

5.3.4. Wellbeing of Teachers

Students and parents expressed their concern about the wellbeing of teachers when discussing their learning and teaching processes in the classroom. Dewayne expressed his empathy for teachers' frustration:

If ten or fifteen percent of the class is not getting it. You must get extremely frustrated.

And if you're not trained to recognize the differences, if you're not trained to teach to those differences, not only is the kid is frustrated. The teacher must be as well. (Dewayne, P2, 190-193)

Dewayne described a disharmonious learning and teaching process where both teachers and students experience frustration, as teachers cannot deliver and students cannot receive in the learning and teaching processes.

Cora acknowledged the immense scope of responsibility that teachers carry. She said, "I don't want to paint teachers as bad. I think they've got a massive, huge job" (Cora, P2, 113-114). She specified, "It's big task for teachers to understand every kid and all their different abilities"

(Cora, P2, 46-47). Annie who was attending an alternative high school and was not satisfied with how her learning needs were addressed in elementary school, expressed her thoughts about teachers' difficult position in schools, "they just get so much hate, but they do so much and they have so many students. (. . .) people are so rude. They do so much and just because they don't understand [students' needs] doesn't mean that ..." (Annie, S2, 223-227).

Kira said that teachers' feelings in class shaped her bad attitude when they teach, "I do get a bad attitude towards going to a class because it's like I don't really want to be here. I get that because the teacher feels like that, I think that I feel like that" (Kira, S1, 462-466). Kira was referring to teachers' feelings of overwhelm, a state of being that shaped the classroom climate and affected Kira. Jonathan described how teaching was difficult for teachers who were exhausted:

A teacher that's kind of not really happy with the job they have, [laughing] and doesn't want to do it anymore, [laughing] and just kind of tired and exhausted from doing it all the time then it's not the best because the information is not put across as clearly ... YEAH!
(Jonathan, S1, 561-563)

Jonathan, like Kira, also described teachers feeling overwhelmed and perhaps burnout.

Dewayne explained that teachers mean well but miss the purpose of schooling when they are focused on helping students reach completion rather than engage in learning.

Teachers are nice and they mean well, but again, all they're trying to do is to figure out how to accommodate him, how to get him through the system. (. . .) that would not have taught him how to read or write. (Dewayne, P1, 191-193)

In a system with multiple players of students, teachers, parents, school personnel, and others, it seems reasonable to support teachers who are alone in the front line making use of their limited resources to provide students with constructive and enriching learning and teaching environment.

5.3.5. Summary

The interpersonal sociality of learning was loud and clear in students' and parents' interview data. Collaborative discussions and teamwork during class were perceived by students as a means to deepen and create optimal learning conditions. Connecting with teachers on a personal level by including life interests beyond school became an enhancer in students' meaningful development. Teachers' use of humour was also an enhancer for the learning environment while untactful public declarations of support was embarrassing for students. This key position of teachers in the interpersonal dynamic was discussed also regarding teachers' overall wellbeing within these attempts to improve the experiences of mediated learning for both teachers and students.

5.4. Expecting Teachers' Expertise

The questions examined in this sub-theme, based on interview data, are: Have teachers been taught how to teach students with learning disabilities? Can we expect or demand of teachers a performance that was not part of their education? Participants noted four necessary expertise of teachers. First, participants expected teachers to be expert about learning differences or disabilities. Second, participated noted that they would benefit teachers teaching them explicitly the way they learn. Third, participants noted their need of teachers to individualize the learning and teaching process to support students with specific learning abilities. Fourth, participants reported benefiting from teachers' ability to provide intensive teaching.

5.4.1. Teachers' Understanding of Learning Disabilities

Effective teaching includes understanding the needs of the learning students. Annie shared her perspective of what may be an ideal teacher, "You're here to help students and help them reach where they want to go and if you can't really understand your students then why are you a teacher?" (Annie, S1, 44-45). Gayle also expressed her opinion, "it needs to be part of the

teacher's training. Learn about learning disabilities, and what are the signs of learning disabilities. (. . .) how does it affect their emotional and behavioural ways, while they're in school" (Gayle, P2, 476-479). Kate argued that teachers have the will but not the training. She said, "teachers want to help her. I think sometimes they don't know how to help her" (Kate, P1, 293-294). Kate further elaborated, "they don't train their senior teachers with Orton-Gillingham" (Kate, P1, 165). Therefore, she said, "teachers need more training to understand what dyslexia and learning disabilities are" (Kate, P2, 156-157). Cora shared an example for how Kira's teachers lack understanding of her daughter's needs as a student with learning disabilities:

She'll put her hand up, she'll ask a question and he's, "Are you kidding me that you're asking me this question? I just told you," or "I just explained this to you." Then she'll have to say, "I'm sorry I'm dyslexic I don't get it" (Cora, P1, 93-95).

As seen in the above excerpts, parents perceived that some teachers did not have the basic understanding of learning disabilities they expected them to have in order to support the needs of students with learning disabilities.

5.4.2. Explicit Learning and Teaching

Participants described that students with learning disabilities require, beyond teachers' basic understanding of learning disabilities, a unique ability to explicitly explain to students the material in a way that they can learn. Jonathan described effective support of specialized teachers in the course support block he attended as a student with learning disabilities. "The teachers (. . .) ask you how you're doing in each block (. . .) If you need any help they can bring over a tutor. (. . .) If they know it they can answer it, and help you with it" (Jonathan, S1, 238-240). He further described explicit teaching:

He'll give me examples, and draw it up on the board. He's like, "If you just apply this to this it should work every time." So that's really helpful having him like explain that to me,

and giving me ways to do it, and like kind of I guess reminding me on the ways to do the homework. (Jonathan, S1, 397-401)

Jonathan clarified the importance of effective explanations, “the teacher that’s really good at explaining, really good at getting information across to you then I love the class” (Jonathan, S1, 558-559).

Kate described the explicit teaching Alexandra received:

She’s had lots of Orton-Gillingham, lot of remediation and her fluency has come up probably to about a Grade 7 level or so. (. . .) her comprehension is still very low. (. . .) so that’s why audiobooks are so important, so that she gets the information in and keeps learning. (Kate, P1, 471-475)

Jonathan described the results of his first learning experience with explicit teaching he received from a private reading tutor specializing in teaching students with dyslexia:

We found Rina. I noticed results instantly. It was really with the hands-on, so she had, I guess, this big tray of tiles, so she’d tell you to spell a word, and you take out the letters, like the T-I-O-N and S-I-O-N (. . .) That was really helpful, because I could sound out the words, (. . .) Eventually, I got really good at that, and it really helped me. (Jonathan, S1, 76-85)

Jonathan described a phonological awareness teaching that was effective for him. Jonathan’s father, Dewayne, described their appreciation of his progress with the tutor who used explicit teaching, “We’re just like, ‘Wow. This has never happened. Never happened.’ It took a month or two. That’s all it took” (Dewayne, SP3, 447-451). Jonathan specified, “she gives me all these little tips and tricks on how to spell” (Jonathan, S1, 97). Dewayne discussed why training teachers to teach explicitly is important:

They don’t know. They’re not trained to teach dyslexics. They just do more of what the

school does and you may as well pull your fingernails when you're dyslexic. You know! Tell the kid to read more. Well, they can't read, to begin with. (. . .) So you need to find the appropriate tutor or school that teaches the way that they can learn. (Dewayne, P1, 68-740)

Dewayne emphasized the need of specialized teaching that is different than the reading practices, for students with dyslexia. Jonathan also distinguished between effective explicit teaching and general ineffective teaching method:

Some teachers will just be like, "All right. Here's a worksheet. Finish it. If you don't finish it, that's your homework. That's the end of class," kind of thing. Some teachers are interested. They're like, "Okay, this is what we're going to be doing. This is ways to go at it, and if you're having trouble with this, come see me. I can talk to you. I'll help you through it." (Jonathan, SP3, 386-390)

Jonathan appreciated explicit teaching and he related it with teachers' engagement and care for students. James also discussed effective teaching:

The teachers don't really know how to explain it in a way that I understand, and I don't really want to have somebody looking over my shoulder all class because I don't really like that. Because then everybody's like, "Why is there some teacher next to that kid the whole class?" I don't really like that. So, I guess just the teachers know how to explain it better, that's about it. (James, S1, 415-419)

James emphasized his preference to learn from teachers who know how to explain to the whole class rather than one-on-one support.

Oliver shared his satisfaction with his father's help with an online math course, "Online, yeah. That is so much easier because he is like very good at explaining things" (Oliver, S1, 78-79). In contrast, Elizabeth noted her gaps in writing skills despite past learning:

Yeah and it's also, it's interesting because then, I got a lot of help when I was younger but they either skipped over that or I just lost what I learned. But I'm pretty sure I never ever knew how to formulate exactly a good sentence. Or like it never stuck, so it's like, and I got through I went through a lot of years of getting extra help and I still don't know it.

(Elizabeth, S1, 384-388)

She further explained that, "I think it's a two way thing. I didn't soak up the information and I don't think it was delivered in the best way for me, emm in elementary school" (Elizabeth, S1, 552-555). Elizabeth was aware of gaps in her learning and she attributed it to both teacher's quality of teachings as well as to her own ability to understand teacher's teaching.

Kate mentioned the reading teaching method in elementary school. She said, "They'd do noisy reading. I don't think they really taught them to read" (Kate, P2, 171). However, she clarified that, "If most kids were getting phonics, kids like my son probably wouldn't have ever known there was an issue" (Kate, P2, 250-252). Similarly, Dewayne said, "He can't learn through just reading and reading and reading and reading because it's not working like you can see it. If you taught him a different way, the way he actually could learn, there's almost an instant difference" (Dewayne, SP3, 458-460). In that case of explicit mediated learning, "You don't have this three-year delay in their education because that impacts EVERYTHING" (Dewayne, P2, 139-140).

Annie argued that her teachers never noticed her specific difficulties and needs:

It's just kind of like misunderstood and just not really having them taking the time to be like, "Okay, she needs help with this," or, "She can't do this on her own," or "She struggles with this." It's just kind of like they give you this, teach it on the board, and then you're on your own. (Annie, S1, 51-54)

For Annie, no explicit teaching meant that, "I was just with no strategy behind how to do it. I

actually had to teach myself” (Annie, S2, 512).

Oliver decided to drop an English class and take it online. He explained:

Well, the first couple of days we had an assignment that was really difficult and confusing to understand. It wasn't just me that didn't understand it and he was saying to the class ah, this is easy stuff, you should know this. (Oliver, S2, 36-38)

The necessity that teachers apply explicit teaching methods so students can engage in learning was evident in participants' stories. More specifically, students with dyslexia reported to require explicit teaching of phonological awareness rather than repeating of noisy reading.

5.4.3. Individualized Explicit Learning and Teaching

Participants' experiences reveal that some explicit teaching methods were not effective for some individual students, thus, adapting the explicit teaching method to fit to the way in which each student learn was required. James described teachers and his frustration around mismatch between teaching methods and students' ways of learning. He said:

Usually what it is with the teachers. They do it one way, and I just don't really get it in that way. Then I end up not doing it as much, so then they get mad at me because of it I guess. That's what it's like for the English and math teacher that I had this year and last year. (James, S1, 224-230)

James shared an example, “With the math teacher, she taught it a certain way, and if you didn't really get it, she wouldn't really try to teach you in a different way. She'd just keep showing you that” (James, S1, 219-221). James was disappointed that teachers did not reach to him by meeting his way of thinking. He said:

They had a certain way that they did it. If you didn't understand it, they didn't really care that much, I guess. I didn't really agree with that, so they didn't, I don't know, they don't like me as much I guess. There's always me and just a couple kids that she didn't like as

much, I guess. (James, S1, 212-215)

James interpreted teachers' lack of flexibility in their teaching method as disliking him.

In contrast to James' experience, Cora described how Kira was pleased when her tutor assured her that she will learn math once he understands how she learns:

She came out of the tutoring the first time and she said, "Mom, Mike said to me, 'If I can't teach you math, nobody can.'" He goes, "It's only going to take me a little while to figure how you learn but I'll be able to do it." That turned her around. That's all she needed to hear. (Cora, P1, 398-401)

Kira also shared her positive learning experience with her math tutor, "I like going to my tutor right now because I'm doing it online. And so it's so much easier to understand things when he's teaching it just to me. I REALLY like it when I understand math [laughing]" (Kira, SP3, 436-439). Alexandra described that notion about her private school teachers, "They can explain it more in a way that I learn it I guess" (Alexandra, S2, 98).

Jonathan also reported to appreciate the one-on-one support he received in the course support, "they help you go over how to organize and stay organized" (Jonathan, S1, 228-231).

He further clarified the individualized aspect of the course support block:

It allows the teacher to have a lot more one-on-one time with each one of the students (. . .) Help the student out (. . .) They spend like five, ten minutes with the kid. (. . .) and find out what the kid's having trouble with. Instead of just roughly explaining it as fast as he can. (Jonathan, S2, 441-451)

James described a teacher who taught him effectively, "if she says it one way, and I don't understand it, she always has a different way of putting it that I would understand, which is good" (James, S1, 194-195). He further elaborated, "like if you don't understand something, she's always able to get around to every single kid who doesn't understand it, and she can make them

understand it by the end of the class. She is good” (James, S1, 177-179). Students with learning disabilities reported to learn well with teachers who apply individualized explicit teaching methods or used ways that reach all learners, so that there are different ways to learn the information. This may not be limited to providing individualized one on one support, but that students may match available methods with their preferred way of learning. These teachers adapted their teaching methods to meet students’ learning needs. When students reported successful learning experiences they described explicit and individualized learning processes.

5.4.4. Intensive Mediated Learning

In addition to explicit individualized teaching and learning some students also needed intensive learning and teaching. Kate argued that, “the whole concept of pulling them out for an hour three times a week is almost futile for these guys. It’s not. It’s not going to fix anything. They really need that intense intervention” (Kate, P2, 300-301). Dewayne, Jonathan’s father, was emotionally moved when he reported Jonathan’s academic progress in the intensive private school for dyslexic students he attended. He said, “When he left [name] school his reading ability was above his grade average which was ... [crying]” (Dewayne, P1, 323-331). Dewayne elaborated that Jonathan’s reading level drastically improved in the private school as he received intensive individualized explicit mediation.

When he went into [name] school in Grade 5, he had a Grade 2 reading level. When he left in Grade 7 (. . .) he had in Grade 7 a Grade 8 reading level. Big difference. If we hadn’t done that, he still have a Grade 2 or 3 reading level, because no one was teaching him the way he could learn. (Dewayne, P2, 235-238)

Dewayne was aware of and concerned about other students that the absence of explicit, individualized, and intensive teaching in the public school did not afford them the learning outcomes his son experienced in a private specialized school. He said, “some people (. . .)

struggling, in tears, and they're in Grade 12 and not able to read. I cannot imagine what that poor person is going through" (Dewayne, SP3, 194-196). Dewayne noted that the degree of resources Jonathan had was the degree of neglect for others.

5.4.5. Summary

Participants perceived that explicit, individualized, and intensive teachings were essential for effective learning processes. Student and parents implicitly conveyed that the outcome of teaching – students' learning – was sometimes a neglected aspect. Teachers focused more on their teaching method and less on the learning outcomes of individuals. Students were happy when teachers adapted teaching to their needs using their learning outcomes as indicator to verify the effectiveness of their method of teaching. Learning happened when teachers taught in the way students learn.

5.5. Beyond Half Full or Half Empty

As will be shown in the next theme, in chapter 6, students and parents described students' specific strengths and challenges. This sub-theme discusses perceptions of possibilities of using strength to overcome challenges. Students with learning difficulties have strengths that were not systematically expressed and utilized in schools. With the current schools' emphasis on meeting grade level academic standards in reading, writing, math, or other academic curricula subjects, students' non-academic strengths may well remain unnoticed. Interviews revealed the tension existing in schools regarding balancing support for students with including both their challenges and strengths. Students and parents suggested that the BC education system is challenged in taking into account both students' half empty (challenges) and half full (strengths) qualities and examining students holistically in the learning and teaching processes.

5.5.1. Focusing on Difficulties

While planning to support students in the learning and teaching processes educators with no ill intention may focus on the difficulty that is in need of support. Some students and parents perceived that the focus on difficulties was inhibiting rather than supporting progress. Elizabeth shared her experience in that regard:

It was always like, “Oh, what Elizabeth can’t do” (. . .) but also at the same time, I had strengths. I was probably good at performing. I was probably decent at talking in front of the class. (. . .) my strengths were weakened. (Elizabeth, SP3, 312-319)

Elizabeth noted her concealed strengths as there was no place to show them while her weaknesses were highlighted. Maria, who is an elementary resource teacher argued:

I think we should always focus on (. . .) what the student can do, (. . .) Then give goals. (. . .) it’s important that the kid knows what he’s good at to get confidence, and strength, and to feel good about yourself, always. Yeah! (. . .) often there’s a negative connotation. Because they focus on what they cannot do, and it’s important to focus on what you CAN do. Yeah, and build from it. (Maria, SP3, 791-799)

Maria argued that focusing on students’ strengths rather than on their difficulties is important for students’ confidence and wellbeing.

In like manner, Barbara noted James’ perspective “he just sees all the deficits all the time, right? So that’s hard” (Barbara, P2, 347). Dewayne expressed the problem in trying to fix a difficulty to meet a standard:

It’s a good example of putting a round peg in a square hole. Everyone has to fit that square hole, and that’s the way the system is designed for 80 percent of the people. If you’re the 20 percent that don’t fit that square hole, there’s something wrong with YOU. That’s not the case. (Dewayne, SP3, 257-260)

The implication of his analogy is that expecting different shapes to fit into the same square hole is equivalent to expecting all students with diverse learning abilities to perform well on the same ability measure. As shown in excerpts above, intending to support students with learning disabilities by focusing on their difficulty and not emphasizing their strengths may further inhibit their learning and growth.

5.5.2. Focusing on Strengths

Parents and students described the need to show students' talents and gifts in areas other than reading and writing or academic learning. Alexandra expressed that for her soccer is her way to show her strength, "Yeah, it's kind of more my time to shine and do what I'm good at" (Alexandra, S1, 567). She further elaborated about her understanding of the magnitude of her disability within her whole personality and other life contexts, "It's just knowing exactly what the disability you have is, and knowing yourself that it's not that big of a deal outside of school. It's not going to affect you outside of reading and writing that kind of stuff" (Alexandra, SP3, 798-800).

Within school, Dewayne argued, students may use their strengths to meet expectations. Dewayne spoke to Jonathan in the last interview, he said: "My hope is the light for you will come on when you're presented with something and you know you're not going to be successful doing it that way" (Dewayne, SP3, 628-629). Dewayne first acknowledged that within the school system Jonathan is likely to face his difficulties to perform within the normative expectations. However, he suggested his son to communicate with others the option of showing his learning in his own way, "But if you let me do it this way, I can show you I know the stuff. Let me show you a different way of demonstrating my knowledge." (Dewayne, SP3, 629-631).

Maria, Anthony's mother and a resource teacher, argued for students' needs:

They need encouragement. They need more, like, "Okay, come here. I'll help you. You

can do it.” Not like, “This is not good enough,” you know? or “How come... or, you did not study?” That’s another thing. “You did not study enough,” but maybe that student did study, but the results, for some reason, is not as good as the others. What I’m trying to say is we compare students to one another, but if we could change the idea and just start with the students’ strength instead of comparing. The students would be more successful. I know it’s hard, would have to change the system. (Maria, P2, 439-445)

Maria suggested that teachers change their mindset from expecting all students to meet expectations the same way to trusting students’ need to succeed and encouraging students to use their strengths. Maria gave a specific example describing her son, Anthony: “He likes to have fun so sometimes he was getting into trouble (Maria, P1, 89). Maria was thankful to a teacher who viewed Anthony’s ways of having fun as his strengths in drama. She directed him to apply for a drama mini school in which he is successful, “she kept telling him that he was good in drama and that’s because of her that he went into [name of mini school] drama” (Maria, P1, 90-91).

Therefore, Maria concluded, students must be allowed to have choices, “To find the program at the school (. . .) what do you think is suitable for you. (. . .) to look if the model, if it fits you. (. . .) what’s good for you” (Maria, SP3, 452-456). Similarly Barbara argued, “So that’s what we’re working on, finding those things that he’s really good at so he can contribute and be a part of society in a way that makes him happy” (Barbara, P1, 311-313). Barbara emphasized the support James need from her and his teachers, “I always say, ‘We’re the team. (. . .) We want to get you through to find those things that you’re good at.’ He is exceptional in a lot of ways and we want him to feel that” (Barbara, P1, 294-296). Maria and Barbara argued that all students deserve to be supported by helping them reveal and use their strengths.

Maria noted the deficit thinking in the notion of learning disabilities. She said:

Learning disability, not for everybody but it depends how it's interpreted, but often there's a negative connotation. Because they focus on what they cannot do, and it's important to focus on what you CAN do. Yeah, and build from it. (Maria, SP3, 794-796)

Maria further said, "If the kid in Grade 3 cannot spell properly, so what? It does not matter. It does not matter. So I think the benchmarks, I think we have to stay away a little bit, you know?" (Maria, SP3, 799-800). Maria suggested that the benchmarks and academic expectations need to be less rigid and adapted to fit all learners to allow acceptance of variation in learning.

Mark's description of his hope for his son, Oliver, reflects the strengths approach:

For a student like Oliver, if he were given the opportunity to present something in a video format or artistically, that's a completely different, then the table turns and you can see someone who can excel at something. (. . .) So, I'm hopeful. I'm hopeful that for students that are in kindergarten now that if they have strengths in other areas that they'll be able to use those strengths to show their understanding. (Mark, SP3, 521-527).

As parents indicated, integrating their child's need and ability to be successful in their own way is key for their learning and effective contribution to others.

5.5.3. Diverse Mediated Learning Outcomes

Effective learning and teaching towards the goal of students experiencing growth and learning outcomes is not limited to one category of students— students and parents argued. All diverse learners deserve support regardless of their relative level of abilities and performances. Elizabeth discussed relevant issues of equality and equity:

I think you just should provide help because everyone, to some extent, has a learning disability or some sort of disability ... like, so ... They should just help all of the students. Not equally, like help with what they need, equity instead of equality because equity is you get what you need. That would make the most sense. (Elizabeth, SP3, 23-26)

Elizabeth suggested an equity approach of offering help to all students based on their needs.

Annie argued, “it’s just about like teachers needing to get to know their students. (. . .) there’s a lot of students with different needs (. . .). not everyone’s going to learn the same” (Annie, S2, 237-239). Annie elaborated, “It’s different for everyone. What works for me isn’t going to work for the student across from me (. . .) It’s just about adapting to students’ needs” (Annie, S2, 249-253). Gayle also described the diversity in learning:

People could learn more, in the way that they learn. Not paint everyone with the same brush. We all learn different, right? We all look at things differently, because we’ve come to the classroom with different backgrounds, and just a different perception of things, right? Cookie cutter doesn’t work for people that think differently. (Gayle, P2, 403-407)

Gayle noted the inevitable environmental influences behind diversity in learning.

Elizabeth discussed the classifications of performances used in schools:

There has to be a stigma taken away that you don’t have to be the perfect student, especially how we grade, it’s like As, Bs, Cs, Ds, so on and so forth. Once you’re put into that label, if you’re an A student, you’re really smart and you can go on and do incredible things. B, you’re decent. C, oh, you’re getting into scary waters. Then, D is, well, you’re just stupid. That shouldn’t be (. . .) the world is so big and there’s room for every type of person because that’s how our world is. You can find your niche and find what you want to do. (Elizabeth, SP3, 324-331)

Elizabeth argued that each of the different abilities of individuals has an important place in the world. Finally, Maria questioned the need of the diagnosis as a condition to provide support for students who need support because they learn differently, or fall under the learning disability criteria. She said:

Everybody learns differently but still people tend to put the students in a box and this is the

level you're supposed to be at. I think this is why it's important and it's sad. I don't think you should need the paper [referring to the diagnosis], but yeah, it does ... it does help to understand that, "Okay, it's just on paper. This child learns differently." (Maria, P1, 302-309)

Ideally, Maria argued, there would be no necessity of the psychoeducational assessment report to indicate students' learning needs. However, she argued, given that no services were available to students with learning needs, and that schools required a diagnosis to create the IEP, then, the assessment and the label were needed for that purpose.

Participants suggested that all people learn differently and that there was a respectful place and purpose for all learners. Categorizing students based on a scale of grade level was limiting. Instead of normalizing the unified standard expectations, perhaps normalizing the differences in learning and needs may allow all learners more opportunities to grow.

Dewayne, Jonathan's father, expressed his conclusive opinion on the fulfillment of the purpose of education. He said:

It says that the whole purpose of the school system in BC is to enable all learners to become literate. They're not they are not doing that! And I've seen it when Jonathan was designated as having a learning disability. It actually is a learning difference. The school does not teach kids differently. If you happen to learn differently, you're out of luck. You know. They will continue to try and teach you exactly the same way and you'll continue to struggle. And I can only imagine the challenges that kids like that face and the issues that come up because of the fact that they think they're dumb. And they're not! It's the school system is not capable of teaching them the way they're able to learn. That's not their fault. (Dewayne, P2, 70-78)

Dewayne emphasized that the condition of Jonathan was a 'learning difference' and as such

teaching must be different as well to match the particular learning difference. Dewayne also argued about his son's education, "It was all about how do we get him through the system and never about how do we teach him" (Dewayne, P2, 221-222). Dewayne, referred to the notion of helping students meet academic curricular expectations as apposed to his preferred purpose of teaching a particular student to use their strengths with awareness of their difficulties to learn, grow, and contribute.

Barbara, James mother, expressed her view on the purpose of her son's education in school despite investing in expensive private schools. She said, "Yeah. Well, and we've always said this, we just got to get him through, and when he's through, he'll fly" (Barbara, SP3, 375-376).

5.5.4. Summary

This theme, learning and teaching, described experiences and perspectives of students with learning disabilities and their parents that delineated the ways in which focusing on students' deficits more than on students' strengths is counterproductive to the purpose of education. Assigning tests and grades appeared to take a priority and to highlight students' deficits over focusing on the processes of learning that allow students' strengths to shine through.

Participants suggested what worked for them in the classroom, for example: learning the way one learns, learning a skill for mastery rather than for passing through the system with accommodations, learning through teamwork, learning though hands on, or learning through a social discussions with classmates and teachers. Participants offered insightful ideas, presented in this chapter, of how to inclusively address all students' and teachers' needs in order for them to flourish as individuals within a collective.

Chapter 6: Students' Strengths and Challenges

This chapter presents how parents and students described students when they were asked about students' strengths and challenges in the contexts of school, family, and friends. Their direct responses to these interview questions as well as indirect responses while elaborating about their perspectives and experiences in general are presented in this chapter. This theme serves to answer the following research questions: 3) How do students describe their strengths and challenges in relation to their academic experiences in school? 4) How do parents describe their child's strengths and challenges in relation to their academic experiences in school?

In order to learn from each of the participants about their personal dynamics with their learning disabilities, students and parents were asked about students' strengths and challenges and experiences of being successful without further defining the meaning of strengths, challenges, and successful. The following are the qualities participants used to describe students' strengths: social skills, using humour, excelling at sports, artistic orientation, and good work habits of organization and motivation to learn. The following are qualities participants used to describe students challenges: academic difficulties in reading writing, regulating stress and attention, feeling stressful and difficulty attending to their academic work, emotional difficulties, stigma associated with pull out support, feelings of guilt and shame about learning difficulties, long term imprints of feeling negatively about themselves, and the challenge to experience successes through grades.

The discussion of strengths and challenges in the previous section of "Beyond Half Full or Half Empty" presented conceptual views about deficits focus and strengths focus, and suggested to view students' qualities as diversity in mediated learning outcomes. This chapter presents the examples, as described by students and parents, of strengths and challenges.

6.1. Social Skills

Social skills described by participants included their strengths of oral communication that was fundamental to their social skills as Gayle described Annie in a very confident voice, “Her strengths are, is that she is a really good communicator with her friends and that, she’s very accepting of them and that she is very loyal” (Gayle, P1, 711-712). Equally, Cora affirmed Kira’s social adeptness, “It’s her communication, [it] is POWERFUL!” (Cora, P1, 132). Miriam also described Elizabeth, “If you look at her oral stuff, it comes out natural for her. That’s who she is” (Miriam, P2, 497). Elizabeth proudly declared her own strengths, “I’m good at like communication (. . .) that is my biggest strengths and I wouldn’t trade that strength for anything in the world.” (Elizabeth, S1, 472-477). Similarly, Anthony said, “Anything oral I feel quite confident about doing. (. . .) it is my forte, my strong point” (Anthony, S1, 282-284). In like manner, his mother Maria described Anthony’s oral communication:

He’s ability to communicate orally. And, if we would have to test his EQ. (. . .) Emotional intelligence, that would be very high. (. . .). That’s his strengths like to connect with people. I think that’s why he does well at school because he connects (. . .) With teachers and go ask questions. (Maria, P1, 394-397)

Maria explained that Anthony’s ability to communicate with his teachers by connecting with them and asking questions helped his academic success in school.

Drama and public speaking were also indicated as areas of strengths that required oral communication. Maria described Anthony’s abilities, “I think drama comes very easily for him like he doesn’t mind to perform” (Maria, P1, 394-408). Elizabeth contrasted her ability to perform with her academic difficulties:

My strengths are like performing and stuff like that. Through there, I was able to realize, “Oh, wow. I’m actually good at something,” because maybe I can’t do the writing or the

math or whatever, but, you know what? The play I put on was really good and was really educational. Students got it. (Elizabeth, S2, 278-282)

Cora described Kira's oral communication abilities, "She does well on presentations. She likes her presentations. I think that's a better way for her to learn too" (Cora, P1, 469-470). One example that both Kira and Cora mentioned was, "She got an A in debate. She's strong up on stage. (. . .) She did do her work, and she presents it well" (Cora, P2, 258-259). Kira emphasized her comfort and motivation with presentations, "I think honestly, I'm not scared of public speaking. I'd give a speech on it to the teachers, if I had to [laughing]" (Kira, SP3, 378-379).

In the context of friends and family, empathy, caring, and solving social problems were described as strengths. Miriam said, "Elizabeth's strengths. She's very empathetic to people. She cares about people honestly more than herself" (Miriam, P1, 371-372). Similarly Gayle said, "Her strength is her kindness. Annie's very kind and Annie's very understanding of other people" (Gayle, P1, 558-559). Dewayne also spoke about Jonathan's empathy, "He's very people orientated and very empathetic. So where that helps him out to be a good leader" (Dewayne, P2, 564-565). Dewayne further specified, "Yeah he should be a diplomat [laughing]" (Dewayne, P1, 943). Indicating the magnitude he associated with Jonathan's use of his oral communication and empathy to solve problems.

Kira described similar qualities about herself: "resolving things like with between my friends. If something like... if some of my friends are upset at each other I can kind of like figure it out most of the time, and I help them with that" (Kira, S1, 442-444). Barbara indicated that "James is a very good problem solver, works well with other people, good communicator" (Barbara, P1, 763-764). Cora elaborated on Kira's abilities in resolving social conflicts:

Her biggest strength is wanting to be the caretaker. She wants to help a person who gets

bullied. She wants to help the person who someone says something mean to. That's Kira. (. . .) She knows she is stronger and so she always wants to help. (. . .). Peacemaker. Bridge builder. She did that for our family. She was the one who really bridged us as a family. (Cora, P1, 426-432)

Cora continued describing Kira's strength, "She's been a bridge. She's emotionally really smart. She knows how to handle everybody really well (. . .). That's a massive strength! [laughing]" (Cora, P1, 566-569). In that regard, Kira shared her pride about her social capability, "Yeah! I think that that's probably where I feel the most proud ... of myself because I like to make people feel comfortable" (Kira, S2, 374-374). Being confident and capable socially, Kira argued for the need to educate others to be socially competent.

I think something ... that would be important for a lot of people to learn at school (. . .) Like manners or empathy would be such a boring class for some people. They'd be like, ahhh ... no kidding. But I don't know, I know it's hard to teach empathy, but it's hard for someone to teach me Chemistry, so! (Kira, SP3, 583-588)

Kira referred to the possibility that learning to be empathic may be difficult, thus, boring for some students, as equally as she found Chemistry difficult and therefore boring.

Kira and Barbara described the ability to read people. Kira said, "[laughing] emm ... I would say I can read them [friends] well, and I know how they're feeling without them having to talk really, and then emm ... I try to bring a positive attitude" (Kira, S1, 717-719). Barbara said, "The social aspect of it is really his thing. He's really good with people. He reads people well. He has lots of friends. He enjoys that, primarily" (Barbara, P1, 333-334). Participants described being friendly, empathic, understanding people, and communicating to solve social problem as strengths. The ability of easily making friends was another positive result of strong social skills. Jonathan said, "I found it was fairly easy making friends" (Jonathan, S1, 135). Kira also shared,

“making new friends is really, really cool to me. I really like that, not knowing someone really well, and then getting to know them. It’s just like really fun” (Kira, S1, 762-763). Cora described Kira, “I think that she’s very emotionally aware. (. . .). She has a really strong EQ. I think her social abilities are very strong” (Cora, P1, 21-23). Dewayne stated, “He can make friends instantly” (Dewayne, P1, 578-581). He further described the inclusivity and easiness in Jonathan’s choices of making friends:

Because he’s got such an outgoing personality, he’s very accommodating. He’s got quite an eclectic group of friends now, especially in [name of city]. Different backgrounds and types. His approach is you approach him, you could be black, white, green, orange it doesn’t matter you’re a person. (Dewayne, P1, 915-918)

Kate also described Alexandra’s easiness with friendships, “She’s pretty easy-going, and she’s ... she’s ... a good person, she’s a good friend” (Kate, P1, 922).

Similarly, Jonathan described himself, “I don’t know [laughing] I guess I’m really good at the social aspect of stuff” (Jonathan, S2, 47). James was also proud about his strength, “I’m quite like easy to get along with, and quite social in that aspect, I guess. And like usually I get along with a lot of people and I can talk to almost anybody. It’s not awkward” (James, S1, 350-352). He further distinguished his social strengths from school related performances, “Yeah, that’s one of my big strengths, but, for in school stuff, I don’t really know that many” (James, S1, 358-359). His mother, Barbara, proudly said, “I have a lot of respect for his ability socially. I think that’s a huge thing, and he’s always been that person” (Barbara, P2, 775-776). For participants in this study, oral communication and academic presentations appeared to be a strength that could have been used by these students and teachers in the learning and teaching processes. This quality perhaps led them to participate in this study as they felt comfortable and confident to engage in conversations.

6.2. Using Humour

Students reported being comfortable in using humour to handle social conflicts and the harshness associated with their learning difficulties. Elizabeth attested about her self, “I’m a goofball like... I joke around and I’m funny and I’m loud and blah, blah, blah” (Elizabeth, S2, 484-485). She further said, “I’m the class clown who makes all of the weird jokes in the class” (Elizabeth, SP3, 260). Anthony also indicated about his humouristic conduct with other people, “Quite light hearted and it’s fun to make them laugh. (. . .) Always. Pretty sarcastic, comedy and joy” (Anthony, S1, 448-450). His mother, Maria, said that Anthony eases the tension by laughing about his difficulties, “He laughs a lot about it [learning difficulties] like if it takes long time to say something or to answer, sometimes he start laughing [laughing]” (Maria, S1, 70-71). Kira reported that she learned from her father to use humour to cope with hard feelings:

We kind of joke at each other and laugh at it. I think that’s what’s helped me a lot too actually, just being able to laugh at it. It’s funny for me in class when I have to read. I don’t enjoy it, but I can laugh at it after. (Kira, S1, 533-536)

Kira was diffusing the hardship and embarrassment by using self-deprecating humour.

Jonathan also indicated that his way of communicating with others was through humour. “My strength in the school context. (. . .). I kind of joke around with them. (. . .). I just joke around with people all the time, and try and bring attitudes up [laughing] [laughing]” (Jonathan, S1, 576-583). His father, Dewayne, confirmed that, “Yeah. He’s got a good sense of humour” (Dewayne, P1, 593). He further elaborated about Jonathan’s positive use of humour in the family context: “He doesn’t talk back he just goes with the flow and nothing seems to get him down. He always appreciates when family’s here. He’s a very easy going (Dewayne, P1, 842-844).”

Dewayne emphasized Jonathan use of humour and easy-going nature in the midst of conflicted and tense family dynamics. Similarly, Barbara described James’ loving and funny nature, “He’s

very funny and he's very loving" (Barbara, P1, 916-917). Students and parents reported that use of humour was a strength that helped students cope with their own difficulties and contribute positively to group dynamics at school and at home.

6.3. Excelling in Sports

Students and parents hesitated to share their sports skills when asked about students' strengths in school. Arguing that sports were not academic, nevertheless, they reported that sport was a strong area in students' life in school and outside of school. Maria said, "it's not academic but physical education like anything, that is sports is easy to him" (Maria, P1, 409). More specifically she indicated, "all the team sports, (. . .). very positive, giving him a lot of confidence" (Maria, S1, 469-471). Maria also reported that teachers encouraged Anthony to participate in sports teams, "It's important. I think they [teachers] went with the strength. I remember in Grade 8, the gym teacher invited Anthony, 'You should try the basketball team. You should try' because he had not done the basketball" (Maria, P2, 311-313).

Experiencing successes in sports helped Anthony and his family to conceptualize his reading difficulties as merely a skill in need of practice, just like running. Alexandra was bright and proud when she reported her strengths in sports:

[laughing] Yeah, one of my biggest strengths with my family would be my sports. You know I play Team BC soccer, HPL soccer, I'm probably one of the top one players with my group. I used to play hockey. I had to quit because I couldn't do both anymore. But when I played hockey I was ranked number one for a lot of things. And also, my disability kind of helps there because it's so visual. Soccer and hockey are both so visual, you know I can see plays on the field or on the ice that some other players might not be able to see, might not be able to think, but I can see stuff like that because it's so visual. It's a really big strength that I have. (Alexandra, S1, 428-435)

Kate, Alexandra's mother, also elaborated on her giftedness in sports:

Her strengths, like she is a very gifted athlete. I think she understands some of that comes from the dyslexia. The visual, like her spatial skills are, if you want to shoot a puck or kick a ball, she just instinctively knows how to do that. You don't have to teach her. (Kate, P1, 56-59)

Kate and Alexandra both perceived the gift of sports and excellent orientation on the soccer field as an outcome of the same brain that made her reading difficult. It appeared as if they both made peace and accepted her dyslexia as it came in a package with such a great gift. Kate reported that their choice of school had to meet Alexandra's strengths:

She was getting remediation, but her social, emotional needs weren't completely being met by being at school. So much happens at school. It's not just learning how to read, write. For them it's their social place. So, they need to also be made to feel good about themselves there as well. If it's all academic maybe that might be great for a gifted child who doesn't care about sports, but for someone who loves sports, if you're at some place for 6 to 8 hours a day, you need to have some kind of thing that you can relate to [laughing]. (Kate, P1, 99-105)

Meeting student's academic needs was not sufficient, Kate explained. It was essential to address students' social emotional needs by allowing them to express their strengths to create experiences that make them feel good about themselves. This rationale guided Kate's search for school:

I revisited all the private schools again that cater to learning disabilities. (. . .) if they were just focused on learning disabilities and because sports is such a huge love of hers, we wanted to try to get the best of both worlds. So this seemed like it was the best of both worlds. (Kate, P1, 275-279)

Kate explained the reason they chose to enroll Alexandra in a private and expensive school that is one-hour drive away from their home (as reported in previous quotes) was to allow her to express and develop her strengths in sports. Kate also noted that Alexandra's strengths in sports made her popular within her friends' context, "Alexandra is so great at sports that the kids all want her on the school team. That's what they see so she's almost idolized by them because of that" (Kate, P1, 436-437). Even more she shared, "She's like I said a good soccer player, and she's already got coaches from universities talking to her" (Kate, P1, 1017-1018). Alexandra's sports abilities and the opportunities she had to share her abilities shaped her to feel confident and fulfilled.

Jonathan also described his love for sports, "Gym, go to gym. It's a lot of movement, and I'm a fairly active kid I like to say. It's easy for me to express myself at gym" (Jonathan, S1, 199-200). Dewayne, his father, confirmed, "He likes the physical education (. . .). He excels at that" (Dewayne, P1, 309-311). Jonathan described that sports activities were not meaningless free movement but structured activities bound by rules that one has to learn and follow. This learning was different than that of reading. James also reported his love of sports, "I like to skateboard, and stuff like that" (James, S1, 649). Barbara reported about James, "He's athletic, so you know gym is pretty good for him. (Barbara, P1, 798). All students who participated in this study expressed their love for physical education classes and sports activities.

6.4. Artistic Orientation

Students reported a variety of after-school activities they were involved with expressing their artistic abilities. Barbara described James' creative projects: "He's very good with his hands, building things, creating things. He's super artistic and creative (Barbara, P1, 763-769)."

Barbara continued to elaborate about James' creative projects and fields of proficiency:

Anytime tech-ed or shop class, stuff like that, he's always a little above the rest of the kids

because he has lots of experience. He tries a lot of stuff. He does a lot of things. He knows how to do stuff, so for him, he gets a lot of positive regard that way. Yeah, he's quite musical as well so he plays guitar. (Barbara, P1, 798-802)

James presented some of his creations to me while Barbara was encouraging him to take pride in them. As the professionalism and perfection level of his creations were made impressed me, Barbara explained, "Yeah, he has a welder and he welds things and chops things up and cannibalizes two things and creates this other thing. I'm amazed by what he can do" (Barbara, P1, 940-941). James presented to me some of his creations. He built a motorbike combining several used artifacts, a workshop table that can withstand heat of welding, electric guitar made of cigar box, wine holder, and several other unique and functional items by watching YouTube and recycling old parts. James' experience of accomplishment in this creative area of his life was disconnected with his school experience that he defined several times as negative.

Oliver indicated that his strengths are, "definitely the non-academic part because they have a really good photo program and graphics program and art program, which is cool" (Oliver, S1, 52-53). He described his engagement in these creative projects, "very stress free but also like I apply myself to it a lot so that's great" (Oliver, S1, 65). Mark reported that Oliver was busy after school in a community of skate boarders, "Well. He is the videographer of all of their skateboard activities" (Mark, P1, 651). Oliver shared with me his YouTube channel of his sophisticated videos. His father, Mark, elaborated:

He has always been very artistic. Whenever there was an opportunity to produce anything that was more along the vein of art, whether it be video production or visual art, that always made him happy. Also, if there were projects where he could contribute through a visual presentation, rather than a written presentation. He was always much happier if he could do that. (Mark, P1, 43-47)

Art appeared to fulfill Oliver and perhaps even become a future way of contributing to society, as Mark indicated, “It’s a big job. He is also the skateboard artistic deck designer too. He will design his own deck and then other guys say, “You can do one for me too” (Mark, P1, 657-658). Oliver and Mark were both very proud to share Oliver’s artistic and creative projects. James and Oliver expressed their creativity in hands-on projects that reflected their original interest and strengths and ability to further develop their extraordinarily creative ideas and skillful use of tools. Elizabeth argued for the place of art in school, “If you’re incredible at art, that’s good for you, but the desirable student is someone who’s incredible at art and at all those academic courses. It’s always better to be good at academic courses” (Elizabeth, S2, 434-436). For Oliver and James academic schoolwork was disconnected from their artistic passion and creativity until Grade 10 in which they could choose an elective of creative courses.

6.5. Work Habits, Organization, and Motivation

When students and parents were asked about strengths some students described their work habits, organizational skills, and motivation, as factors that afforded them academic success in school.

Elizabeth described her diligence in school:

I work hard, I think that is my strength is that I try my best and I’m also like, I go through phases but I’m normally not afraid to ask questions, and so like so I learn from that and I just try my best that’s all I really do. (Elizabeth, S1, 306-308)

Miriam, her mother attested to Elizabeth work habits, “She’s very hard working and she really tries and she does well. Her grades are excellent ... She got 95% average” (Miriam, P1, 196-197). Moreover, Elizabeth perceived her learning disabilities as an advantage:

So I’m an engaged learner. I like learning. So once I went to high school and you had to put your own learning in your own hands and do it yourself, then I thrived. That was my strength. I like learning new things. I would attempt to learn everything that was handed in

my direction. Whereas, some students who are extremely smart, once they're put into that, they have to do the work themselves, they fall short because they just don't have that drive that I had. (Elizabeth, S2, 317-323)

Elizabeth described that once she could shift her experience of being dependent on help to being independent she could act as an engaged learner. She clarified that even gifted students need to be motivated to engage in learning to experience success.

Annie also expressed this notion of developing a drive or motivation to engage in learning. She said:

Now, I think I'm good at being motivated. I wasn't before, but it's kind of realizing that you have to do this and if you have to do this it's just like you're going to do what you're going to do. (. . .). That's pretty much ... It's just being motivated and just it starts with yourself. (Annie, S1, 293-297)

Annie described her drive and motivation to put the necessary work needed for her to complete her work. Annie implied that before she experienced academic success in the alternative program she was not motivated to engage in learning efforts. She clarified, "Just, like, the way that I can work hard and it just, kind of, encourages me to work hard, I guess" (Annie, S2, 470-471).

Seeing that her work resulted in academic successes motivated her to put in more work into her academic progress and successes. Annie shared an example of how she disciplined herself to take a first step to achieve a big goal: "And that first step is to like trying to achieve to graduate or whatever. It's just like a drag. I don't want to wake up every morning to go to school, but it's just something you have to do (Annie, S1, 321-325)." Experiencing academic successes helped Annie increase her motivation and realize the potential results of investing into completing her schoolwork.

Anthony described his habits that he learned of taking responsibility for completing his

work and searching for answers. He said:

I, for one, did my homework properly. If I didn't get it, instead of just ignoring it and expecting the teacher to answer it, which she didn't, which was what I used to do. I'd just go, by myself and search out what it was and then figure it out. (Anthony, S1, 439-441)

Anthony, like Annie, have developed, with the guidance of supportive teachers, a sense of trusting in their abilities that their efforts would lead them to academic successes.

Kate described Alexandra's work habits, "She is persistent ... she works hard. She's pretty easygoing. So! She will not get upset right away. She's usually ... pretty methodical about things ... Emmm ... positive! Those are all strengths that she has" (Kate, P1, 641-643). Alexandra took pride in her organizational skills using her computer.

Yeah. Some kids don't know how to organize it as nicely so everything's just kind of thrown in there, then I see them in class and the teacher's like, "Pull up study guide for chapter 2.3 unit," or whatever, and then beside me the kid is going through absolutely everything [laughing] he owns in his computer to try to find it. He spends 20 minutes trying to do that while we're already filling it out, whereas I can just click Science, chapter 2, and it's there. (Alexandra, S2, 357-362)

She compared her effective skills of organizing documents on her computer to weak skills of other students who do not have learning disabilities. She further elaborated about her familiarity with assistant technologies on her computer that perhaps helped her establish appreciation to proper use of technology. Alexandra elaborated:

Probably because I use my laptop to read to me, I always use voice to text so when I need to write a paragraph or Ms. N. isn't there to scribe for me, I just send it to my laptop and it gets all my thoughts down then I just edit it which helps me get my thoughts onto paper or laptop paper, whatever you call it. Emm ... and that helps, and also when we're doing stuff

in class my school uses Google Docs a lot for all of their stuff so it's good that I know exactly how to work it, how to get each document, how to file it and make it nice and organized. Emmm ... which also helps me get stuff quickly and not everything just scattered. It's nice and neatly in there where I can find everything, I don't lose anything. (Alexandra, S2, 344-352)

For Alexandra and other students, effective work habits progressed following experiencing accomplishments and feeling competent. Also, experiencing positive outcomes as a result of their work habits in one area appeared to influence their general positive perspective on their potential in other areas of their life.

6.6. Academic Difficulties: Reading and Writing

Students and parents reported that their academic difficulties were reading and writing, when asked about their challenges in the school context. Oliver generalized, "Most difficult is probably my language classes" (Oliver, S1, 67). Maria indicated that Anthony's difficulties, "The reading and the writing" (Maria, P1, 256). Similarly, Alexandra said, "I don't really like English because it's pretty much reading and writing, which are two of my struggles. So emmm ... That's probably the most frustrating and hard class for me" (Alexandra, S1, 243-245).

Jonathan reported that his challenge was, "English because it has a lot of writing, and reading short stories and stuff" (Jonathan, S1, 206). Maria explained, "if there's a lot of reading, if he needs to read very quickly, it's hard for him" (Maria, P1, 110). Kate indicated that Alexandra's challenge was mostly reading, "The reading aspect, because you know what, it presents in everything" (Kate, P1, 112). James indicated his most challenging classes, "I'd say probably like English and Socials" (James, S1, 44). Students and parents reported that in general, reading and writing in classes that required use of language were a difficult challenge for them.

Oliver specified his written output difficulty, "Taking notes sometimes is like, I'll can ... I

like fall behind a lot” (Oliver, S1, 375). Although his diagnosis of learning disability was in math, he reported to experience his difficulties in reading and writing. Elizabeth who was diagnosed with dyslexia elaborated about her challenges in expressing her ideas in writing:

I have a really hard time still like ... writing down my thoughts and feelings (. . .). I have really good ideas but I have a hard time actualizing them on paper (. . .). I have a hard time wording my opinion and so yeah so like writing is hard. (Elizabeth S1, 315-319)

Elizabeth rationalized her difficulties, “I don’t think I was ever properly taught grammar, like still today something I’m like insecure about. I still always mix up like nouns and verbs and like adverbs and all these things adjectives” (Elizabeth, S1, 340-342). Miriam, her mother commented, “You could talk to her forever, and she’ll come up with these amazing thoughts and stuff but to write it down was not easy” (Miriam, P1, 327-329).

Anthony also said, “it’s hard to think on the spot and write it down right away” (Anthony, S1, 87-88). He specified, “I don’t really like Socials or English. In Socials we wrote a lot of essays and it’s not my strong point” (Anthony, S1, 265-266). He elaborated, “Grammar ... was not my forte. It was hard for me, it is hard for me to learn the rules, all the rules and like use them while I’m writing. I’m also not very strong in reading that didn’t help” (Anthony, S1, 289-292). Maria reported, “He said, too ... I’m allergic to grammar.” (Maria, P2, 245). Cora, Kira’s mother, thought that her challenges were in written output, “It was more to do with her output. When she writes, her spelling is bad” (Cora, P1, 65). Alexandra also indicated that writing was challenging for her, “Most difficult would be emmm ... writing essays in English and all the reading in English because of my learning disability (Alexandra, S1, 47-48). Written output, including, grammar, spelling, and expressing ideas was reported by participants in this study to be challenging.

Reading out loud in front of others was reported to be a challenge for students who

participated in this study when they were asked about their challenges in general. Kira, who was diagnosed with dyslexia and reported that public speaking was her strength, shared, “reading in front of the class when they pick you to read. I’m so bad at that” (Kira S1, 525). Alexandra also shared, “It’s always embarrassing when we’re reading around the classroom where each student reads. I stress out about it” (Alexandra, S1, 48-49). James shared the same challenge, “Reading in public in front of an audience or a group” (James, S1, 362). I clarified with James regarding requesting him to read out loud:

Hadas: When was the last time the teacher asked you to read out loud?

James: I don’t really know if this is reading, but I just went off of the sheet, but I didn’t really read off of it because I knew that I’d mess up. So I got the main parts of what the sheet said, and then made stuff up off of that. That was 2 days ago [laughing]. (James, S1, 367-370)

James further elaborated about his experiences of being expected to read out loud:

It wasn’t too bad. There’s been way worse ones when like I have to read a paragraph or two, or a speech in front of the class. Since I would have trouble with the reading so much, I just memorized it [laughing] so then I wouldn’t even have to look at the cards. When you have to memorize two paragraphs, it gets kind of hard. (James, S1, 385-388)

Alexandra elaborated about her challenges in situations of reading out loud in class:

Probably when we’re going around the room, we’re going around, each student has to read a paragraph of story we’re reading. It’s quite stressful. I guess ... It’s not a big deal to them I guess, or they don’t think it’s a big deal, but my brain it’s going to be embarrassing [broken sad voice]. (Alexandra, S1, 125-128)

Reading out loud in class, as was required of them, was stressful and embarrassing for students with dyslexia. Alexandra shared with her mother that she feels stressful every time she has to

read. Kate reported Alexandra's statement:

I feel like that every time I have to read. It doesn't matter if people are listening to me or not. Even if I'm by myself," she said, "every single time I have to read, I have to take a deep breath and go, Okay. Here I go. (Kate, P1, 728-733)

Alexandra's disclosure that her stress and frustrations while reading were not exclusive to public reading, clarifies the degree of challenge that public reading posed on her and can possibly pose on others with dyslexia.

Reading comprehension was also reported as an academic challenge. Alexandra discussed her difficulties in reading comprehension tasks. She said:

The reading side and understanding what I'm reading and be able to work off of it. It's hard to know how to answer the questions when they're giving you a paragraph question that I don't even understand, because I can't read some of the words on it and it just makes no sense. (Alexandra, S1, 276-279)

Alexandra further elaborated in details the difficulties she experienced when having to complete a reading, comprehension, and writing task in class on her own. She said:

In Socials sometimes where they give you a paper or something and it's a paragraph for each question, and reading it. I'm not recognizing the name when I probably just read the name over here, I just don't recognize it because it's such a long word that I've never seen before. Having to flip through all my notes to try to find what the answer is, and trying to figure out what the question is actually asking me. Then writing the answer in paragraph form when I don't know how to spell half the words. (Alexandra, S1, 304-309)

James also described a class activity he experienced difficulties completing on his own: "where we'll read these two chapters by the end of class and then write notes on it or something like that. Those are usually the hard ones for me" (James, S1, 49-51). Alexandra and James are two

examples of how students' reading and writing difficulties inhibited reading comprehension when students needed to work independently and under time pressure.

Students' academic challenges impacted also their family dynamics. Barbara described how James' academic challenges affected their family. She said:

Last year we had a Social teacher who would assign chapters of reading every night.

Basically, that meant I was reading to him every night, which was intense for both of us.

We'd have to take notes and then try to make that happen, and so he doesn't like that, neither do I [laughing]. (Barbara, P1, 339-344)

She further specified the monetary investment in James' private education:

He reads at about a Grade 4 level despite \$50,000 worth of intervention on our part. I don't expect him to improve greatly overtime, maybe slightly, but it's ... it is what it is, which makes me sad because I wish it would be different, but we've done all we can do. (Barbara, P1, 302-306)

Barbara clarified that the four years of intensive intervention resulted in some progress:

Four years of significant remediation. (. . .) Daily Orton Gillingham tutoring in the private school. (. . .). and it still was that crappy (. . .) Thank God we did that because he may have not read at all. (Barbara, P1, 610-615)

In this example, Barbara presented that James had made little progress in reading in spite of the family's big monetary investment. In addition, James' reported that school was a negative experience overall. The three measures of little progress, big investment, and negative experience, pose a question of whether that path of intensive expensive and difficult schooling was the right path for James.

Reading, written output, and reading comprehension were reported to be challenging for all students. Classes such as English and Socials reported to be disliked by students due to the

need to use language skills. Families were also involved in the experiences of academic challenges while investing time and money and adjusting expectations of their child's reading progress.

6.7. Feeling Tense

All students and also parent participants reported being in a state of stress as a result of students' learning difficulties and related challenges. Anthony argued that his learning disabilities contributed to the stress, "I think it's a little bit of the learning disability causing the stress" (Anthony, S2, 124). Gayle reported that Annie experienced anxiety attacks due to stressful demands at school:

She says she has anxiety attacks at school sometimes. Sometimes she says, "Mom, I went to school," — it happened a couple of times last year—"Mom, I went to school and I was about to enter the school and I had to come home because I could just not go in." (Gayle, SP3, 815-818)

Annie, who was diagnosed in Grade 8, experienced years of struggles that might have contributed to building up the anxiety attacks she experienced upon arriving to school. Gayle also reported, "She says, 'Mom, I can't do it today, I just feel stupid today. I just can't do it. I just feel stupid.' Is that because there was a test coming? (. . .) She just could not face it that day" (Gayle, P2, 314-317). However, the following year, Annie experienced academic success with the intensive individualized teachers' support in the alternate program. These positive academic results eased Annie's harsh feelings about her abilities to learn.

Mark described the relief Oliver experienced when he enrolled in math online and did not have to attend math classes in school. He said:

After I took him out of the math there was this certain relaxed tone about going. The stress just wasn't there. I think because the stress wasn't there that I was able to simplify all just

about every [math] operation that he would have to do. (Mark, P2, 521-524)

Because the stress was not there, Oliver was able to learn well with the simplified math teachings of his father, despite his math learning disability diagnosis.

Anthony also described a test condition in which he was feeling stressed:

Yeah, because when I didn't have more time towards the end of the test, I'd usually stress and then when I stressed, I forget to do things. And ... I, say, forget to write things down or just skip over something without me even noticing because I get stressed and then panic.

(Anthony, S2, 115-118)

The accommodation of more time made a significant positive difference for Anthony. Elizabeth noted her low performance on tests, "I did well, but my test marks always brought me down" (Elizabeth S2, 555). Mark argued against the validity of tests, "I think test conditions are always an issue (. . .) we can always argue whether or not testing is valid or not" (Mark, P1, 61-62). In accordance, Oliver said, "Tests were like the worst part of math. (. . .) The hardest part. I would never do that good on the test" (Oliver, SP3, 286-288). Tests were associated with stress and anxiety that likely inhibited learning, as when students had supportive and stress free conditions they performed better.

Some students experienced anxiety and panic attacks occasionally or during test taking. Other students carried a feeling of sadness on a daily basis. Kate described Alexandra's frequent bursts into crying after school, "She'd just sort of step up or limp all day at school and then I would pick her up and than she would just start crying as soon as she sits in my car" (Kate, P1, 648-649). Kate reminded Alexandra of her tummy aches in the mornings, "[name] School that you had tummy ache and you didn't want to go?" (Kate, SP3, 246). Barbara also reported on psychosomatic pains that James experienced as he realized his slow progress in school, "he could see that other people were going along and improving and he wasn't. So stomach aches,

headaches, such classic symptoms of stress in little kids, not able to verbalize what's going on" (Barbara, P1, 111-113). Kira described feeling sad and regarded school as a place to avoid:

Being at school makes me feel not that great all the time. It like makes me feel kind of like sad a lot. It's not like I'm depressed or anything [laughing], emmm ... but it's not really... I wouldn't want to go there ever again after [laughing]. (Kira, S1, 807-809)

Barbara shared their stressful times at home in regard to James' learning difficulties:

We were trying really hard. We're doing all these things and I'm on the internet, "How do I help my kid learn?" My husband was working evenings at that time, so we worked the opposite shifts. I was trying my hardest, by myself, to try to do this with another child as well, because I have a daughter. (Barbara, P1, 113-116)

Barbara described the parents' situation where they did not receive the professional guidance and support to inform them of best practices to support their child in school who also experienced stress in schools due to their slow progress and difficulties in test conditions.

6.8. Attending to Work

Students reported that some of their learning challenges in school related to their difficulties paying attention and remaining engaged, memorizing, and managing their pace and time during academic work. Jonathan described how he got distracted in class:

Getting the work done because I get distracted so easy. The work is in front of me, but I want to go over, and talk to my friend. I prefer to do that over doing the work. I know I shouldn't do it, and I know that I don't want to do it, but at the same time, but my friend's right there! I can go talk to him. (Jonathan, S1, 589-592)

Dewayne, Jonathan's father, shared his opinion for the reason Jonathan was distracted:

One of his challenges is just keeping his interest. If the topic is boring his mind will just, he's gone. Gone to another world and who knows where he goes. (. . .). You got to keep

him engaged. That's one of his challenges is staying engaged. (. . .). he's bored!

[laughing] It's a boring topic! [laughing] It's not whether or not he's got ADHD it's a boring topic. (Dewayne, P1, 616-624)

Barbara, James' mother, also described James' difficulties engaging in class. She said: "To be fair, he is a teenage boy and he definitely has some attitude" (Barbara, P1, 499). However, she noted her expectations of teachers to, "they're high school teachers. (. . .) Right? It's your job to engage them despite that" (Barbara, P1, 500-504). Barbara and Dewayne argued that for students to be engaged the topic has to be interesting to them and teachers might have a part in the disengaged behaviour of students.

Oliver described his limited attention in class, "Sometimes I'll be paying attention to something and I'll just drift off away from it" (Oliver, S1, 376). Annie described losing her attention during a test and having to re-read test question, "I'll have to read the question, like, twelve times just because I can't understand it and I keep getting distracted or something like that. It's just about somebody else can read that once and be done" (Annie, S2, 462-465). Paying attention in class or during a test was challenging for students whether the reason was attention difficulties or interest.

Students also described memory as a challenge in their academic learning. Kira indicated that she could remember if the content was meaningful to her. She said:

Science is hard for me too. (. . .). Because ... it's a lot of memorization. (. . .). I say I have a pretty good memory when it's things that have meaning to me, but when it's things that I can't really relate to it slips out of my head [laughing] ... Yeah! (Kira, S1, 101-105)

Like Kira, Jonathan described his difficulty remembering names in science. He said:

Science and Social Studies because Social Studies you have to remember people's names, and the time periods, and the names of the cities (. . .). With Science you (. . .) have to

remember all the names of the parts of the cell. You have to remember so many names. It's so annoying. (Jonathan, S1, 211-215)

Kira described a challenge with retaining learning in her memory. She said:

I feel like I always know it and then I get there and it's like oh my God. I have no idea.

And that's also with math sometimes. I'll know it. I'm like, I got it with my tutor. I'm so happy. I can't believe I can do that question, and then the next day I'll have math and first thing in the morning I'm like we literally just did this, and I have no idea. (Kira, S1, 840-843)

Kira and Jonathan expressed their challenge with remembering names. Kira also described learning and understanding a math concept but forgetting it the next day.

Students also reported a challenge accepting the pace and the time needed for their learning. Annie said that her challenge was, "Staying at the same pace as everyone else" (Annie, S1, 521). Maria clarified, "sometimes it would take a long time. He needs a long time to think. Or if he reads, he needs time to process" (Maria, P1, 414-415). Anthony explained, "when I didn't have more time towards the end of the test, I'd usually stress (. . .). Then with more time (. . .) I feel a sense of relief" (Anthony, S2, 115-117). Kira expressed her frustration regarding her pace of learning, "it kind'a sucks because ... emmm ... It is just harder sometimes for me to pick up things as quick as other people" (Kira, S1, 26-27). As indicated by students and parents, students needed to accept that they required more time to learn.

Expecting to reap the results of their hard work was disappointing for some students who felt that their hard work did not pay off. Kira said, "Yeah, it is pretty frustrating. Like... because you are spending so much time and it feels like it is kind of unproductive, sometimes" (Kira, S1, 26-34). Similarly, Gayle said about Annie, "she said, 'I try so hard and nothing works, so why do I even try?' (Gayle, P1, 30). Cora shared about Kira, "She gets frustrated with the fact that she

has to work harder than everybody else, and the outcome of that doesn't match what she's put in. To keep that motivation there is sometimes difficult" (Cora, P1, 29-32). Kira and Annie expressed their challenge of putting time and work into their academic learning and not seeing the expected results.

6.9. The Stigma in Pull Out

The physical space where students received their explicit, individualized, and intense learning and teaching experience was often in isolation from their classmates. They were pulled out to a separate room or attended a different school. Participants described several challenges associated with the pull out practice. James indicated that gathering students with learning disabilities into one separated group may limit their social life, "You could put them all like in the same class, but then they would have no social life" (James, SP3, 19-20).

Elizabeth described how she felt when she left class to receive support, "I wasn't always there with my classmates like in the same class so it's like I would miss out on things so I wasn't like a normal student. No one is a normal student, but" (Elizabeth, S1, 31-32). She also clarified that, "having one on one was really good for me. But, I don't know, it's like a lot of like negative because I could not like work with students in my class" (Elizabeth, S1, 130-133). She further elaborated:

By pulling people out, yes, you're helping them, but you're also excluding them from everyday class. And yes, I probably might have been lost in class, but time taken away, it ... I was isolated from the kids in my normal class, so it's awkward coming in and out.
(Elizabeth, SP3, 46-49)

Alexandra shared, "it was just weird that like I would have to leave the school to go get tutoring in the middle of the day and all the kids would be like, "Where's Alexandra?" (Alexandra, S2, 74-75).

Elizabeth described that kids who are pulled out are looked at differently, “In high school, there’s still kids who do get help. And they’re looked at differently. They’re like, if they’re leaving to go get a test, they’re sometimes looked at a bit weird. (Elizabeth, S2, 437-439).

Elizabeth further clarified:

It’s like, the fact of getting up and being taken away from what the norm is, of sitting in the same classroom and taking the test, like everyone taking the test at the same time together.

Once you’re taken out differently, you’re looked at like, “Oh, why do they get to leave?

Why do they get special treatment,” or “How stupid do they have to be to go?” Which is such a horrible way to. (Elizabeth, S2, 447-451)

Dewayne also elaborated on the stigma attached to pulling out students from class, “It becomes a bit of a stigma. As soon as you pull a child out of the classroom, they’re different. And all of the other kids are wondering what’s going on” (Dewayne, P2, 147-148). In accordance, Elizabeth reported, “When I was younger I was like I would get teased a lot about I was always like different because of like I was taken out to get help” (Elizabeth, S1, 271-272). Miriam, her mother, indicated, “Some kids can be really nasty. They’re like, “Elizabeth is getting help.” That could be something that could be taught through the teacher too” (Miriam, P1, 458-460). Miriam explained why Elizabeth decided to keep her learning disability a secret when she moved to public high school, “that’s why she said when she goes to high school, she doesn’t want that because she thought it’s going to be the same thing. So I think that was very difficult for her in elementary school” (Miriam, P1, 708-712). I further clarified with Elizabeth regarding her high school status:

Hadas: So, you moved to high school. No one knows you have a learning disability. Why? What advantage did it give you?

Elizabeth: Then you’re not put in the box. It also raised the expectations people had for me.

Then, I was able to meet those expectations. (Elizabeth, S2, 600-603)

Elizabeth was determined that the stigma of learning disability and the pull out support that was provided for her were more harmful than helpful both academically and socially.

In contrast to the negative aspects of the pull out support, Alexandra shared that in her high school her specialized support was positive, “Because everyone just has so many different classes, you don’t really notice that that person’s different in a different kind (. . .) My best friends, they all know and they all don’t see me as different” (Alexandra, S1, 466-469). Similarly, Dewayne suggested providing individualized support without singling out students. He said:

So you know it’s now time for reading or writing. You know that they go to their various classes where these kids are taught a different way because they learn differently, these kids are taught a different way and the way that they actually learn. I think you can do it within the same system. (Dewayne, P2, 149-152)

Students and parents shared examples reflecting the current school situation that presents a dilemma between receiving helpful one-on-one assistance outside of the classroom and staying in class while risking being academically lost but feeling included and sociable. Dewayne and Alexandra shared how an alternative school setting helped resolve this dilemma. Although, Kira spoke about enrolling back in the public school to meet her sociability needs.

6.10. Embarrassment, Guilt, and Shame

In addition to the stigma of being different as a result of being pulled out for special services, students and parents reported feeling embarrassment, guilt and shame in regard to students’ learning disabilities. Maria mentioned that Anthony encouraged his friend who had Math difficulties to get diagnosed. He told him: “You should go and have a psych-ed done because you’ll understand why you cannot pass” (Maria, P1, 275). However she reported that, “The other guy said, ‘No, because I don’t want to get labeled.’” (Anthony, P1, 278). Elizabeth described the

deeper difficulty students may experience by being labeled with a learning disability. She said:

All different forms of humans made to live in the world. So the fact that we like we label people and push people to the side (. . .) they have disability put them like ahh they are different than me. I don't really understand that. (Elizabeth, S1, 763-766)

Emphasizing the difference and its lower grade level was unappreciated by Elizabeth.

Dewayne described that students feel guilty for their learning difficulties, “A lot of times right off the bat, that child thinks it's their fault. They've done something wrong. Their confidence is just crushed. They don't know how to stand up for themselves” (Dewayne, P2, 176-178). Kate noted that the mere difference presents an issue, “Yeah! . . . Nobody wants to feel like they are completely different, and nobody is like them. You know, we want to feel like we're included” (Kate, SP3, 632-633). Kate shared an example of Alexandra's difference in learning was pointed out by the teacher who said, ““Okay, Alexandra, you only have to do three. Let's do these three,' in front of the whole class” (Kate, SP3, 385-386). Alexandra clarified, “It also helps if the teacher does pull me aside, not saying it in front of the whole class” (Alexandra, SP3, 404-405). Alexandra and Kate referred to feelings of embarrassment as a result of perceiving their learning disability as a negative difference. As noted earlier, Barbara also shared how James when he was about six or seven, perceived his difference negatively to the point of wishing “he wasn't who he was, (. . .) He just said, 'I'm the dumbest person and I wish I was dead.' That was devastating [crying]” (Barbara, S1, 44-47).

Kate reported that when people ask Alexandra why do you go to another school she is embarrassed, “It doesn't come easily, [to say] ‘Well I'm dyslexic. I'm in a program that they have’” (Kate, SP3, 541-542). Anthony also reported, “at first I didn't use the calculator because I was quite embarrassed. And then like I realized that I actually needed it so I started using it more and more” (Anthony, S1, 241-242). Kate shared another example of students with learning

disabilities being embarrassed in the classroom context, “Grade 9, who had an IEP, sort of sitting at the back of the classroom and the teacher is at the front, ‘Nathan, are you okay back there?’” (Kate, SP3, 405-407). Not being okay and being embarrassed with their difficulties as if they are guilty was consistent across all participants at some of point in their development.

In a short discussion about how that stigma might be resolved, Alexandra noted that people do not understand her learning disabilities and that her whole personality was not expressed in academic learning in school. She suggested, “Just getting to know knowing the person first, [crying] I guess, so they know that I’m not retarded or something [crying]” (Alexandra, SP3, 548-549). She continued, “So I can show them [crying], there is nothing wrong with me, it’s just reading and stuff [crying]” (Alexandra, SP3, 552-553). We mentioned the need to explain to people about dyslexia. She said, “I’ve never talked about my dyslexia in front of a group of people” (Alexandra, SP3, 600). Alexandra, who felt extremely successful in soccer and socially comfortable, felt misunderstood by others – as being different – regarding her dyslexia.

Gayle, Annie’s mother, shared a similar view that learning difficulties were perceived as a negative difference, “... kind of like finger pointing ‘Look Annie has a learning disability, she’s different,’ and not necessarily in a positive way, different. I think being different in a school setting is not necessarily a good thing” (Gayle, P1, 397-405). Like Alexandra, Gayle suggested that by educating students about learning disabilities, the stigma would not hold a negative meaning.

I think a lot of the frustration for Annie is a bit of the shame that she is different, and they don’t want to be different. Then, the question is, how can we maybe educate other students about learning disabilities, as well, right? To take some of the stigma out of that. (Gayle, P2, 43-46)

Similarly, Alexandra argued that, “I guess it’s the problem of just that not a lot of people know

exactly what dyslexia is. If they knew, I wouldn't feel ashamed" (Alexandra, SP3, 568-570). Alexandra suggested that educating people about dyslexia would help remove the shame associated with it. Cora expressed her wish in regard to educating all students about learning differences, "education as to what learning differences are. So that they can support their fellow student without going, 'That's a really dumb thing to say.' That's a horrible thing for a kid who's struggling to hear" (Cora, P2, 131-133). The challenge students experienced was feeling embarrassment, shame and guilt as they felt that people judged their learning difference as less, as a disability.

Kira reported that she felt confident explaining to people about her dyslexia and she understood the value in doing so. She said:

Some people, they don't really know, but then when I tell them and I explain it they're really supportive too. I think it really interests them and they just want to know more, and what does it do. That's really cool. I always like explaining it because I'd rather them know and not be like ... ahhh I wonder. (Kira, S1, 783-786)

Elizabeth also argued that people need to understand learning disabilities, "Because when you're different, it's always looked at weirdly. (. . .). When people don't understand what someone else is going through, they're not as sympathetic" (Elizabeth, S2, 463-467). Jonathan reported his own positive experience of sharing his learning difference of dyslexia with his friends. He said:

Emmm ... I guess ... a lot of the times like whenever I told my friends they're like, "You can't read? You can't write? What's it like, do you just see every word backwards?" It's like they know what it is in a way, but they're not informed I guess about it. I was like, "I don't really see it backwards. It's just the words meshed together without me even realizing it, or I'll add in like *is* or *a* into a word and sentences that don't actually have it."

I don't know they just see it as reading backwards or seeing things backwards. (Jonathan, S2, 189-194)

Jonathan found a way to clarify his learning difference with confidence and with no shame. He was able to advocate for himself only once he understood his difference, accepted it with no guilt and shame, and then worked with it. He shared:

At first it was like, "Why? Really?" and then when I first figured out that I had one I didn't, like, I thought it was kind of my fault. I was like, "Why am I like this?" Over the years I've kind of come to realize that it's not my fault that I have a learning disability. It's just the way my brain was made, and all that stuff. So, I've kind of just become confident with it, like it's who I am. I can't really change that, so I kind of just take pride in it. (Jonathan, S1, 27-32)

Jonathan's transformation from self-blaming to accepting confidently and taking pride of who he was including his learning difference, was a result of unwavering consistent family support.

Dewayne, his father, explained his proven method used with his son, of educating, first his son, then other students to perceive their difference as natural, not as a deficit. He said:

If they're able to realize it's not your fault. You just learn differently. It's not a stigma. It's just an everyday thing. You learn differently, so does the other eighty percent. You're going to be taught the way you learn. Also, it takes you longer to read. We're going to give you a little more extra time so you can request that. It's a normal, everyday thing. You start to build confidence. Then they can be a self-advocate. (Dewayne, P2, 178-182)

Supporting students with learning disabilities may include understanding and making them understand that they deserve accommodations or extra tools to help them learn the way they learn. Knowing that they are deserving of support may replace guilt and shame with productivity and progress in learning. Annie expressed her view on a fundamental understanding she

expected from people in her life. She said:

Having someone think that they're better than you. We're all the same. There isn't a difference between everyone in this world. You know what I mean? There is no person that's like better than you or worse than you. We're all equal. You know what I mean? So, when like you come around and make me feel like I'm like lower standard than you ...
(Annie, S1, 495-499)

Barbara also expressed her worry, "That's been a huge challenge for us because the learning disability obviously makes him feel like he's less than in comparison. (Barbara, P2, 67-68).

Ideally, imagining that Annie's understanding of no grading among people would prevail – differences of people would be neutral features uncontaminated with shame. Consistent among all participants, differences in learning were criticized and graded on a scale of ability to disability and left a negative psychological mark on students.

Students and parents shared the view of the potential long-term and overcasting impact of their harsh consequent secondary disabilities of stigma, shame, and guilt that were entrenched in their academic experiences. Barbara shared her concern, "He has a very severe dyslexia. It's really bad. (. . .) So I'm always afraid that he's going to feel terrible about himself" (Barbara, P1, 72-74). She further elaborated, "I think my biggest concern for him is psychological. (. . .) I just want him to get through school without feeling like an asshole." (Barbara, P1, 422-424).

Barbara emphasized a possible traumatic damage:

Well, I work at [name of city] Native Health (. . .) population of First Nations people that have been traumatized (. . .) from residential schools. So trauma, (. . .) gives you brain damage and makes it likely that you'll become an addict, which makes it impossible to learn anything. (. . .). every single drug addict I see has a learning disability. I can almost guarantee it because of how shitty they feel about themselves. (. . .). if you're a young

male and you suck at school, you want to find something you're good at. Maybe you're good at being a criminal. [laughing] Maybe you're smart at making money in ways that are not okay, and then you end up in jail. (Barbara, P2, 654-670)

Barbara provided a perspective on possible negative long-term outcome of a population when their needs of dignity are not met. Instead, this group experiences stress, embarrassments, shame, and guilt, as they are not able to meet standard academic expectations.

6.11. Experiencing Successes Across Grades

The likelihood of students with learning difficulties to experiencing successes through grades was limited. Students' need to feel good about themselves in school in light of their academic difficulties may be impossible to fulfill, especially when there were no systemic alternative ways for students to show their strengths. Elizabeth argued, "my self worth and my confidence is directly relate to my grades" (Elizabeth, S1, 452-453). Kate, Alexandra's mother claimed, "I think mostly she feels unsuccessful with regards to school. (Kate, P1, 884). Elizabeth noted the importance of academics in school.

How school's laid out now, if you're not an academic, like high academic student, you're not really a good student. The core classes (. . .) English, Math, Science (. . .) If you're not strong with those, then you're not really a strong student in the eyes of like...grades and society. (Elizabeth, S2, 429-432)

Accordingly, Kira spoke about her difficulty focusing on academic successes in school.

It's just like frustrating I guess sometimes because ... like I know I'm lucky, and I'm happy with who I am, but it's annoying when you have to go to school and not do well so often. Sometimes I mean I think I could be doing other things that would be a lot more productive for me. (. . .). That's frustrating" (Kira, S1, 413-417).

Not doing well often in school everyday was frustrating for Kira.

Similarly, Gayle argued, “because of the value that’s placed on academic achievement. If you don’t academically achieve, where does that put you in your level, in acceptance and in society? Right? Are you put at a lower rung?” (Gayle, P1, 418-420). Oliver confirmed Gayle’s question, “Definitely a big one for me is like getting good mark on a test, which I don’t usually get good mark, (Oliver, S1, 385-386). Although important, getting a good mark was not experienced by Oliver usually. Kira described her difficulty preparing for tests, that are key to academic success “I was angry because I would go in the tests preparing really late and none my friends were all like, ‘Oh this is so easy,’ and ... I was embarrassed to say that was so hard” (Kira, S2, 187-189).

Barbara described James’ motivation to succeed, “I think the thing for him is that he wants to do well. He’s still engaged and trying, which is hard for a kid that’s really challenged [laughing]” (Barbara, P1, 795-796). James attested his mother’s view, “Like I got good grades in a couple classes, but like the whole time to get those good grades were completely terrible. (. . .). In Socials, I ended with a B+, so I was pretty happy” (James, SP3, 194-197). For all students, a good grade was a source of contentment and expression of success. Students perceived grades as objective external feedback, unlike, for example, the subjective feedback James’ mother offered him. Barbara shared:

I always say “James, you’re smart, you’re awesome, you’re this, you’re that,” he’s like “Yeah, you have to say that because you’re my mom.” Whereas, I think, coming from the outside, it’s different, and kind of having that independent success means something.

Success is hard to define. (Barbara, SP3, 223-226)

James, like other students and parents, was educated that successes are measured in good grades. Barbara admitted her appreciation of good grades, “for me academic success was really important, and therefore I offload that expectation onto my kids (. . .). And I know how hard it

is for him on some level, I understand it” (Barbara, SP3, 228-232). With this defined understanding of successes in school, students who were not able to meet academic standards were also, to some degree, denied the experiences of successes.

Some participants with learning disabilities managed to achieve good grades and experience successes. Dewayne described Jonathan’s academic successes; “He was actually on the honour roll last year then dropped at the end of the year. I think he got to the end of the year and it’s just like he’s had enough of school [laughing] Yeah!” (Dewayne, P1, 574-576). Dewayne emphasized the feeling of success Jonathan gained one term but could not maintain longer, “he was extremely proud of himself when he made the honour roll. (. . .) and he felt that the effort he was putting in was being recognized. (. . .). His attitude was so positive about school” (Dewayne, P1, 637-642).

Alexandra also elaborated about her academic successes:

Emmm ... I think with getting good grades, just the fact that I put so much effort into homework and studying for tests and to all of that and I get the mark, get a good mark for that makes me feel successful because I’ve gone through all the work to get there and I’ve gotten it. So, getting that mark shows that I was successful with all my studying and all my homework and all that. (Alexandra, S2, 197-201)

Alexandra who attended a private high school with a systemic one on one support of a resource teacher was able to focus her academic efforts and achieve good grades.

Elizabeth, who hid her diagnosis of dyslexia in high school and often achieved good grades, doubted her determination to experience academic successes through good grades. Elizabeth said, “I finally felt like a thing which is like a false way of getting like success of gaining success is like through marks. I feel like I got my success through when I get my 100%” (Elizabeth, S1, 407-409). Elizabeth elaborated, “Yeah it’s actually very sad. (. . .) if I do really good on the test,

I have the best day!” (Elizabeth, S1, 455). She concluded her thoughts about putting effort to feel successes through good grades, “I think I need to stop worrying about the grade and more worry about the material that I’m learning about” (Elizabeth, S2, 664-665).

Anthony described his successes in school by describing his grades, “I felt quite successful this year, (. . .) when I got a 4.75 out of 6 on my essay. I felt like it was pretty good because the year before I got a 2” (Anthony, S1, 323-325). Speaking about successes in school meant achieving good grades on academic subjects for most students most of the time. Some students realized they needed to rely on other experiences of successes to make them feel fulfilled.

Kira described that her positive experience of feeling successful in elementary school stemmed from teachers appreciating her efforts, “I didn’t get the best grades, but I was more happy about them I think. And I think my mom was more happy about them because they explained why and ‘Kira is working hard’” (Kira, S1, 349- 350). In high school, Kira had a different experience as teachers were critical of her work habits, “now with school, if they were to go in and talk to my teachers, they’d probably say ‘Kira needs to do more studying’ [laughing], or ‘she needs to work harder’” (Kira, S1, 352- 353). For Kira, it was teachers’ qualitative evaluation of her efforts that made her feel more successful.

Alexandra also included efforts in what caused her to feel successful, “Well both [grades and effort] are important to me, but if the grade isn’t there then clearly I haven’t learned something” (Alexandra, S2, 233-234). Like Alexandra, despite valuing efforts, Kira also described a happy experience of success through a good grade, “I got an A in one of my English writes. I was really, really happy because the whole year I hadn’t had a single [laughing]. I was really, really, really happy. (. . .). It was a debate” (Kira, S1, 492-495).

Kira further specified that she wrote and performed the debate on bullying, a topic of her choice, “it was really interesting to me. I think that’s probably why. My parents got to help me

with grammar and stuff. It was good” (Kira, S1, 504-505). Kira experienced academic success by applying her strength of oral presentation to debate about a topic she chose and found interesting. I further asked her:

Hadas: Is there anything else beside a good grade that would make you feel successful?

Kira: I like when teachers like me. (Kira, S1, 507-508)

Although Kira achieved a good grade on her debate in English she reported her preference of developing positive relationships with teachers to feel successful. “It’s [success] different for everybody. Mine’s obviously being successful isn’t getting A’s for me” (Kira, SP3, 136-137). In the last interview Kira further elaborated about her understanding of successes as being interested in and enjoying the subject:

Success for me is just probably enjoying it more, would be something I’d feel happy with. (. . .). I’d rather just be happy with my courses and be interested in what I’m learning, because I think that’s why, I don’t know why I’d want to learn if ... It’s so hard to learn when you’re not interested. It’s almost impossible to put yourself in the situations, I think! So I’m excited to choose my own courses. (. . .) So that would be successful. If I was in class and I wasn’t bored. (Kira, SP3, 139-147)

Kira, who attended a high school where she said that teachers were denying her accommodations and arguing that she could work harder, developed a different sense of success in school. Although Kira was content with the good grade she got on her debate, she expected success to come in the future from being interested and enjoying her classes as well as having good relationships with her teachers.

In a conversation with Oliver, he explained his perspective on successes through getting a good mark in school.

Oliver: Emmmm ... Usually when I’m like I have high hopes for something, for an

assignment or a project and I'll get it back and it's not a good mark and I'll just feel like I didn't try enough or something like that, I don't know, like that. I don't know. I could have tried more.

Hadas: It's again the mark? ... it's the grade?

Oliver: It's definitely a big one for me. I try not to let it bother me too much though, a mark.

Hadas: Emmhmm [affirmative] _____. Can you tell why is it that the grade makes you feel successful or unsuccessful? ... It's a hard question maybe.

Oliver: I don't even know why. It shouldn't, should it? Getting good or bad grades. I don't know. I think even something that would make me feel more successful would be like my productivity, probably, in like a class or something. I don't know it always comes back to a mark. I don't know why I'm so fixated on that. I don't think that I should be as much. I don't know. I guess that's just all I thought that school was. (. . .) It's like what else is there? (Oliver, S1, 403-420)

Conversing with Oliver about the value of marks revealed that although the grading system was rooted and dominant in his school reality, he was questioning his commitment to succeeding through achieving good grades. Oliver's father, Mark, noted that for Oliver failing a course would be devastating, "the point of failing a course. (. . .) can be really devastating" (Mark, P1, 452-453).

Theoretically students may discuss the possibility of detaching from the success value attached to grade, however, as Mark noted failing a course can be devastating for students. Kira also reported that her most difficult time in school was receiving grades, "My report cards, and after big tests, yeah probably, or if I answer a question wrong, like if they pick me and I know I don't know it, or I think I know it but I'm wrong" (Kira, S1, 523-524).

6.12. Summary

The areas of strengths reported by students and parents involved movement, social, oral, creative, and humouristic interaction with other people. The strengths of organization, motivation, and work habits resulted from positive experiences with supportive relationships with teachers. Team sport was perceived as a form of social interaction and exchange of signals that students reported to excel in with no use of language. A learning context in which social skills, oral communication, creative and humouristic exchanges, as well as movement in space and physical hands on learning may be a learning environment that would allow students with learning disabilities to put their strengths into their academic learning.

Challenges experienced by students clustered into four general areas of students' life. In the first area of academic performance, students reported consistent difficulties in reading and writing and in classes of English and social studies that required them reading and writing. Within this challenge of academic performance, students also reported that reading comprehension was difficult for them when they had to complete the reading task on their own in class. The second area of challenges includes emotional regulation of stressful situations of placing high demands on students, and regulation of their ability to sustain their attention in class or on task either due to lack of interest or lack of ability to pay attention for long duration of time. The third area of challenges, secondary disabilities, resulted from social stigma and feelings of otherness, of being different in a negative way within the school context. Some students reported that being singled out as different was associated with feeling shame and being embarrassed, although Jonathan and Kira accepted their difference and were relatively more comfortable discussing the reading difficulty with peers. The fourth area of challenges was students' attempts to experience success through grades while they were wishing to participate through presentations and projects.

Their stories exposed a paradox that students with learning disabilities experienced in school: They were diagnosed with a disability of not being able to meet academic standards, yet their successes were measured by grading their academic performance. As Cora, said, “they just feel like they’re not smart! Make them feel like: ‘We’ll get there.’” (Cora, P1, 351-352). The many challenges students reported to experience in school cover un-met needs of students’ wellbeing in the academic, emotional, social, and behavioural domains.

Chapter 7: Discussion

This study examined students' and parents' experiences of and perspectives on learning disabilities through the lens of Vygotsky's sociocultural theory, which emphasizes the interdependence between individuals (e.g., students, parents, and teachers) and their relationships with historical, social, and cultural processes of learning and development (Vygotsky, 1993; Wertsch, 1985). In order to complement the predominantly quantitative methods often used to examine the phenomenon of learning disabilities this study used generic qualitative research to approach the issue holistically by exploring lived experiences related to learning differences (Connor et al., 2011).

In order to respond to the first two research questions, I drew upon the first three themes: 1) identifying difficulties in learning; 2) testing to diagnose a disability; and 3) searching for alternative settings. These themes enabled me to speak directly to the questions of 1) How do students describe their experiences of and perspectives on having learning disabilities? and 2) How do parents describe their experiences of and perspectives on their child's learning disabilities? In order to respond to the second two research questions I drew upon these three themes: 3) searching for alternative learning settings; 4) learning and teaching; and 5) students' strengths and challenges. These themes enabled me to speak directly to the research questions of 3) How do students describe their strengths and challenges in relation to their academic experiences in school? and 4) How do parents describe their child's strengths and challenges in relation to their academic experiences in school?

The analysis and interpretation discussed in this chapter is integrated and organized around six areas. First, I present the interlaced paradoxes that were related to the issues that emerged from parents' requests for help making sense of and noticing their child's learning differences and the schools' response to their requests. Second, I describe the secondary

disabilities experienced by the students as a result of the gaps between young students' learning needs and the absence of timely and meaningful responses to their needs. Third, I discuss the importance of social interactions for the students who participated in this study. Fourth, I discuss student-teacher relationships from participants' perspectives. Fifth, I describe participants' perspectives on the expertise they needed from teachers. And sixth, I describe the diverse mediated learning principles grounding the participants' comments. The chapter ends with a brief summary.

7.1. Paradoxes in the Promises of Testing

Testing for diagnosis and early screening for identification are two different practices. Early screening for identification of learning needs may be conducted by teachers and ideally follows with instruction (Kozulin, 2009b). The early screening typically involves a form of school-wide, or class-wide academic screening for the purpose of early identification of the specific nature of students' differences in learning as early as in Kindergarten or Grade 1. Screening results may be used to create educational support based on students' strengths and challenges (D'Angiulli et al., 2004; Lloyd et al., 2009; Shaywitz et al., 2007; Torgesen, 2002). Educational support may prevent further difficulties in students' future learning (Partanen & Siegel, 2014). The rationale for early screening is consistent with Vygotsky's (2011) ZPD in which teachers mediate educational supports that are customized for students' current skill levels in order to advance their learning and development in the future (Kozulin, 2010b).

Typically, the purpose of early identification is first to notice students who need support and then to provide the needed support. Early identification does not require the process of psychoeducational assessment or a diagnosis of learning disabilities (Kozulin, 2009b; Siegel, 1988a, 1988b, 2013). An outcome of class-wide early identification may be, for example, proactively integrating tools into classroom practice that enable seeing how all students are

performing so as to better identify strengths and needs. These classroom practices may involve both assessment and pedagogy that work together in a more seamless way (Feuerstein et al., 2010).

In contrast to early screening for identification, testing for a diagnosis of learning disabilities is a process of testing individual students through administering standardized measures of cognitive and academic abilities typically in the context of psychoeducational assessment conducted by a psychologist within or outside of the school. Testing for diagnosis, as was reported by participants in this study, can take place at any age, not necessarily in early grades and, thus, this individualized standardized testing was lacking the function of identifying early strengths and challenges.

In this study, interview data revealed that early identification and testing for diagnosis were not always clearly distinguished by parents. One reason for this confusion may be that participants reported that they were required to diagnose learning disabilities through testing prior to accessing special services. Participants reported that the diagnosis of learning disabilities through psychoeducational testing was the method used to “identify” students’ learning needs. This “identification” through testing for diagnosis was not the same as the typical early academic screening for identification (D’Angiulli et al., 2004; Lloyd et al., 2009; Shaywitz et al., 2007; Torgesen, 2002). Nevertheless, in the absence of early academic screening for identification in schools, testing to diagnose a disability functioned in participants’ views, to “identify” students’ learning disabilities, although sometimes as late as in Grade 8.

In summary, early identification as a form of academic screening can be conducted by teachers for the mere purpose of early identification so as to include in the learning and teaching contexts all students with their various challenges and strengths (Partanen & Siegel, 2014). This early screening for identification is distinctive from a diagnosis of a learning disability (Decker

et al., 2013). Therefore, in this discussion I use the term “early identification” to refer to early academic screening for identification of possible strengths and challenges and I use the term “testing” as used by participants, to refer to diagnosing learning disabilities through the process of psychoeducational assessment.

7.1.1. Schools Requesting Diagnosis without Early Identification

The paradox discussed here is the focus on testing for diagnosis, a method that is used to label students’ disabilities as attributes of the child, prior to, and in the absence of, early academic screening and adequate pedagogy. Information generated from early screening could have been used to inform instruction and mediate students’ development prior to diagnosing them based on their current static abilities. At a student’s early age, when parents expressed their worries about their child’s difference in learning, neither early identification nor testing for diagnosis was offered to participants in their schools. Furthermore, it appeared in interviews that parents’ requests for help from teachers were understood by the schools’ personnel as requests for testing for diagnosis through a psychoeducational assessment. From the interviews, it appeared that the lack of systemized early screening for identification practices in schools together with the policy of requiring a diagnosis of learning disabilities in order to access services in school or have an IEP, may have left parents and school personnel with no alternative but to seek testing for diagnosis to ensure services for students.

Parents reported that when they asked for help it was unclear to them why teachers did not have in their toolbox an approach for or an understanding of how to support their child. Parents expected that teachers would have the expertise to clarify the nature of the problem of academic learning differences (Torgesen, 2002). Parents reported that given that their inquiry in schools about their child’s learning did not result in professional helpful information, or change to instruction they turned to resources outside of the school to find out how they may support their

child. Parents' search for clarity about their child's learning difference led them to turn to a specialist, a psychologist. The rationale they followed was consistent with research by Flanagan et al. (2010) who argued that through cognitive testing, the missing and needed answers to identify the problem causing the learning difference may be found. This approach to learning differences, which is based on standardized cognitive measures, assumes that the learning problem is inside the head of the student (Valencia, 1997, 2010). For parents, this seemed to inhibit their child's academic learning. A sociocultural critique of this approach would be that it neglected to assess whether students had access to mediation in school for building their skill level. This question guides the approach of early screening for identification that is followed with instruction informed by the results of early screening.

Miriam, Elizabeth's mother, noted that they asked for academic help, rather than a diagnosis, similar to the specialized academic help that supported her older daughter's learning and development in Manitoba. Likewise, Kate indicated that she noticed delays in her daughter's reading, which she thought could have been identified and remediated in Kindergarten. However, the principal said to her, "we don't test until Grade 3 or Grade 4. Even at that we don't really do anything" (Kate, P1, 35). At this early age, Kate argued, specialized teaching could have helped Alexandra. Kate noted that she realized that the only way she could ensure that Alexandra's learning needs would be noticed in school early was by obtaining a diagnosis of learning disabilities through testing.

Alternatively, research on learning difficulties shows the effectiveness of early screening for identification in improving learning (Partanen & Siegel, 2014; Shaywitz et al., 2007; Stanovich, 1989). Research on cognitive abilities also suggests the potential of using RTI first, for early identification purposes, in order to prevent learning delays (Hale et al., 2006). Finally, research focusing on cognitive abilities measures has concluded that the traditional use of IQ

testing to determine a learning disability is invalid (Decker et al., 2013).

Nevertheless, given the lack of other resources, Kate turned to a private psychologist in order to conduct a psychoeducational assessment to obtain a diagnosis for her daughter that she could present to the school to request services, as she was guided by school personnel. However, when the private psychologist tested Alexandra in Grade 2, she reported that her testing results did not meet the criteria for a diagnosis of learning disabilities and, thus, suggested teaching strategies instead. This conclusion seem to be consistent with the notion of early identification informing teaching, however, the school requested a diagnosis. When Kate approached the school with the private testing results—including teaching strategies and recommendations—Kate noted that because there was no diagnosis it “didn’t lend itself to getting Alexandra help early” (Kate, p1, 501). Determined to ensure academic help for Alexandra, Kate paid again for another private psychologist to ensure that this time the psychoeducational assessment would result in a diagnosis. She explained that given her daughter’s experience of not being noticed in the school, she needed the diagnosis as a gatekeeper for academic services.

However, as Kate reported, the diagnosis did not inform how teachers taught in the past and need to teach Alexandra in the future. The testing results were not linked to classroom pedagogy and assessment, as much as for example, curriculum based assessment may have been linked to specifically informing teaching. Given the minimal support provided for Alexandra after she was diagnosed through her second private testing, Kate decided to enroll her in a private specialized school. Barbara, James’ mother, also noted a similar story of James feeling unnoticed for his learning difference in school during the early years due to the absence of early screening for identification.

All eight participants suffered negative consequences as a result of their schools not screening students early in their school years to identify their strengths and challenges. Torgesen

(2002) noted “the cost of waiting until mid-elementary school to identify children in need of special instruction in reading are simply too great” (p. 8). Participants were not screened early for their diverse learning strengths and challenges in academic and emotional domains. At a minimum, identifying the specific academic difficulty and providing students with enriched and targeted instruction for that specific area based on their development may have improved their outcomes (Francis et al., 2005; Vygotsky, 2011). Additionally, reassuring each of the students that their difficulties in learning were merely a difference within a spectrum of diversity in learning may have helped as well.

Ideally, the following points could have been shared with students, parents, and peers when students first experienced learning challenges: their differences are not deficits (Dudley-Marling, 2010), comparisons to other classmates are not significant while relative comparisons to their own ongoing academic progress are significant (Vygotsky, 2011), considering the impact of resources provided, or not provided, and the access students had to instruction that they need for their learning and development is critical (Vygotsky, 1993).

7.1.2. The Myth of the Benefits of Testing

As noted in interviews, parents and school personnel complied with the requirement for testing for diagnosis as was needed as a gatekeeper for educational support. The rationale for the BC Ministry of Education requirement of a diagnosis for services is beyond the scope of this study. In regard to this study, parents’ expectations of testing for diagnosis were consistent with Flanagan et al. (2010) who argued that cognitive testing results could generate beneficial information useful for making sense of learning difficulties. Although parents and students expected that information generated in testing would be helpful because it would potentially allow teachers to address students’ learning needs, generate information that may assist in explaining the cognitive reasons for the learning delays, and inform learning and teaching, they

did not recall examples of those benefits. The importance of testing for diagnosis for students and parents given its promises, the cost, and its rarity, in contradiction with its insignificance based on their not recalling the benefits, suggests that the potential of the information generated of testing for diagnosis was unfulfilled.

However, based on participants' lived experiences, testing—the comprehensive psychoeducational assessment—was reported to have two functions. First, the possibility of obtaining a legal diagnosis of learning disability was assumed to ensure noticeability by providing verification that there was a problem that needed attention, resources, and care. Second, a derivative of this first function was to use the diagnosis as a requirement for entry to provincial programs or private schools. For participants, testing results did not function as expected. The promise that assessment would be linked to pedagogy (Catts et al., 2016; Feuerstein et al., 2010), and informed learning and teaching, was not fulfilled. Parents shared their disappointment that testing results yielded minimal appropriate teaching (see Klassen, 2002).

The importance of specialized education for teachers emphasized by Gindis (2003) and Torgesen (2002) was demonstrated in Jonathan's turning point as a result of his Grade 3 teacher who noticed his difference in learning because she was educated about learning disabilities. Dewayne noted that initially the referral to testing and the diagnosis resulted of testing gave them hopes. However, the diagnosis was not followed with changes in pedagogy. Following the diagnosis, Dewayne and other parents searched for alternative learning settings, as their school did not offer sufficient special interventions for their children. Dewayne said that his expectations were that after the diagnosis, the lights would go on or a red carpet would be rolled out with programs and interventions. James and Alexandra, who were also tested privately and were diagnosed in Grade 2, shared similar experiences with limited specialized pedagogy

provided to them after diagnosis. Following their testing for diagnosis, Jonathan, Alexandra, and James attended private specialized schools for the rest of their elementary years so that they could have access to appropriate pedagogy.

Ironically, when some participants had testing done, and thus, had a diagnosis of a learning disability, its promise to inform learning and teaching, as noted by Flanagan et al. (2010), could not be utilized by teachers to inform pedagogy or by students to increase their participation in school. Pedagogy was not differentiated based on participants' test results. Following Stanovich's (1989) argument, that "at their best, IQ test scores are gross measures of current cognitive functioning" (p. 487). They do not reflect students' potential to learn throughout their schooling. Stanovich (1989) provided empirical evidence that scores of cognitive measures reflect only current development of students. These scores mistakenly regard abilities as static or fixed abilities within the individual (Baglieri et al., 2011; Barber, 2011). Cognitive abilities scores also do not capture the dynamic properties of a given reasoning skill (Miller, 2010). These scores represent a snapshot of students' performance within a changing dynamic of social and cultural processes that are reciprocally shaping learning in school and outside of school.

In summary, according to participants in this study, testing results did not function to directly inform teaching and learning. The diagnosis that increased their noticeability in schools allowed them to have an IEP and to negotiate accommodations with teachers and advocate for themselves by feeling confident to ask for help within the school or to access resources outside of the public school system. Hypothetically, if the schools of these students had systemized early screening for identification of strengths and challenges, the learning differences of these students may have been identified earlier. It is important however, for early screening for all students to inform teaching and further assessments. This dynamic process of teaching and assessment may have helped these students experience their learning difference in a context of diversity where all

students are screened for their strengths and challenges. In that context, they may not have needed the legal diagnosis for self-advocacy and to be noticed. In that hypothetical scenario, their schools may have supported students' learning needs first through early screening.

7.1.3. Required and Unavailable Testing for Diagnosis

Given that schools required participants to obtain a diagnosis through psychoeducational assessment and, yet, testing for diagnosis was not available to them was paradoxical. This paradox caused confusion and frustration for participants in this study. As was shown in the previous section, testing for diagnosis did not appear to inform teaching or provide an explanation of why students had difficulties, as testing results did not translate to classroom practices. However, regardless of the debate over the potential functions and benefits of testing for diagnosis, participants reported that a diagnosis of learning disability was required of them by the schools.

Mark, who was a high school teacher in an alternative high school, offered a somewhat unrealistic resolution to this paradox. Mark noted that given the requirement in BC to test students for a diagnosis, and given that parents constantly requested that their child be tested, it would only be fair if all students were tested. However, he clarified, as discussed earlier, that testing served mainly for increasing the noticeability of his child, Oliver, in the school. He said, "I knew that there was value in having a psych-ed, only to have that recognized" (Mark, P1, 106). As noted earlier, Mark and other parents summarized the benefits of testing to diagnose through psychoeducational assessment as needed for obtaining recognition for their child's learning difference so they would be noticed in their classrooms as needing help. Alternatively, early screening for identification of students' strengths and challenges followed by classroom instruction to mediate students' progress would have likely provided a recognition and noticeability for them as a whole person with strengths and challenges, as well as with learning

needs, in addition to also supporting students' future learning (Kozulin, 2010b; Lesaux et al., 2008)

7.1.4. Too Young and Old Enough for Testing

The paradox discussed here reveals that school personnel rightly assumed that development of students depends on instruction and learning. This assumption seemed to have guided schools to avoid referring young students for testing for diagnosis and labeling with learning disabilities and it also required Grade 7 students to be tested again for updating their diagnosis. An update was requested to examine the degree of their change and if the diagnosis was still valid. The paradox, however, was that the underlying assumption that learning and instruction may change the development of students was not put to use in investing in early instruction based on early screening and identification of students' academic needs for the purpose of helping students develop at a young age. This assumption of students' malleability also did not guide the requirement of a label of learning disabilities as a static attribute. In other words, if educators know that students develop as a result of instruction then consistent with this they would likely instruct students as early as possible with adequate pedagogy to influence their development and also avoid labeling students in case their ability to change may compensate for their difference (Feuerstein et al., 2010).

Barbara described how the school responded to her requests for help for James during Grades 1 and 2. She reported that the school said: "we can't do anything because he is too young" (Barbara, P1, 129). Barbara clarified that the school not only did not provide him with testing for a diagnosis, but also did not provide him with academic screening. There appears to be a paradoxical contradiction in that school's position of malleability was used as the reasoning for not testing for diagnosis early but was not used for early screening for identification. Information generated from early screening could have been used for instruction and building upon their

malleability to help students learn. Bratsch-Hines et al. (2017) found that it was common for school personnel to avoid recommending the testing as it appeared to be based on the understanding that young learners certainly change and develop during their school years. Students, as they develop, may overcome or compensate for their differences if provided with learning opportunities as suggested, for example, by Feuerstein et al. (2010), Vygotsky (2011), and Torgesen (2002).

In sum, the paradox here is that the decisions to avoid early testing and to update older students' testing are in contradiction with the seemingly lack of attention and support at early age through explicit, individualized screening and informing pedagogy to take advantage of the malleability of young learners who are in need of support (Shaywitz et al., 2007). Investing in pedagogy that is ahead of students' current development may enable them to further extend their potential zone of development. In contrast, while their children were at early age, parents were told that there was nothing teachers could do. Neither testing nor other early screening methods were available systematically to participants. Addressing this paradox may be accomplished by ensuring that students have access to educational resources that are directly linked to their identified areas of strengths and challenges as diverse learners (Partanen & Siegel, 2014).

7.1.5 The Problem of Unnoticed Students

Participants reported that the period between the time that students first noticed their own difference in learning and the time that the school responded to their learning needs, was a period in which students and parents were frustrated as students' needs were not noticed in school. Ideally, as noted earlier, early academic screening for early identification of students' strengths and challenges would likely have provided students, teachers, and parents with information about how to support students' learning and development and prevented the feeling of being unnoticed in school.

Annie and Anthony waited until Grade 8 for the diagnosis that then functioned to bring teachers' attention to their learning differences. Then they reported feeling their teachers' acceptance of their diverse learning needs. Mark described his son, Oliver, during class time, being busy drawing little characters on paper and avoiding class work during the years that his learning difficulties were unnoticed. Similarly, Kira referred to students not being noticed when she described feeling sorry for her peers who struggle academically, but have not been diagnosed.

More extreme were the cases of Anthony and Annie who were not noticed throughout their elementary years as having learning difficulties and needing support. They reported experiencing frustration, developing behavioural problems, and being identified in school as a "troubled child." Their noticeability was late because the only method that was recommended, testing for diagnosis, was not available early. As late as Grade 8, teachers' recognition of their learning needs allowed more acceptance and understanding of their needs. However, since Grades 2 or 3, participants had reported feeling inadequacy, shame, and guilt. These feelings may have been avoided if there were other ways for students to be noticed in schools with no period of waiting to be diagnosed in which time they felt unnoticed in school.

These examples show that the need to be noticed was only fulfilled for some students in Grade 8 through the method of testing for diagnosis, which was not available earlier. Participants' emphasis was on the importance of noticeability in schools and acceptance of students' diverse strengths and challenges. One resolution for this paradox may be ensuring noticeability of students' needs through early screening for all students that would follow with informed pedagogy.

7.1.6. Summary of Paradoxes

The purpose of testing was considered to be necessary to diagnose a learning disability by the BC Ministry of Education (British Columbia Ministry of Education, 2016), and it functioned as a

gatekeeper for specialized pedagogy within the school and access to private schools. First, the participants in this study confused testing for diagnosis with early identification. Prior to requesting testing, as indicated by all parents, they requested support and validation for their suspicions that there was a difference in their child's learning. Second, the promise of testing to explain the reasons for students' delays and to inform learning and teaching was not fulfilled. Parents expressed their frustration with the gap between the promises and the importance that was associated with psychoeducational testing and the actual outcomes of merely confirming and reflecting back the symptoms of learning difficulties, as noted by Vygotsky's (1993) critique of IQ testing. Testing only allowed noticeability and provided access for special programs and private schools. Third, although required for diagnosis, testing was not available to all students. It was only available to some students within the school and to those who could pay outside of school. Fourth, testing young students was avoided due to their malleability and, perhaps, in an attempt to avoid unnecessary labeling that may have been bypassed if early academic identification for all students had been employed (Partanen & Siegel, 2014). It appeared that malleability of learning could have guided a greater focus on mediation to support the malleability of especially young learners. Fifth, students felt unnoticed in school and it appeared that only testing for diagnosis was offered to them to be noticed when in fact early screening of all students with emphasis on diverse strengths and challenges may have helped to ensure everyone is being noticed.

7.2. Experiences of Secondary Disabilities

Participants noted that the essential early identification and differentiated pedagogy was absent (Bratsch-Hines et al., 2017). If they had later access to testing for diagnosis, it did not directly inform learning and teaching. During this period in which students' academic and emotional needs as young learners struggling with their learning differences were not noticed or met,

students developed secondary disabilities (Smagorinsky, 2012; Vygotsky, 1993). Given the issues of unavailability of testing for diagnosis, students remained unnoticed long enough to develop secondary disabilities of feeling shame, embarrassment, guilt, and thinking of themselves as “stupid.” It is interesting to note that the diagnosis that resulted from testing was reported by participants to help alleviate, in some sense, their experience of feeling shame, and they reported that the learning disability label helped them explain to themselves and others their learning differences and gain confidence when asking teachers for help and negotiating their IEP.

During the years of academic and emotional struggles, participants described students’ feelings of being tense, angry and frustrated, crying often, experiencing panic attacks and anxiety, and having psychosomatic pains. Their feelings resulted from their own and others’ perceptions of their assumed impairments that caused the learning difficulties to be experienced as disabling, debilitating, and lessening their self-worth.

Vygotsky (1993) argued that although the origin of a learning difference may be organic, educators can address the negative perceptions of the difference; how the difference makes the person feel when socializing and experiencing the societal perceptions of their difficulty, for example, with reading. Participants were frustrated because of having unexplained and unnoticed differences that led to difficulties in participating in school and meeting academic requirements. Students reported experiencing frustrations regardless of having a diagnosis or not because having a diagnosis did not generate appropriate teaching.

Smagorinsky (2012) suggested that creating inclusive and socially just practices for students with learning difficulties is key for eliminating the development of secondary disabilities. This would involve a classroom where the norm is that all students have differences, rather than the norm of all students having to meeting the same standard regardless of their unique difference. As shown in this study, some teachers used their capacity to influence

students positively and in that way reduced the negative perception that may have been associated with their learning difficulties. On the other hand, there were also examples of how well intended practices contributed to students' secondary disabilities. Alexandra was sensitive to teachers' calling out loud in class to ask if she needed help. James was embarrassed when a teacher "hovered" around him in class. Elizabeth reported feeling socially excluded when leaving the class for one-on-one support. Anthony reported being embarrassed to use the calculator. These examples demonstrated how the participants experienced shame given their differences (Kenyon et al., 2013).

Secondary disabilities as social perceptions are also demonstrated in these examples (Lalvani & Broderick, 2013). Although all teachers, in these cases, intended to provide students with support, their actions were miss-attuned with students' needs (Feuerstein et al., 2010). Such attunement within a student-teacher relationship within the ZPD helps educators to recognize students' emotional needs and possible perceptions of themselves.

Participants reported experiencing feelings of shame early in relation to their learning differences. These secondary disabilities may have been avoided with more awareness in the classroom around the diversity of learners by offering a variety of strategies for addressing these differences in class with all learners. As early as students realize they have a difficulty, teachers and parents may respond to students with knowledge about it before the students negatively interpret the difficulty with helpless thoughts of being stupid. Additionally, emphasizing students' strengths by examining the whole person, including students' in-class activities as diverse learners on a spectrum of diversity in learning, may convey acceptance and ease their judgment of themselves.

The pull out support Elizabeth received and her label of learning disability both had a strong impact on Elizabeth to the point that when she moved to high school she did not inform

her new teachers of her learning disabilities. She decided, using the metaphor of a swimmer, to jump into the “water” knowing she would likely be rescued if unable to float. Her secret remained unknown to her teachers and classmates during her five academically successful high school years, including being on the principal’s list and acquiring a reputation as a “good student” in the eyes of her friends. Yet, scars from her secondary disabilities from elementary school were visible when she shared that she will always feel “less than” and argued, that she “cannot write” and does not know how to “compose a proper sentence.”

Elizabeth hid her learning disabilities diagnosis in high school in order to avoid the stigma that is associated with the label (Shifrer, 2013). She explained that not experiencing stigma helped her achieve beyond the limits that low teachers’ expectations would potentially present to her (Rosenthal, 2002; Rosenthal & Jacobson, 1968). In summary, Elizabeth and other participants, reported feeling inadequate in elementary school. She admitted needing the academic support she received in her pull out support, while feeling that she was missing out on whole class activities, which she perceived as valuable.

Avoiding secondary disabilities beyond the context of the classroom involves facing historical, social, and cultural assumptions held by people and embedded in practices. First, stigma and feeling less valuable due to academic performance are primed in society by the ableist perception of a hierarchy of abilities (Lalvani & Broderick, 2013). Second, classifying students based on the criterion of meeting age expectations or comparing students to standardized norms, involves the ableist notion that one is superior to another due to higher ability. Although malleability of learners is common knowledge nowadays, schools in BC practice measuring abilities quantitatively, through the ableist mindset, and conclude a seemingly arbitrary diagnosis of learning disabilities (Baglieri et al., 2011).

Alternatively, in a diverse democratic society, standardized expectations may be dissolved,

as they have no place in the diversity acceptance mindset (Broderick & Ne’eman, 2008). Instead of age norm standards, students’ progress could be guided and informed by the individual changes students make throughout a period of time, a month, or a year with a vision and planning for future relative expectations (Vygotsky, 2011). Ideally, negotiating with each student and their parents their goals based on their strengths, challenges, motivation, current passions and future dreams may be included in the supports made available to students.

Importantly, among the eight participants, no one reported that their differences were noticed and identified early in Kindergarten or Grade 1. It is possible that early attention to academic and emotional needs from a holistic, strengths based approach may prevent secondary disabilities and also may address students’ needs as a whole person and avoid the experience of trying to replace a negative self-perception of “stupid” with a diagnosis through an expensive, unavailable, and uninformative testing process.

7.3. The Sociality of Learning and Development

Students described their interactions and relationships with teachers and classmates during class time in accordance with Mercer (2013) who noted “one reason why people engage socially, which can also be linked to human evolutionary success, is so that they can think collectively in order to pursue common goals” (p. 149). Similarly, Elizabeth described her preferred way of learning through collaboration and she argued against an individualistic way of learning:

It’s best to be in a collaboration, because if you’re individuals, obviously, we’re stronger as a team. We’re all just going around as individuals looking out for ourselves. It’s going to be a lot harder to like survive. It’s best to work together. You can do more together as a team. (Elizabeth, S2, 763-766)

Vygotsky (2011) emphasized the sociality of learning and development including one-on-one communications that facilitate meaning making through mediation with others who bring to the

social context their different learning based on their unique educational histories.

Other students reported that when they experienced difficulty in class they approached their classmates to ask for assistance by reading together or by clarifying the requirement of the task. James shared what he would do in class when he was not able to complete a task, “I either will ask to go partner up with somebody like that and we could read it together, or I just won’t do it in class” (James, S1, 53-54). Jonathan described one of his favourite classes: “everyone helps each other out. It’s good, I guess, community ... It’s a little community in the school” (Jonathan, S1, 242-243). Oliver described with excitement and enthusiasm his favorite class activities of class discussions as a form of interaction with classmates about the topic. He described, “last year (. . .) we were doing a lot of discussions and stuff like that (. . .) we’d analyze books and stuff. He was just such an awesome teacher” (Oliver, S2, 48-50). Alexandra also explained why collaborations in science class were enjoyable for her, “You get to work with people that we’re both doing the experiment and it’s just fun” (Alexandra, S1, 240). Anthony described, “they make us do more projects, group work. They make you learn in different ways instead of just, as I said, teachers giving you lecture” (Anthony, S2, 238-239). Anthony further explained, “It helped us to help each other, to get a deeper understanding of what we were reading and it was a nice creative way to understand it more” (Anthony, SP3, 389-390).

Through structured activities towards a goal and collaborative communication with classmates, as consistent with Mercer (2013), the students felt that their learning was more effective, enjoyable, and deeper. Brown (1992) elaborated on Vygotsky’s ZPD and created a complex intervention in a classroom setting in which, similar to participants’ descriptions, students worked in groups to investigate and report to the whole class about aspects of a topic the whole class was learning. In that way, students were learning and teaching in a meaningful and purposeful way while they were socializing, exchanging ideas, relating to one another, and

mediating each other's learning.

Vadeboncoeur (2017) discussed the individualistic mindset that assumes learners can function separately from their environment. This individualism can be seen in practices whereby some students reported that their seeking help through social interaction in class was seen as an interference while other teachers appreciated it. For example, James described his teacher's attempt to isolate him in class so "I couldn't talk to anybody (. . .). If I had a question for a friend I couldn't ask them. I couldn't be like, 'Yo do you get how to do this?' or something like that. Then that sucks" (James, S1, 225-226). James needed to discuss, ask, and socialize to assist his own learning in class. Social communication in class was in accordance with their reported strengths of strong communication skills and connectedness, and preference for oral presentations. Kira, who described her strengths for oral presentations noted, "I like group work because it's talking, and then it's someone telling you one-on-one, basically, or you telling them and you are teaching" (Kira, SP3, 681-682). Allowing opportunities to express their strengths contributed to compensating for their academic challenges (Vygotsky, 1993).

7.4. Student-Teacher Relationships

It may seem unavoidable that students who have academic difficulties would feel anxious in an environment where they are not meeting expectations. However, careful examination of interview data shows some evidence in this study for Vygotsky's (1993) suggestion from over 70 years ago that educators can support students, not only regarding their academic differences, but also regarding the social consequences of these differences. Vygotsky argued that educators' capacity to support students' differences, such as dyslexia, for example, may be limited compared to their capacity to address the social consequences of these difficulties. For example, Kira and her mother Cora admired the elementary school principal who took the time to make sure that students with various difficulties learned to reduce their symptoms of anxiety by, for

example, taking a walk. Her teacher created a student-teacher relationship that fostered a ZPD in which mutual listening, learning and caring for one another as human beings was likely to lead to realizing the needs of a person. Kira described benefiting from this learning environment more than she benefited from her short period of attending the private specialized school.

Anthony described that he felt that his high school teachers “had his back.” This was especially meaningful for Anthony compared to how he described his perceptions of the negativity of teachers toward him in elementary school. Annie, who attended an alternative high school, described her relationships with her teachers in the alternative school as resembling the sociality within the ZPD: teachers were available to respond to her questions and academic learning needs; they took the time as needed; and they communicated with her in a non-judgmental manner. Annie was proud to note that in one year she caught up a gap of over two years in math. This positive experience was contrasted with her previous experience in elementary school that she described: “I just felt like I didn’t have anything in my favour” (S1, 24). Jonathan described, with joy, his favorite high school teacher commenting in a friendly way to him as opposed to other teachers he described as disciplining him for chatting in class. This demonstrated the principle in the sociocultural theory that learning and development are rooted in social relationships (Wertsch, 1985).

Barbara noted the critical role of James’ relationships with his teachers: “his connection is where it lives or dies – the teacher [laughing]” (Barbara, P1, 506). Alexandra expressed one of the reasons for the importance of student-teacher relationships: “I feel comfortable going up to the teacher and saying, I don’t understand this. I need you to explain it in a different way” (Alexandra, S1, 31-33). Alexandra described her ideal teacher as “a teacher that knows actually who you are outside of school” (Alexandra, SP3, 510). She alluded to the intimacy needed in relationships that intend to mediate learning as learning and development are both cognitively

and emotionally impacted by relationships (Wertsch, 1985). Developing close relationships where students and teachers connect, collaborate and relate to one another may function to overcome stereotypical deficient beliefs on groups of students that would be associated with individual students (Comber & Kamler, 2004). Teachers who visited homes of their students and had conversations with students and their parents gained a holistic and intimate understanding of each individual in relation to their particular contexts.

Jonathan explained that close relationships with teachers motivated him to put effort into his work: “If you get to understand them and you get to know them, you feel like there’s no point in not doing the work” (Jonathan, SP3, 351-352). On the other hand, he said “If you don’t have a good relationship with a teacher, it really feels like they don’t really care about you, your education or anything like that” (Jonathan, SP3, 356-358). Barbara, James’ mother, linked a positive student-teacher relationship and academic engagement. She said:

I think if there is a good relationship with the teacher, I think he gets excited and engaged about learning. He wants to learn, he wants to do well, so if a teacher hooks into that, it can be amazing. But if they, on the other hand, shut him down that way, it’s almost impossible, too, in my experience. (Barbara, P1, 574-577)

Barbara and James as well as all other participants viewed student-teacher positive relationships as a prerequisite for learning. These are examples of the subtle communications of teachers sometimes using as little as minor gestures that simply made students feel good even though they had learning difficulties.

7.5. Teachers’ Education

Torgesen (2002) described teachers’ responsibilities in the classroom as including both their positive emotional support and systematic pedagogy focused on the skills required. He emphasized teaching through a dialogue that directly shows students the needed processing or

thinking in order to successfully complete the task. Participants' descriptions of their expectations of teachers as professionals were in accordance with Torgesen (2002).

7.5.1. Emotional Aspects of Teaching

Lalvani and Broderick (2013) argued that teachers might perceive impairment as a disability. This has implications for teacher education so it is important that teachers learn to be cognizant of the difference between impairment and disability and role model acceptance of diverse learning in the classroom. Barga (1996) and Woodcock and Vialle (2011) argued that teacher education needs to include teachers' acceptance of learning differences and willingness to provide supports and accommodations. Students in Barga's (1996) study, as well as all participants in the current study, at some point in their early years of school, experienced a lack of teachers' awareness of their learning difficulty. This had a negative emotional effect on them that allowed them to develop social and emotional secondary disabilities that might have further hindered their ability to access cultural tools, participate in classroom activities, and learn.

Scholars argued that teachers hold power in affecting students' social and emotional wellbeing. Gindis (2003) argued "students with disabilities need specially trained teachers" (p. 212). Similarly, Smagorinsky (2012) proposed re-educating the whole society to view individuals with impairment not as disabled in order to reduce the reported systemic discrimination. Kalyanpur and Harry (2004) noticed a systemic discrimination that was embedded in the conversations about learning disabilities. In addition, Lalvani and Broderick (2013) argued that educating teachers and students to recognize and challenge inequalities, is a condition for democratic participation in society.

James reported his perception of his teacher favouring the students who were academically successful over students like him. James noted that some of his teachers had more respect in the classroom for those who complied and met expectations and less towards those students who, for

various reasons, displayed a difference in learning. James' mother noted that teachers neglected to consider James' social and emotional needs as being integral to his cognitive development. This neglect hindered his participation and functioning in the classroom. In summary, the social and emotional aspect of teaching, demonstrated in Vygotsky's (1993) argument that "education must cope not so much with these biological factors as with their social consequences" (p. 66), was also demonstrated in participants' lived experiences.

7.5.2. Experts in Learning and Teaching

In addition to being aware of students' emotional needs, participants expressed their concerns about teachers' preparation for instructing students with learning disabilities. They noted, similarly to Torgesen (2002), that they expected three areas of expertise for teachers: being an expert about learning differences or disabilities, accurately identifying learning needs, and being able to apply explicit, individualized, and intense teaching. Effective teaching included understanding the needs of learners. Bratsch-Hines et al. (2017) noted that general higher education and professional development of teachers is not sufficient to enable teachers to teach students with reading difficulties. They found that specific knowledge of learning difficulties that includes methods of accurate identification and appropriately matching high quality individualized and challenging instruction have long term positive effects for students.

Annie shared her frustration with teachers' lack of understanding of her needs: "You're here to help students and help them reach where they want to go and if you can't really understand your students, then why are you a teacher?" (Annie, S1, 44-45). Gayle also expressed her opinion: "it needs to be part of the teacher's training. Learn about learning disabilities, and what are the signs of learning disabilities. (. . .) how does it affect their emotional and behavioural ways, while they're in school" (Gayle, P2, 476-479). Kate noted "teachers want to help her. I think sometimes they don't know how to help her" (Kate, P1, 293-294). Kate further

elaborated, “they don’t train their senior teachers with Orton-Gillingham” (Kate, P1, 165). Therefore, she said, “teachers need more training to understand what dyslexia and learning disabilities are” (Kate, P2, 156-157).

7.5.3. Explicit Teaching

Beyond teachers’ basic understanding of learning disabilities, participants stated that they required a unique ability to accurately identify the difference and explicitly explain to students the material in a way that they can learn. Torgesen (2002) noted: “The requirement for more explicit and supportive instruction demands a higher level of training and skill for teachers than is usually provided at present” (p. 18). Jonathan described the effective support of specialized teachers as “the teacher that’s really good at explaining, really good at getting information across to you then I love the class” (Jonathan, S1, 558-559). Kate noted that the explicit teaching Alexandra received, which included Orton-Gillingham, was helpful for her. Jonathan described a phonological awareness teaching that was effective for him. His father, Dewayne, described their appreciation of his progress with the tutor who used explicit teaching: “We’re just like, ‘Wow. This has never happened. Never happened.’ It took a month or two. That’s all it took” (Dewayne, SP3, 447-451). James emphasized his preference to learn from teachers who knew how to explain to the whole class, rather than one-on-one support.

As noted, students reported that they would require explicit teaching of phonological awareness rather than simply repeating “noisy reading.” Kate mentioned the teaching method for reading in elementary school. She said, “They’d do noisy reading. I don’t think they really taught them to read” (Kate, P2, 171). However, as Torgesen (2002) argued, she clarified that, “If most kids were getting phonics, kids like my son probably wouldn’t have ever known there was an issue” (Kate, P2, 250-252). Similarly, Dewayne said, “He can’t learn through just reading and reading and reading and reading because it’s not working like you can see it. If you taught him a

different way, the way he actually could learn, there's almost an instant difference" (Dewayne, SP3, 458-460). In that case of explicit mediated learning, Dewayne echoing Bratsch-Hines et al. (2017) declared, "You don't have this three-year delay in their education because that impacts EVERYTHING" (Dewayne, P2, 139-140).

7.5.4. Individualized Teaching

Participants' experiences revealed that some explicit teaching methods were not effective for some individual students. Thus, adapting the explicit teaching method to fit the way in which each student learns was required. Torgesen (2002) argued that "[teacher instruction] requires entirely new resources to adequately meet the instructional needs of all children who are at risk for reading failure" (p. 18). James described his frustration around the mismatch between teaching methods and students' ways of learning. He said:

Usually what it is with the teachers. They do it one way, and I just don't really get it in that way. Then I end up not doing it as much, so then they get mad at me because of it I guess. That's what it's like for the English and math teacher that I had this year and last year.
(James, S1, 224-230)

James shared an example, "With the math teacher, she taught it a certain way, and if you didn't really get it, she wouldn't really try to teach you in a different way. She'd just keep showing you that" (James, S1, 219-221). James was disappointed that teachers did not reach out to him by meeting his way of thinking, yet his mother noted that he was interested to learn. He said: "They had a certain way that they did it. If you didn't understand it, they didn't really care that much, I guess" (James, S1, 213-215). Some teachers did not appear to have more than one approach to mediate the learning of their students.

When teachers were able to mediate learning in multiple ways, the results were quite effective. Kira also shared her positive learning experience with her math tutor, "I like going to

my tutor right now because I'm doing it online. And so, it's so much easier to understand things when he's teaching it just to me. I REALLY like it when I understand math [laughing]" (Kira, SP3, 436-439). James described a teacher who taught him effectively: "if she says it one way, and I don't understand it, she always has a different way of putting it that I would understand, which is good" (James, S1, 194-195). He further elaborated: "like if you don't understand something, she's always able to get around to every single kid who doesn't understand it, and she can make them understand it by the end of the class. She is good" (James, S1, 177-179). Students with learning disabilities reported that they learned well when teachers adapted their teaching methods to meet students' zone of proximal development. In students' descriptions of their successful learning experiences, they described explicit and individualized learning processes that seemed to reflect zones of proximal development (Vygotsky, 1993, 2011).

7.5.5. Intensive Teaching

In addition to explicit individualized teaching and learning, some students also needed intensive learning and teaching. Torgesen (2002) noted, "The requirement for more intensive instruction for at-risk children must involve a reallocation of resources to make more teacher time available for preventive instruction" (p. 18). Likewise, Kate argued that "the whole concept of pulling them out for an hour three times a week is almost futile for these guys. It's not. It's not going to fix anything. They really need that intense intervention" (Kate, P2, 300-301). Dewayne, Jonathan's father, was emotionally moved when he reported Jonathan's academic progress in the intensive private school for students with dyslexia. He said, "When he left [name] school his reading ability was above his grade average which was ... [crying]" (Dewayne, P1, 323-331). Dewayne elaborated that Jonathan's reading level drastically improved in the private school—from a Grade 2 to a Grade 8 reading level—in three years because he received intensive individualized, and explicit mediation. He noted that without that intensive teaching Jonathan

would not have improved because in his public school, “no one was teaching him the way he could learn” (Dewayne, P2, 238). Dewayne was aware of and concerned about other students because as he saw it, the absence of explicit, individualized, and intensive teaching, the public school may not afford other students the learning outcomes that his son experienced in a private specialized school. He said, “some people (. . .) struggling, in tears, and they’re in Grade 12 and not able to read. I cannot imagine what that poor person is going through” (Dewayne, SP3, 194-196). Dewayne noted that the degree of teaching resources Jonathan had, mirrored the degree of neglect others may have experienced.

7.6. Diverse Mediated Learning

Five principles relating to diverse learning settings that participants described as being helpful for them are discussed in this section. The first principle questions the need to diagnose a learning disability to access resources in the context of equity for students with learning differences. The second principle challenges notions of deficit thinking related to students with learning differences. The third principle highlights a progressive approach to evaluating students based on relative, rather than absolute achievements. The fourth principle relates to a strengths based approach. The fifth principle emphasizes the importance of teachers getting to know their students in order to use sociability to provide meaningful guidance and instruction for students.

7.6.1. Unnecessary Diagnosis in an Equity Framework

Participants expressed that a diagnosis of learning disabilities was required of students before they could have access to special resources; although within a framework of equity, all students may have access to educational supports. Maria questioned the need for the diagnosis as a condition for support for diverse learners, although she had to comply with the school’s requirement of a diagnosis in order to create for Anthony the needed IEP. She said:

Everybody learns differently but still people tend to put the students in a box and this is the

level you're supposed to be at. I think this is why it's important and it's sad. I don't think you should need the paper [referring to the diagnosis], but yeah, it does ... it does help to understand that "Okay, it's just on paper. This child learns differently." (Maria, P1, 302-309)

Ideally, all students' diverse strengths, challenges, and learning needs would be assessed early and included in learning and teaching, as all students are diverse and have different needs, not only those who have challenges to meet standard academic expectations. Students and parents argued that all learners deserve opportunities to learn regardless of their relative level of abilities and performances.

Participants noted that ideally, effective learning and teaching with a focus on diverse academic outcomes and academic achievement related to each student's own achievement would be available to all. Elizabeth discussed relevant issues of equality and equity:

I think you just should provide help because everyone, to some extent, has a learning disability or some sort of disability ... like, so ... They should just help all of the students. Not equally, like help with what they need, equity instead of equality because equity is you get what you need. That would make the most sense. (Elizabeth, SP3, 23-26)

From a social justice perspective, Elizabeth suggested an equity approach of offering help to all students based on their needs as Vygotsky (2011) argued that relative achievement—comparing current achievements to previous achievements for each student—rather than comparing across students was the way to assess each student's learning and teaching. Elizabeth discussed the classifications of grade level performances used in schools:

There has to be a stigma taken away that you don't have to be the perfect student, especially how we grade, it's like As, Bs, Cs, Ds, so on and so forth. Once you're put into that label, if you're an A student, you're really smart and you can go on and do incredible

things. B, you're decent. C, oh, you're getting into scary waters. Then, D is, well, you're just stupid. That shouldn't be (. . .) the world is so big and there's room for every type of person because that's how our world is. You can find your niche and find what you want to do. (Elizabeth, SP3, 324-331)

From an equity approach, each individual student brought to their ZPD their own developmental histories that contributed to how they responded to the educational and emotional resources offered to them in school. This approach would emphasize diversity over the hierarchical view of deficits.

7.6.2. Challenging Deficit Thinking

Valencia (1997, 2010) and Varenne and McDermott (1999) discussed attributing deficits to individuals based on their difficulties to meet standard academic expectations as an injustice. In a like manner, Barbara noted James' perspective: "he just sees all the deficits all the time, right? So that's hard" (Barbara, P2, 347). Varenne and McDermott (1999) argued that this societal deficit thinking does not include evaluating the responsibility and contributions of schools to students' learning and development and, in doing so, blames the individual for the failure of schools to provide mediation for students.

Dewayne, Jonathan's father, expressed his perspective regarding this notion of deficit thinking. His concerns regarding the focus on the individual's failure, rather than the schools' failure in disregarding their responsibilities by not fulfilling the essential promise to support the learning and development of all students. He said:

It says that the whole purpose of the school system in BC is to enable all learners to become literate. They're not they are not doing that! And I've seen it when Jonathan was designated as having a learning disability. It actually is a learning difference. The school does not teach kids differently. If you happen to learn differently, you're out of luck. You

know. They will continue to try and teach you exactly the same way and you'll continue to struggle. And I can only imagine the challenges that kids like that face and the issues that come up because of the fact that they think they're dumb. And they're not! It's the school system is not capable of teaching them the way they're able to learn. That's not their fault.

(Dewayne, P2, 70-78)

Similarly, Maria noted issues of secondary disabilities that may be prevented through using a strengths based approach, rather than perpetuating deficit thinking in relation to learning differences. She said:

Learning disability, (. . .) often there's a negative connotation. Because they focus on what they cannot do, and it's important to focus on what you CAN do. Yeah, and build from it. (Maria, SP3, 794-796)

Participants noted that the term learning disability has a negative connotation. They argued for classifying students' learning difficulties as a learning difference to allow building on their strengths within a context that emphasizes diversity rather than a hierarchy of abilities.

7.6.3. Focusing on Strengths

Vygotsky (1993) and others argued for building on students' strengths, rather than on their difficulties and supporting them to converge their natural and cultural paths of development.

Maria said in relation to the strengths based approach:

I think we should always focus on (. . .) what the student can do, (. . .) Then give goals. (. . .) it's important that the kid knows what he's good at to get confidence, and strength, and to feel good about yourself, always. Yeah! (. . .) often there's a negative connotation. Because they focus on what they cannot do, and it's important to focus on what you CAN do. Yeah, and build from it. (Maria, SP3, 791-799)

Elizabeth shared that teachers meant to support her through focusing on her deficits while she

recognized her own strengths that could have been included in her learning. She said:

It was always like, “Oh, what Elizabeth can’t do” (. . .) but also at the same time, I had strengths. I was probably good at performing. I was probably decent at talking in front of the class. (. . .) my strengths were weakened. (Elizabeth, SP3, 312-319)

Elizabeth noted that although she was aware of her strengths, she concealed them, as there was no place to show them while her weaknesses were highlighted in school. Likewise, Maria argued that students must be allowed “To find the program at the school (. . .) [asking students] ‘what do you think is suitable for you’. (. . .), if it fits you. (. . .) what’s good for you” (Maria, SP3, 452-456). Similarly, Barbara emphasized the support James needs from her and his teachers: “I always say, ‘We’re the team. (. . .) We want to get you through to find those things that you’re good at.’ He is exceptional in a lot of ways and we want him to feel that” (Barbara, P1, 294-296). Maria and Barbara argued that all students deserve to be supported by helping them reveal and use their strengths.

In a member check Email correspondence with Dewayne on January 12, 2018, he wrote: “is it time to change our approach completely to learning? Why not focus on a child's strengths? Sure, teach them the basics but by grade 9 you should be diverting to building on their strengths.” Dewayne spoke to Jonathan in the last interview, he acknowledged that within the school system Jonathan is likely to face his difficulties to perform within the normative expectations, he said: “My hope is the light for you will come on when you’re presented with something and you know you’re not going to be successful doing it that way” (Dewayne, SP3, 628-629). However, he suggested to his son to communicate with others the option of showing his learning in his own way. He continued, suggesting that Jonathan may say, “But if you let me do it this way, I can show you I know the stuff. Let me show you a different way of demonstrating my knowledge” (Dewayne, SP3, 629-631).

Mark, Oliver's father, had similar strengths based approach. He said:

If he were given the opportunity to present something in a video format or artistically, that's a completely different, then the table turns and you can see someone who can excel at something. (. . .) So, I'm hopeful. I'm hopeful that for students that are in kindergarten now that if they have strengths in other areas that they'll be able to use those strengths to show their understanding. (Mark, SP3, 521-527)

As parents indicated, integrating their child's need and ability to be successful in their own way is key for their learning and effective contribution to others. Maria was thankful to a teacher who viewed Anthony's ways of "having fun" as his strengths in drama: "she kept telling him that he was good in drama and that's because of her that he went into [name of mini school] drama" (Maria, P1, 90-91). The teacher who took a strengths based approach to Anthony's outspoken, outgoing, and humoristic behaviour, directed him to apply for a drama mini school in which he was successful, feeling fulfilled, and academically motivated to learn.

7.6.4. Relative and Absolute Achievement

Daniels (2014) argued to not rely on absolute retrospective or past development of students, as that may be limited to their developmental history. He argued instead to focus on prospective or future development that includes the influence of current teaching and building on what students already learned. Cognitive tests or any other test, for example, measure matured functions or knowledge without measuring the current and future dynamic effect of teaching on students' learning. Furthermore, Daniels (2014) emphasized students' upper levels of competence that are "constantly changing with learners' increasing independent competence" (p. 520). The more students are enriched with meaningful mediation that operates in the zone beyond their current level of development and provides instruction that is meaningful to them, the more they become competent learners. Instruction and assessment that is focused on future development measures

students' relative progress, comparing yesterday's level of development to the potentiality of tomorrow's level of development with mediation in the learners' ZPD (Vygotsky, 2011).

Echoing Vygotsky (2011) who argued that each student's zone of proximal development is different based on their histories, as well as natural attributes, Dewayne expressed that schools do not take into account this diversity as they try to fix students so they meet an absolute standard:

It's a good example of putting a round peg in a square hole. Everyone has to fit that square hole, and that's the way the system is designed for 80 percent of the people. If you're the 20 percent that don't fit that square hole, there's something wrong with YOU. That's not the case. (Dewayne, SP3, 257-260)

The implication of his analogy is that expecting different shapes to fit into the same square hole is equivalent to expecting all students with diverse learning backgrounds and abilities to perform equally well on the same ability measure, a reality participants in this study described as academically limiting, discriminatory, and contributing to emotional distresses as secondary disabilities.

Dewayne emphasized that the condition of Jonathan was a "learning difference" and as such teaching must be different to match the particular learning difference. Dewayne also argued about his son's education: "It was all about how do we get him through the system and never about how do we teach him" (Dewayne, P2, 221-222). Dewayne referred to the notion of helping students meet standard age level or grade level academic curricular expectations as opposed to his preferred purpose of teaching a particular student to progress on their own line of development building on their past learning and strengths with awareness of their differences.

Parents expressed a related issue of ableism, in which superiority is attributed to those who are deemed able. They exemplified daily communications that reflected societal views from an

ableist position (Broderick & Ne’eman, 2008) and teachers’ perceptions of struggling students as not trying hard enough (Dudley-Marling & Paugh, 2010). Maria articulated that teachers may change their communication with students from an ableism mindset and absolute normative expectations of comparing students to one another to a mindset of relative expectations. She said that teachers assume that students did not work enough:

“You did not study enough,” but maybe that student did study, but the results, for some reason, is not as good as the others. What I’m trying to say is we compare students to one another, but if we could change the idea and just start with the students’ strength instead of comparing. The students would be more successful. I know it’s hard, would have to change the system. (Maria, P2, 441-445)

Maria further argued for relative progress, rather than a comparison to an age level standard of absolute progress. She said, “If the kid in Grade 3 cannot spell properly, so what? It does not matter. It does not matter. So I think the benchmarks, I think we have to stay away a little bit, you know?” (Maria, SP3, 799-800). Maria suggested that the benchmarks and academic expectations need to be less rigid and adapted to fit all learners to allow acceptance of variation in learning and development and, thus, teaching. Consistent with the literature, the focus on the difficulty to meet an absolute benchmark was perceived by some participants as inhibiting learning and development (Daniels, 2014; Smagorinsky, 2012; Vygotsky, 1993, 1997, 2011).

7.6.5. Relationships and Instruction in Learning and Development

Teachers’ guidance and instruction within the ZPD involves not only pedagogy, but also social interactions of teachers with students within the mediation process (Daniels, 2014). As a reflection of how teachers may identify students’ potential development, their ZPD, Annie, a Grade 10 student, argued, “it’s just about like teachers needing to get to know their students. (. . .) there’s a lot of students with different needs (. . .). not everyone’s going to learn the same”

(Annie, S2, 237-239). Annie elaborated: “It’s different for everyone. What works for me isn’t going to work for the student across from me (. . .) It’s just about adapting to students’ needs”

(Annie, S2, 249-253). Gayle also discussed developmental histories and contexts of learners:

People could learn more, in the way that they learn. Not paint everyone with the same brush. We all learn different, right? We all look at things differently, because we’ve come to the classroom with different backgrounds, and just a different perception of things, right? Cookie cutter doesn’t work for people that think differently. (Gayle, P2, 403-407)

Participants suggested that all people learn differently and that there was a respectful place and purpose for all learners. Categorizing students based on a scale for each grade level was limiting in Elizabeth’s view. As Gayle argued, instead of normalizing the unified standard expectations, and comparing students on an absolute scale of hierarchical levels of performances based on past learning, perhaps normalizing the differences in learning and needs may allow all learners more opportunities to grow.

Vygotsky (1993, 2011) argued for moving ahead on the path of development toward what students may be able to do or learn through mediation with the guidance of adults within relationships and social contexts. Daniels (2014) elaborated: “instruction actually creates the possibilities for development, rather than being seen as subordinate and incidental to developmental processes” (p. 519). He noted that the relationship between teachers’ instruction and students’ development is that effective instruction in schools is ahead of each student’s development. Teachers’ instruction may mediate effectively through social relationships and connectedness with students so instruction is mutually shaped to students’ learning in a reciprocal dialectical process in which both teachers and students contribute to the mediation.

7.7. Chapter Summary

In this chapter, I discussed five overarching issues. First, I discussed the paradoxes in relation to the necessity of early screening for identification of learning differences and teaching by responding to students' strengths and challenges. This early identification is distinct from testing to diagnose learning disabilities that represent a static, rather than malleable, deficit within the child. Although testing to diagnose disabilities was required of participants, it contradicted other factors, such as the lack of availability of testing, the timing of testing, the inconsistency in using malleability as a rationale for testing, and the problem of unnoticed students.

Second, I discussed students' experiences of secondary disabilities that developed as a result of not understanding their strengths and challenges before limiting self-judging perceptions, based on not meeting academic standard expectations, dominated their school experience. Third, I discussed the sociality of learning based on participants who reported seeking social interactions to support their learning. Fourth, I discussed how students experienced their relationships with their teachers in impactful ways, both negative and positive. Fifth, I discussed teachers' education based on participants' clarifications of what they needed from teachers that included: emotional consideration of learning, expertise specifically in learning diversity, and explicit, individualized, and intense teaching. Sixth and last, I discussed participants' perspectives on diversity in learning as a social just approach to address all students' strengths and challenges in learning and teaching.

Chapter 8: Conclusions

In this final chapter, first, I present five conclusions with relevant recommendations and implications. Second, I include recommendations for policy changes and action in education. Third, I present the limitations of this study. Fourth, I suggest future research. Fifth, I suggest the significance of this study. I end with a concluding summary.

8.1. Conclusions, Recommendations, and Implications

Five conclusions are presented in this section. The first conclusion is that participants did not have access to a system of early identification of learning differences. The second conclusion is that all participants in this study experienced secondary disabilities as a result of their learning difference, which they perceived as an individual deficit. The third conclusion reflects the perspectives of the participants regarding the affordances and constraints of testing for diagnosis. The fourth conclusion emphasizes that participants in this study valued the learning they experienced through social interactions and connectedness with classmates and teachers. The fifth conclusion highlights the importance of the mediation provided by teachers for participants learning and development.

8.1.1. Absence of Systemic Early Identification of Learning

As was reported in the discussion of the first theme of identifying difference in learning, the eight students who participated in this study did not benefit from systemic early identification for understanding their learning strengths and challenges, nor for the purpose of informing teachers of how to provide individualized and/or differentiated pedagogy for each learner. The students and their parents, who were highly attuned to students' learning needs, noticed a problem in students' abilities to meet grade level academic expectations and, thus, asked for professional help in their schools. In addition to the absence of systemic early identification and intervention according to parents, it appeared that schools were also not equipped to provide the parents with

relevant information for how to further support their children by accounting for their strengths and challenges within a diverse learning and teaching context.

A relevant recommendation for the absence of early identification is to consider systemizing early screening that is linked to pedagogy (Partanen & Siegel, 2014) and assessment, as emphasized by Feuerstein et al. (2010). Basic early screening may focus on strengths and challenges in foundation skills for literacy. Strengths may be built upon when developing the areas in which students experience challenges (Vygotsky, 1993, 2011).

An implication of applying systemic early identification in schools may be that teachers and parents would become further informed about how to design pedagogy, before students, peers, and teachers identify students' differences as deficits. In this study, students perceived differences as deficits leading to secondary disabilities of feelings of shame, guilt, and embarrassment that dominated their learning experience in school, although parents provided their children with supportive resources. Another implication is that applying systemic early identification may allow for differentiated pedagogy that addresses students' difficulties and also builds on their identified strengths. A strengths based approach may address all students' profiles of strengths and challenges and alleviate students' feelings of shame regarding their differences.

8.1.2. Secondary Disabilities

The second conclusion drawn from all five themes is that all eight participants and their families experienced secondary disabilities of emotional distress in early years of elementary school. This conclusion is consistent with Vygotsky's (1993) concern that the social perception of a difference has ramifications for the experiences of individuals as much as, or even more than, the primary difference. Using the term "difference," as was used by Vygotsky to distinguish it from deficit, does not imply highlighting students as different from others, but rather to note the importance of developing an acceptance of the variety of learners within each classroom that

acknowledges and supports diverse strengths and challenges.

The impact of students' emotional difficulties was negatively ingrained in how students described themselves in spite of their academic successes in high school and their strengths in non-academic areas. The secondary disabilities, for participants in this study, were a result of not being noticed as students with learning differences at an early age when they were becoming well aware of their own delays and their parents expressed concerns. Secondary disabilities were expressed not only as emotional distress, but also in some cases by developing patterns of behaviour that were perceived by some teachers as unacceptable in the classroom. Participants reported that they had been perceived at school as a "troublesome child," as "slacking off," or as unjustifiably requesting extra time.

Parents in this study noted that early screening for identification—combined with an awareness of diversity and an acceptance that all students are different—would have helped their child to perceive their differences, perhaps as Vygotsky (1993) suggested, as part of their uniqueness. Educating teachers and all students for awareness and acceptance of diversity in learning was suggested as a way to help students advocate for the educational support that they need with no shame and stigma. Within a context where it is expected that all students will experience learning challenges and strengths, and may compensate for their challenges and build on their strengths, there may not have been a need for Elizabeth to hide her learning challenges—differences, seen as deficits—throughout her five years of high school.

One implication of educating for diversity in learning and also applying systematic screening as early as possible for strengths and challenges is that teachers' and students' beliefs about students' abilities may not be based on historical perceptions of deficit thinking regarding students with learning differences (Valencia, 2010) or on low expectations for students who experience difficulties meeting academic expectations (Catts et al., 2016; Rosenthal, 1994).

8.1.3. Affordances and Constraints of Testing for Diagnosis

The third conclusion relates to the outcomes of testing for diagnosis, that is, the psychoeducational assessment that led to a diagnosis with a label of learning disabilities.

Participants reported that the diagnosis that resulted from the testing process afforded them four benefits. First, they were more noticeable in school. Second, the diagnosis of learning disability provided a language they could use to explain their difficulties to others. Third, the learning disability label replaced the “stupid” label they had assigned to themselves. Fourth, the diagnosis gave them the opportunity to consider enrolling in private schools or programs that required formal diagnosis of learning disabilities as an entry criterion.

These benefits were acknowledged by participants with the reservation that the testing, diagnosis, and label afforded solutions to problems that were created, along with emotional harm, during their first years of school. However, interview data cannot suggest whether appropriate early support could have prevented these problems that testing resolved (e.g., shame, embarrassment, and self labeling as “stupid”).

Participants reported five constraints of testing for diagnosis. First, testing for diagnosis was not universally available in schools to all students in an equitable fashion. Second, the high monetary cost of testing limited access to only those who could afford it. Third, the information that was generated and documented in the report of the psychoeducational assessment yielded a general label of learning disability with no specificity of the exact academic challenges students experienced (e.g., reading, spelling, computation). Fourth, the vast information generated through testing was not used to inform teachers for how to plan pedagogy for each student who was examined. This information was also rarely helpful for students and parents to make meaning of the differences that caused the academic challenges and the strengths that were identified. Fifth, testing generated eligibility for an IEP that included accommodations. Although

this can be included in the affordances of testing, it is included as a constraint because not all teachers implemented the accommodations. Some students felt shame in reminding teachers that they needed accommodations and in using the accommodations in public. Parents argued that the focus on the accommodations diverted school attention from the more important purpose, which was providing individualized teaching for students.

A recommendation to address the constraints of testing may be ongoing screening of how students respond to classroom pedagogy. Attention to adaptations of pedagogy, rather than focusing on providing accommodations to students so they meet the standard academic grade level expectations, may result in more meaningful learning. Vygotsky (2011) emphasized the importance of using academic assessments with pedagogy as reflective of potential future learning, rather than as a measure of past learning. Feuerstein et al. (2010) designed the mediated learning experience—including a method of dynamic assessment that focuses on pedagogy and assessment—for the purpose of modifying abilities while paying close attention to students’ patterns of responses to teaching. One implication is the need to inform teacher education and professional development with these perspectives to educate teachers on diverse methods of learning and teaching so they are better equipped to meet students’ learning differences.

8.1.4. Sociality of Learning

The fourth conclusion is based on students’ positive experiences related to socializing and connecting with teachers and peers. Participants noted that even the little positive attention and care that school personnel provided to students, who were in a vulnerable position of experiencing academic delays, had a long lasting and empowering effect on students and their families who also reflected on their own past experiences in childhood. This is tied to Vygotsky’s (1993) emphasis on the importance of attending to the social environment within which learning and developing takes place and the recognition that learning is social and is

mediated through social relationships.

Gindis (2003) and Torgesen (2002) emphasized the importance of educating teachers and school personnel about diversity in learning; not only regarding the pedagogical aspect of learning and teaching, as noted in the previous recommendation, but also regarding students' emotional wellbeing. Emotion and cognition are unified in learning and both are influenced by the classroom environment, educational histories, experiences, as well as biological personal attributes. Therefore, the implications of teachers' sensitivity and awareness of students' needs to socialize and communicate in order to learn better may help teachers design a collaborative learning environment (Mercer, 2013).

8.1.5. Malleability of Learning

Interview data revealed that all the students who experienced moderate to severe difficulties in elementary schools were academically successful in public high school. Students reported experiencing success when they had a good grade. Although their experiences of success were earned with great effort and significant support provided by their parents, each of them learned how they learn, what help they needed, and implemented strategies that worked for them. Their teachers and parents, as well as specific teaching methods, supported students in improving their learning, academic outcomes, and feeling good about themselves as learners.

Participants indicated that it was likely that students may continue to experience challenges in school. However, given their malleability and successful experiences through the mediation in their high school years, perhaps earlier mediation would have helped them to have more experiences of academic successes in school. This finding supports the recommendation to focus more attention on systemic early identification that is linked with classroom pedagogy.

8.2. Recommendations

The conclusions of this study support the suggestion to reconsider the use of the term “learning disabilities.” One option may be to foreground diverse learning and teaching needs and to create learning environments that are responsive to these differences. This may reflect a shift of focus from a deficit in the individual to a spectrum of strengths and challenges all students may possess and use for learning in school in a democratic and diverse society (Broderick & Ne’eman, 2008; Lalvani & Broderick, 2013). To be successful, students may build on their strengths, as well as be aware of their own needs that stem from their challenges. In a diverse learning and teaching context, students may be encouraged to negotiate, select, and create their preferred learning strategies to facilitate their successful experiences. In addition to the notion of deficit focus, Siegel (1988a) argued that the term learning disability does not specify the difficulty students experience, and further that “[t]he concept of learning disability is problematic because what we are dealing with, in reality, is a continuum, not discrete entities” (p. 265). The generality of the term “learning disabilities” reflects both a purpose and a limitation: the purpose appears to be labeling and the limitation is that it does not provide the information required to inform teaching and learning given specific curriculum based challenges.

A second recommended change in policy, based on interview data, is the distinction between: 1) processes for the systemic universal early screening for the identification of strengths and challenges, and 2) processes of testing for diagnosis that involve psychoeducational assessment. Additional clarifications at the level of the BC Ministry of Education would help school personnel distinguish between these different processes both in terms of awareness of the different methods of assessment, including the purpose, method, and the potential meaning of the data gathered from the assessment for teachers, parents, and students, and in making decisions about selecting early screening methods.

A third recommended change in policy is to systematically use evidence based interventions that are already used successfully in private specialized schools in the BC public school system. Educating teachers about the range of interventions, how to use them, and how to implement programs would likely increase the possibility for diverse learning and teaching.

In regard to action in education, this study supports a recommendation to systemize early screening, the identification of students' strengths and challenges, and early intervention as early as in Kindergarten or Grade 1. In addition, the benefits of early identification of all students' strengths and challenges must be acted upon by teachers and parents and focused on future academic learning and development (Partanen & Siegel, 2014) and, further, as argued by Torgesen (2002), for emotional development.

8.3. Limitations of this Study

The first limitation of this study is that study results are limited to participants of this study. The purpose of this generic qualitative research, consistent with a sociocultural lens, is not to generalize to other sociocultural contexts and/or to the wider population. Indeed, the themes discussed in this study may not be useful to describe the perceptions and experiences of other students and parents in BC and/or in other provinces in Canada. The analysis of themes and specific conclusions based on successes or challenges experienced by participants in this study, given their unique personal histories as also shaped by the special education policies of the BC Ministry of Education, are limited to the participants of this study.

The second limitation is that the population of this study is not representative of all parent of students and students with learning disabilities. The design of this study required the participation of students with one of their parents. Participation of all eight dyads was initiated by parents and students who willingly agreed to join their parents. Parents were committed to participating in this study and, although their children experienced extreme hardship throughout

their school years, the participants in this study likely reflect parents with both financial and knowledge based resources and students who benefitted from their parents' ability to navigate both educational systems and psychological services. Moreover, these parents were educated professionals who had the means to fund extra supports and could drive their child to distant schools. Some of the parents also had previous personal experiences with dyslexia or were aware of students with learning differences when they were in school. In addition, in sharing their vulnerabilities, these participants were not afraid or embarrassed to describe their hardships, to cry, show anger, and admit their sadness and frustrations.

Additionally, there were other parents who wanted to participate in interviews, but their child was, as they described it, too shy to speak about their difficult experiences. However, given that the participants in this study reported harsh experiences, it is worrying to imagine the experiences of students who are shy or who have less support. As noted by Mark and by Dewayne, the parents and students who chose to participate in this study were likely to be atypical both in their provision of support and their coping abilities. Participants also shared examples of other students who did not have parental support and argued that their experiences would be more difficult as a result. While it is possible to consider that, unlike participants in this study, there may be students with learning disabilities who have had positive experiences, the amount of difficulty reflected in the experiences and perceptions of these participants is a concern.

The third limitation is that only one method of collecting data was used. While the breadth and depth of interviews provided rich data, utilizing different methods of collecting data may have added more nuances. That said, the method of interviewing was enriched by the research design. The first interview was semi-structured while the second was a collaborative interview. This allowed more discussion of meanings and revalidating or clarifying issues that were briefly

discussed or mentioned in the first interviews. The joint student-parent third interview also created a different setting to share ideas and it helped create closure together. I intentionally chose not to include an analysis of documents, such as psychoeducational reports or IEPs, as sources of additional data. While this may be helpful in future research, the focus of this study was on the participants' experiences of learning and teaching in school, rather than on anything having to do with the process of the psychoeducational assessment or its results.

Finally, the fourth limitation of this study is that findings are based on eight student-parent dyads. Although 16 participants may seem a limited number of participants, the design of this study allowed me to meet with each participant three times and with each dyad for a total of five meetings. The first two interviews were conducted separately with each student and parent, and the third was a joint interview with both student and parent. Revisiting issues raised in the first interview again in the second interview, and then again revisiting issues in the joint interview with student and parents together also contributed to a depth of understanding participants' experiences and clarified their perspectives.

8.4. Suggestions for Future Research

The first suggestion for future research is a longitudinal study conducting a series of follow-up interviews with these eight student-parent dyads one or two years following their graduation from high school. A follow up exploration of their experiences pursuing post-secondary education and/or careers may add a retrospective perspective on how their early experiences influenced students' choices in postsecondary years. These perspectives may reveal patterns that link early experiences with later ones. Existing research on adult education has been informative for advocating for young students and influencing change in their learning contexts. Continuing to speak with adults who had learning difficulties was shown by Gerber and Reiff (1991) and Gerber (2012) to provide a more pronounced longitudinal perspective.

The second suggestion for future research is a generic qualitative study observing and interviewing students, parents, and teachers in a learning setting where the recommendations from this study already inform the learning environment in order to find out how these learning settings impact students' learning and development. For this study it would be necessary to identify a particular school, public or private, that is committed to diversity of learning based on early identification of strengths and challenges, and building on strengths to overcome challenges, along with the use of assessments that are integrated with ongoing instruction.

8.5. Significance of this Study

Five contributions may make this study significant. First, this study accessed in-depth lived experiences of students and their parents about their learning disabilities within their schools, with friends, and at home. Examining lived experiences as shared by participants revealed nuances and deep feelings that helped make sense of their experiences. Second, this study used sociocultural theory as a lens to broaden and specify the examination of learning disabilities beyond the individualistic investigation of students' cognitive and academic abilities based on the results of psychoeducational assessments. Using sociocultural theory as a lens provided a theoretical framework that helped in making sense of the academic and emotional issues described by the participants. Third, interview data provided details of the process of mediation experienced by students through their highly supportive parents. The importance of mediation is documented in relevant literature and this study's interview data provides additional validation for the effectiveness of these processes (e.g., Feuerstein, 2010; Vygotsky, 2011). Fourth, although students experienced academic successes in high school due to intense supports provided by their parents, this study also highlights the potential ongoing risks for participants given their experiences in schools as well as the potential risks to other students who have little or no access to such supports. Fifth, this study revealed the potential emotional damage for

students who experience secondary disabilities in BC schools, as well as in other locations that have fewer resources than BC, Canada. Considering the high standard of living associated worldwide with life in Canada, one would not expect Canadian students with learning differences to experience their differences as deficits with little to no systemic professional identification and support procedures in place. Sixth, students with learning disabilities, in this study, seemed to have significant strengths that they were eager to demonstrate and share. This suggests that inquiring students with learning difficulties about their strengths may support them to become more aware of their strengths in addition to their difficulties. Seventh, this study suggests balancing the focus on learning differences by including strengths and emphasizing the integrated nature of learning and teaching. In other words, if we measure learning outcomes, we must also measure the teaching that led to the learning outcomes.

8.6. Concluding Summary

Vygotsky's sociocultural theory emphasizes the potential of learning to influence development, and views the student's abilities in his or her relation with a teacher. Teaching and instruction that are built on past learning with future potential in mind enable students to learn with guidance. Learning and development are mediated processes in dynamic and reciprocal relationships between individuals within all contexts in which they live. However, there is a special quality to student-teacher relationships. The potentially life-long effects of the experience of secondary disabilities that result from considering differences as deficits, both by students and teachers, may be internalized and then shape future learning and development. This consequence of the meanings associated with learning differences is likely to have material effects on students' futures.

Finding ways to respect students' strengths and challenges while acknowledging the influences of the learning environment may help to address some of the effects of difficult

learning experiences. Beyond pondering the paradoxes in the promises of diagnosing learning disabilities, participants also suggested the fulfillment of these promises by ensuring adequate resources for teachers to provide instruction linked to assessments and for all students to achieve their optimal levels of learning and development. Rethinking policies that support an equity framework that recognizes and supports diverse learning is crucial not only in contributing to the development of healthy individuals but also for the healthy development of our culture and our social institutions.

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Appendices
Appendix A: Recruitment Letter



Recruitment Letter

The Intersection of Sociocultural Processes and Learning Disabilities

Dear _____ ,

Thank you for distributing the attached information to potential participants. This document includes all the necessary information to help them decide if they are interested to participate in this research.

In general, this research involves a total of three interviews for each participant. Two of the interviews are with each of the parents/legal guardians and students and one interview is with both of them together. In addition, before the interviews there will be a short introductory meeting, and after the interviews there will be a closure meeting with both parent/legal guardian and student.

Further details about this research are included in the Introduction Letter attached.

Sincerely,

Hadas Av-Gay

Appendix B: Introduction Letter



Introduction Letter

The Intersection of Sociocultural Processes and Learning Disabilities

I. Who is conducting the study?

Supervisor : Jennifer Vadeboncoeur, Ph.D. Department of Educational & Counselling Psychology, and Special Education UBC

Co-Investigator: Hadas Av-Gay, Doctoral student. Department of Educational & Counselling Psychology, and Special Education UBC

II. Why are we doing this study?

I am a doctoral student in the Department of Educational & Counselling Psychology, and Special Education at UBC. I am interested to interview students and parents/legal guardians about their experiences with learning disabilities. The purpose of this research is to get a clearer understanding of learning disabilities from perspectives and experiences of students with learning disabilities and their parents/legal guardians.

III. What happens if you say: “Yes, I want to be in the study”?

If you decide to take part in this research study, you will be interviewed about your experiences of having learning disabilities or being a parent/legal guardian of a child with learning disabilities. There will be three interview sessions of 60-90 minutes each. Interviews will take place in a private place that is comfortable to you. Before the three interviews the researcher and each participant will meet for a 30-minutes introductory meeting. After the interviews the researcher and parent/legal guardian and student will meet for a closure meeting for about 30 minutes.

In the first interview each of you (student and parent/legal guardian) will be interviewed about your perspectives and experiences of learning disabilities. In the second interview we will further discuss ideas you described in the first interview. In the third interview we will summarize the previous two interviews with both of you – parent/legal guardian and student.

As a courtesy honorarium to thank you for your participation you can choose to receive \$10 for each of the three interviews, or, a \$50 movie ticket gift card.

IV. Study results

The results of this study will be reported in a PhD dissertation and may also be published in journal articles and books after the completion of this study. At the completion of this research study a summary of the study and an electronic copy of the dissertation will be offered to you.

V. Is there any way being in this study could be bad for you?

We do not think there is anything in this study that could harm you or be bad for you.

Some of the questions we ask may seem sensitive or personal. You do not have to answer any question if you do not want to.

VI. Will being in this study help you in any way?

You may be helped in this study by taking the time to reflect on your experiences during the interviews. However, even if taking part in this study will not help you now, others, in the future, may benefit from what we learn in this study.

VII. How will your identity be protected and your privacy be maintained?

We respect your confidentiality. Information that discloses your identity will not be released without your consent unless required by the law. Participants will not be identified by real name in any reports of the completed study. A pseudonym of your choice will be assigned to you. All recordings of interviews and transcriptions kept on a computer will not include your real name.

The interviews will be audio recorded and then transcribed by Hadas Av-Gay or by another confidential professional transcriber. A printed copy of the transcribed interviews will be shared with you.

We will ensure the confidentiality of the audio recordings. No other person than investigators mentioned above will have access to the audio recordings. The audio recording will be password protected and encrypted.

Audio recordings and electronic documents of transcripts will be stored at a UBC facility for at least five years after the completion of this study. After this period the audio recordings and electronic transcripts will be deleted to ensure that confidentiality will not be breached.

At any point in the study, if you reveal that there has been an incident that involves abuse and/or neglect of a child or an elderly person (or that there is a risk of such occurring) please be advised that the researcher must, by law, report this information to the appropriate authorities.

VIII. Who can you contact if you have questions about the study?

If you have any questions or concerns about what we are asking of you, please contact the study leader or the Co-Investigator. The names and telephone numbers are listed at the top of the first page of this form.

IX. Who can you contact if you have complaints or concerns about the study?

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604- 822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on you.

Dr. Jennifer Vadeboncoeur, Supervisor Signature

Hadas Av-Gay, Doctoral Student Signature

Appendix C: Consent Form



Consent Form

The Intersection of Sociocultural Processes and Learning Disabilities

I. Who is conducting the study?

Supervisor : Jennifer Vadeboncoeur, Ph,D
Department of Educational & Counselling Psychology, and Special
Education UBC

Co-Investigator: Hadas Av-Gay, Doctoral student
Department of Educational & Counselling Psychology, and Special
Education UBC

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If you decide to take part in this research study, you will be interviewed about your experiences of having learning disabilities or being a parent/legal guardian of a child with learning disabilities. There will be three interview sessions of 60-90 minutes each. Interviews will take place in a private place that is comfortable to you. Before the three interviews the researcher and each participant will meet for a 30-minutes introductory meeting. After the interviews the researcher and parent/legal guardian and student will meet for a closure meeting for about 30 minutes.

In the first interview each of you (student and parent/legal guardian) will be interviewed about your perspectives and experiences of learning disabilities. In the second interview we will further discuss ideas you described in the first interview. In the third interview we will summarize the previous two interviews with both of you – parent/legal guardian and student.

As a courtesy honorarium to thank you for your participation you can choose to receive \$10 for each of the three interviews, or, a \$50 movie ticket gift card.

IV. Study results

The results of this study will be reported in a PhD dissertation and may also be published in journal articles and books after the completion of this study. At the completion of this research study a summary of the study and an electronic copy of the dissertation will be offered to you.

V. Is there any way being in this study could be bad for you?

We do not think there is anything in this study that could harm you or be bad for you. Some of the questions we ask may seem sensitive or personal. You do not have to answer any question if you do not want to.

VI. Will being in this study help you in any way?

You may be helped in this study by taking the time to reflect on your experiences during the interviews. However, even if taking part in this study will not help you now, others, in the future, may benefit from what we learn in this study.

VII. How will your identity be protected and your privacy be maintained?

We respect your confidentiality. Information that discloses your identity will not be released without your consent unless required by the law. Participants will not be identified by real name in any reports of the completed study. A pseudonym of your choice will be assigned to you. All recordings of interviews and transcriptions kept on a computer will not include your real name.

The interviews will be audio recorded and then transcribed by Hadas Av-Gay or by another confidential professional transcriber. A printed copy of the transcribed interviews will be shared with you.

We will ensure the confidentiality of the audio recordings. No other person than investigators mentioned above will have access to the audio recordings. The audio recording will be password protected and encrypted.

Audio recordings and electronic documents of transcripts will be stored at a UBC facility for at least five years after the completion of this study. After this period the audio recordings and electronic transcripts will be deleted to ensure that confidentiality will not be breached.

At any point in the study, if you reveal that there has been an incident that involves abuse and/or neglect of a child or an elderly person (or that there is a risk of such occurring) please be advised that the researcher must, by law, report this information to the appropriate authorities.

VIII. Who can you contact if you have questions about the study?

If you have any questions or concerns about what we are asking of you, please contact the study leader or the Co-Investigator. The names and telephone numbers are listed at the top of the first page of this form.

IX. Who can you contact if you have complaints or concerns about the study?

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604- 822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on you. Your signature below indicates that you have received a copy of this consent form for your own records.

- Your signature indicates that you consent to participate in this study.

Participant Signature **Date**
(Student or Parent / Legal Guardian Signature)

Printed Name of the Participant (Student or Parent / Legal Guardian) signing above

Dr. Jennifer Vadeboncoeur, Supervisor Signature

Hadas Av-Gay, Doctoral Student Signature

Appendix D: First Interviews Protocols

Student First Interview Protocol

Welcome _____, thank you for meeting with me today. Before we begin, I'd like to check in with you about the consent form. Do you have any questions about consent? Please remember your participation is voluntary and that if a question troubles you, you can let me know if you'd like to skip it.

In this interview, I'd like to **learn from you** about learning disabilities.

Patton (2002) suggests starting with general and open-ended questions to allow participants to say first what is significant for them. This general start may also create a non restrictive style of conversation in which participants are more likely to talk freely and elaborate. (RQ1, RQ3)

1. Please share your **thoughts** on what does learning disability mean to you?
2. How do you **feel** about having a learning disability?

Prefatory comment: thanks for sharing....

I am interested about your experiences of having learning disabilities in three different contexts: in schools, with family, and with friends. I have the questions written out here.... to guide me, however, please feel free to talk about whatever comes to your mind... ask questions... comment on anything you what whenever you want.

School Context:

Possible prefatory comment: Let's start with the school context, okay? You mentioned
Tell me more about OR-

3. Please share with me your experiences of having learning disabilities in school (RQ1).

I listen actively and if needed, when fitting the flow and content of the responses of the interviewee, I use the following probes:

"Probes are used to deepen the response to a question, increase the richness and depth of responses, and give cues to the interviewee about the level of response that is desired" (Patton, 2002, p. 373). Probes are basically follow up questions.

- a. What are your favorite parts of school?
- b. What parts of school are most difficult?
- c. In what academic areas do you experience your learning disabilities?
- d. Please describe the help you receive at school
- e. What did school personnel tell you about your LD?
- f. What do you know about your Individualized Educational Plan?
- g. Please describe your relationships with your teachers
- h. Please share with me examples of how were teachers supportive you?
- i. Please share with me examples of how were teachers not supportive of you?
- j. How do you think your teachers may have impacted your learning?

Possible prefatory comment: You mentioned your diagnosis... here is the report you shared with

me ... thanks for sharing your psychoeducational report with me. **Based on this report**, (RQ1, RQ3)

- 4.a. What do you think this report tells you about your strengths?
- 4.b. What do you think this report tells you about your challenges?
- 4.c. How was the **testing process** for you? (RQ1)

I am interested in your **opinion** about the testing process (RQ1)

For clarity of analysis of themes and for tapping on variety of information, it is better to ask specifically about opinion, beliefs, thoughts, and feelings in an open-ended questions (Patton, 2002).

- 5.a. Based on your opinion, tell me in what ways was the testing process helpful for you?
- 5.b. Based on your opinion, tell me in what ways was testing process not helpful for you?

Possible prefatory comment: The outcome of testing was your diagnosis of LD (RQ1)

- 6.a. Please tell me how being diagnosed was helpful for you?
- 6.b. Please tell me how being diagnosed was not helpful for you?

Possible prefatory comment: Now, Let's talk about what you really like and don't like in school. (RQ1, RQ3)

- 7.a. Please tell me what academic subjects do you like?
 - Why do you like them?
- 7.b. Please tell me what academic subjects you don't like?
 - Why don't you like them?

Possible prefatory comment: We talked about your academic preferences. Now I would like you to **think** about your own **strengths and challenges**. (RQ1, RQ3)

- 8.a. Tell me about your strengths in the school context.
- 8.b. Tell me about your challenges in the school context.
- 8.c. Tell me about experiences where you felt successful in school. Why?
- 8.d. Tell me about experiences where you felt unsuccessful in school. Why?

Possible prefatory comment: We talked about your diagnosis of learning disability, and how helpful or unhelpful it was for your learning. Now I want to ask you a slightly different question. I want you to think about the label of learning disability. (RQ1, RQ3)

- 9.a. What does the **label "Learning Disability"** mean to you in relation to your life in school?
- 9.b. How do you **feel** about having a learning disability label?

As the interviewed progresses I may move from the spontaneous conversation style to using the interview guide style and towards the end of the interview I may use more of the standardized open-ended interview style. Patton, (2002) suggested this option of combining approaches, "using the informal conversational interview early in an evaluation project, followed midway through by an interview guide, and then closing the program evaluation with a standardized open-ended interview to get systematic information from a sample of participants" (p. 347).

Family Context:

Possible Prefatory Comment: I am interested to hear about your experiences with your family. (RQ1)

10. How do you **experience** your learning disabilities within your family context?
 - a. In what ways having LD impacts your relationships with your family?
 - b. How has your family been supportive of you in relation to your LD?
 - c. Tell me about times, if there were any, when you wished you had more support from your family in matters relating to your LD?

Possible Prefatory Comment: I want you to think about your **strengths and challenges** within your family context. (RQ3)

- 11.a. Tell me about any of your strengths in your family context.
- 11.b. Tell me about any of your challenges in your family context.
- 11.c. Tell me about experiences where you felt successful in your family context. Why?
- 11.d. Tell me about experiences where you felt unsuccessful in your family context. Why?
12. What is the meaning of LD to you in the context of your family? (RQ1)

Friends Context:

13. How do you **experience** your learning disabilities when you are with your friends? (RQ1)
 - a. In what ways having LD impacts your relationships with friends?
 - b. How have your friends been supportive of you in relation to your LD?
 - c. Tell me about times, if there were any, when you wished you had more support from your friends in matters relating to your LD?

Possible Prefatory Comment: I want you to think about your **strengths and challenges** when you are with your friends. (RQ3)

- 14.a. Tell me about any of your **strengths** when you are among your friends?
- 14.b. Tell me about any of your **challenges** when you are among your friends?
- 14.c. Tell me about experiences where you felt successful when you were with your friends. Why?
- 14.d. Tell me about experiences where you felt unsuccessful when you were with your friends. Why?
15. What is the meaning of LD to you in the context of your friends? (RQ1)

Closure:

16. What are your favorite activities or hobbies?
17. Before we end this interview I'm interested to hear about your future plans. What are your dreams for the future? (RQ1)
18. I have asked lots of questions, thanks for sharing so much. Are there any questions you wished I had asked but I didn't?
19. What questions do you have of me?

Say closure remarks as relevant to the situation.

Remind them that before the second scheduled interview they will receive the transcript of this interview to review.

Hand them the greeting - thank you- card with the honorarium.

Parent First Interview Protocol

Welcome _____, thank you for meeting with me today. Before we begin, I'd like to check in with you about the consent form. Do you have any questions about consent? Please remember your participation is voluntary and that if a question troubles you, you can let me know if you'd like to skip it.

In this interview, I'd like to **learn from you** about learning disabilities based on your experience as _____ parent.

Patton (2002) suggests starting with general and open-ended questions to allow participants to say first what is significant for them. This general start may also create a non restrictive style of conversation in which participants are more likely to talk freely and elaborate. (RQ2, RQ4)

1. Please share your **thoughts** on what does learning disability mean to you?
2. How do you **feel** about your child having a learning disability?
 - 2a. How does your child feel about having a learning disability?

Prefatory comment: thanks for sharing....

I am interested about your child's experiences in three different contexts: in schools, with family, and with friends. I have the questions written out here.... to guide me, however, please feel free to talk about whatever comes to your mind... ask questions... comment on anything you want whenever you want.

School Context:

Possible prefatory comment: Let's start with the school context, okay? You mentioned
Tell me more about OR-

3. Please share with me your child's experiences of having learning disabilities in school (RQ2).
I listen actively and if needed, when fitting the flow and content of the responses of the interviewee, I use the following probes:

"Probes are used to deepen the response to a question, increase the richness and depth of responses, and give cues to the interviewee about the level of response that is desired" (Patton, 2002, p. 373). Probes are basically follow up questions.

- a. What are your child's favorite parts of school?
- b. What parts of school are most difficult for your child?
- c. In what academic areas does your child experience learning disabilities?
- d. Please describe the help your child receives at school
- e. What did school personnel tell you and your child about her/his LD?
- f. What do you know about your child's Individualized Educational Plan?
- g. Please describe your child's relationships with her/his teachers
- h. Please share with me examples of how were teachers supportive your child?
- i. Please share with me examples of how were teachers not supportive of your child?
- j. How do you think teachers may have impacted your child's learning?

Possible prefatory comment: You mentioned your child's diagnosis... here is the report you shared with me... thanks for sharing your child's psychoeducational report with me. **Based on**

this report, (RQ2, RQ4)

- 4.a. What do you think this report tells about your child's strengths?
- 4.b. What do you think this report tells about your child's challenges?
- 4.c. How was the **testing process** for your child?

Possible Prefatory Comment: I am interested in your **opinion** about the testing process (RQ2) For clarity of analysis of themes and for tapping on variety of information, it is better to ask specifically about opinion, beliefs, thoughts, and feelings in an open-ended questions (Patton, 2002).

- 5.a. Based on your opinion, tell me in what ways was the testing process helpful for your child?
- 5.b. Based on your opinion, tell me in what ways was testing process not helpful for your child?

Possible prefatory comment: The outcome of testing was your child's diagnosis of LD (RQ2)

- 6.a. Please tell me how being diagnosed was helpful for your child?
- 6.b. Please tell me how being diagnosed was not helpful for your child?

Possible prefatory comment: Now, Let's talk about what your child really likes and doesn't like in school. (RQ2, RQ4)

- 7.a. Please tell me what academic subjects does your child like?
 - Why does he/she like them?
- 7.b. Please tell me what academic subjects does your child dislike?
 - Why doesn't your child like them?

Possible prefatory comment: We talked about your child's academic preferences. Now I would like you to **think** about your child's **strengths and challenges**. (RQ2, RQ4)

- 8.a. Tell me about your child's strengths in the school context.
- 8.b. Tell me about your child's challenges in the school context.
- 8.c. Tell me about experiences where your child felt successful in school. Why?
- 8.d. Tell me about experiences where your child felt unsuccessful in school. Why?

Possible prefatory comment: We talked about your child's diagnosis of learning disability, and how helpful or unhelpful it was for his/her learning. Now I want to ask you a slightly different question. I want you to think about the label of learning disability. (RQ2, RQ4)

- 9.a. What does the **label "Learning Disability"** mean to you in relation to your child's life in school?
- 9.b. How do you **feel** about your child's having a learning disability label?
- 9.c. How does your child **feel** about having a learning disability label?

As the interviewed progresses I may move from the spontaneous conversation style to using the interview guide style and towards the end of the interview I may use more of the standardized open-ended interview style. Patton, (2002) suggested this option of combining approaches, "using the informal conversational interview early in an evaluation project, followed midway through by an interview guide, and then closing the program evaluation with a standardized open-ended interview to get systematic information from a sample of participants" (p. 347).

Family Context:

Possible Prefatory Comment: I am interested to hear about your child's experiences within your family.

10. How does your child **experience** his/her learning disabilities within your family context? (RQ2)

- a. In what ways having LD impacts your child's relationships with your family?
- b. How has your family been supportive of your child in relation to his/her LD?
- c. Tell me about times, if there were any, when your child wished he/she had more support from your family in matters relating to your LD?

I want you to think about your child's **strengths and challenges** within your family context. (RQ4)

- 11.a. Tell me about any of your child's strengths in your family context.
- 11.b. Tell me about any of your child's challenges in your family context.
- 11.c. Tell me about experiences where your child felt successful in your family context. Why?
- 11.d. Tell me about experiences where your child felt unsuccessful in your family context. Why?
12. As a parent, what is the meaning of LD to you, in the context of your family? (RQ1, RQ2)

Friends Context:

13. How does your child **experience** his/her learning disabilities when he/she is with friends? (RQ2)

- a. In what ways having LD impacts your child's relationships with friends?
- b. How have your child's friends been supportive of him/her in relation to his/her LD?
- c. Tell me about times, if there were any, when you wished your child had more support from his/her friends in matters relating to LD?

Possible Prefatory Comment: I want you to think about your child's **strengths and challenges** when he/she is with his/her friends. (RQ4)

- 14.a. Tell me about any of your child's **strengths** when he/she is among his/her friends?
- 14.b. Tell me about any of your child's **challenges** when he/she is among his/her friends?
- 14.c. Tell me about experiences where your child felt successful when he/she were with his/her friends. Why?
- 14.d. Tell me about experiences where your child felt unsuccessful when he/she were with his/her friends. Why?
15. What is the meaning of the LD label to your child in the context of his/her friends? (RQ2)

Closure:

16. What are your child's favorite activities or hobbies?
17. Before we end this interview I'm interested to hear about your child's future plans. What do you think are his/her dreams for the future? (RQ2)
18. I have asked lots of questions, thanks for sharing so much. Are there any questions you wished I had asked but I didn't?
19. What questions do you have of me?

Say closure remarks as relevant to the situation.

Remind them that before the second scheduled interview they will receive the transcript of this interview to review.

Hand them the greeting - thank you- card with the honorarium.

Appendix E: Second Interviews Protocol

Second Interview Protocol for Students and Parents Separately

Thank you for meeting with me again today. Before we begin, I'd like to check in with you about the consent form. Do you have any questions about consent? Please remember your participation is voluntary and that if a question troubles you, you can let me know if you'd like to skip it.

The purpose of this interview is to further discuss with you few ideas from our first interview. *My intention for this interview is as described by Patton (2002) "to capture how those being interviewed view the world, to learn their terminology and judgments, and to capture the complexities of their individual perceptions and experiences" (p.348). In order to remain committed to that purpose of the first and second interviews I'll pay extra attention not to promote my opinions, thoughts, and feelings, in a way that may influence their position.* Please ask me as many questions as you may have. I encourage you to be curious and feel comfortable to help me guide our discussion.

These are the ideas you shared with me last time:

Present to them several themes by using their own words they used in the previous interview.

Write each idea they shared (verbatim) on a cue card and present several ideas to them. If needed, review briefly each idea using words they used in their first interview. Ask them about further information about each theme and possible relationship among the themes.

To guide the discussion on each and all of the themes I may use some of the following questions, as it may be appropriate to the topic discussed and at the time of the interview. It is difficult to predict how this discussion will unfold and plan a standardized open-ended interview. The nature of this interview will be "the informal conversational interview relies entirely on the spontaneous generation of questions in the natural flow of an interaction (Patton, 2002, p. 342), while I keep in mind the research questions and my neutral unbiased position.

The following possible probes may be used in order to cover: thoughts, feelings, beliefs, and knowledge as appropriate (Patton, 2002).

- 1) What theme would you like to discuss first?
- 2) Please tell me a little more about this incident/issue/concept/thought.
- 3) Please share with me other examples of this issue.
- 4) What actually happened/ what is the problem here/ what is the conflict here?
 - How do you feel about it now?
 - How did you feel about it then?
 - What do you think about it now?
 - What were your thoughts at the time when it happened?
 - If you could change the past, how would you like it to have happened?
- 5) How do you think other people may see this issue from their point of view?
 - Teachers, Parents, Other students
- 6) Tell me how you have seen (the issue/conflict, e.g., LD) presented in the media or literature?
- 7) How do you think this issue might be perceived in other cultures?
- 8) If we look back in history at how this issue (e.g., LD) evolved, what trend do you think we may notice?
- 9) If you were to reinvent anything to make things better in regard to LD, what would that be? Why?

Say closure remarks as relevant to the situation.

Remind them that before the third scheduled interview they will receive the transcript of this interview to review if they wish.

Appendix F: Third Interview Protocol

Third Interview Protocol for Students and Parents Together

Welcome both of you (parent and student), thank you for meeting with me today. Before we begin, I'd like to check in with you about the consent form. Do you have any questions about consent? Please remember your participation is voluntary and that if a question troubles you, you can let me know if you'd like to skip it.

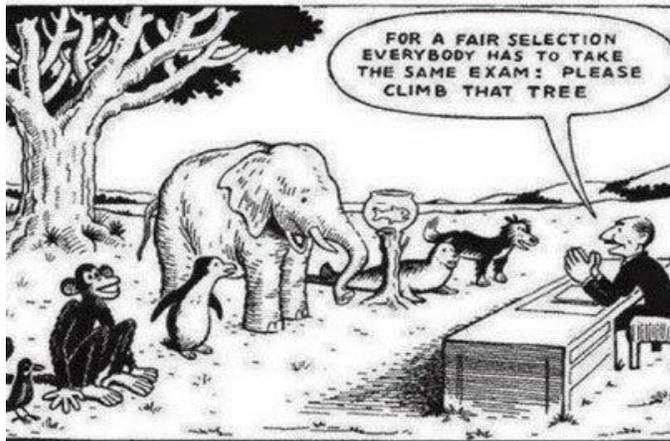
The purpose of this meeting is to **integrate and share** our discussions and get more clarity on your experiences and perspectives in regard to learning disabilities.

I invite you each to choose any topic we discussed that you would like to discuss together if you feel comfortable to further explore in the forum of three of us together.

In order to respect your confidentiality I will not bring up here ideas you shared without you initiating a discussion about them. I will let you decide what themes, experiences, and perspectives to share.

In this interview I will share a little bit of my own perspectives and interpretations after parent and student have discussed issues and had enough time to co-construct meanings. At the end of the interview after they have shared their thoughts, feelings, and integrated ideas, I may suggest discussion on the following:

Show the cartoon and ask –



Our Education System

What does this mean to you?

Closure of the topic discussed as appropriate.

Remind them that after they receive the transcript of this interview we will meet again briefly to answer any final questions they may have.

Appendix G: Transcriber Confidentiality Agreement

Transcriber Confidentiality Agreement

I agree to prepare transcriptions of audio interviews for Hadas Av-Gay at a rate of \$ ____ per hour or page. I understand that the audio contain personal and confidential information. As part of this contract, I agree to keep this information confidential and to not disclose or disclose the participants' identifiers or the content of their interviews.

Transcriber's full name (Please Print)

Transcriber's Signature

Date