Supporting Student Neurodiversity in Teacher Practice

by

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Abstract

Neurodiversity is a recent term used to signify a diversity of thought for individuals with intellectual diagnoses such as autism and ADHD. This is a significant shift from historical conceptualizations of these conditions, which were ground in medical or charity models, and supported a deficit-based, 'othering' narrative, centering the voices and ideas of (often) neurotypical 'experts'. In contrast, the concept of neurodiversity reframes these conditions as natural and valuable variances in thought. In doing so, the focus shifts to the expertise and agency of neurodiverse individuals themselves. The concept also aligns with overarching critical theories such as critical disability studies and critical pedagogy. However, these emerging ideas are just beginning to take hold in educational settings and shape teacher practice.

This study explored the educational experiences of four neurodiverse young adults (each on the autism spectrum). The interviews and findings focused on two key questions: what are the lived educational experiences of neurodiverse students? and what strategies can teachers incorporate into their pedagogy to best honour the neurodiverse qualities of autistic students? Centering the knowledge and experience of neurodiverse individuals, rather than external sources of 'expertise', was a key goal in the critical mandate of this study.

Participant responses addressed four major themes: questioning the purpose and benefactor of education, exploring the impact of appointed versus natural expertise, understanding neuro-specific challenges, and recognizing the power of relationships. Five significant suggestions for pedagogy also emerged, providing ideas about best practices for all students, not just those that identify as neurodiverse. These suggestions focus on providing heterogeneous learning opportunities, honouring neurodiverse students (and their allies) as experts of their learning needs, supporting self-advocacy, recognizing the complexity of neuro-specific challenges, and focusing on genuine and open relationships.

Preface

This thesis is an original work by Jennifer Shwetz. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name "Supporting Student Neurodiversity in Teacher Practice", No. Pro00091207, August 15, 2019.

Dedication

For Jacqueline and Margaux, whose arrival made this project slightly more prolonged, but

infinitely more meaningful.

Acknowledgements

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Chapter 1 - Introduction

The mainstream social conception of intellectual and emotional disability has evolved over time. Initially considered a reflection of amorality through a religious lens, disability later came to be viewed through a medical lens (Withers, 2012; Hamraie, 2015). In both cases, the disabled experience was regarded as insignificant in comparison to the 'expertise' of those who created and maintained the categorizations of 'normal' and 'abnormal'. Although there is an unavoidable medical reality to most disabilities, advocates argue that many significant challenges presented to individuals with disabilities are a result of social norms and complex power relations, rather than the realities of the disability itself.

Over the last several decades, this conceptualization has shifted yet again, leading to ideological models that recognize the expertise of those most intimately impacted by disability, acknowledge the social barriers that prevent individuals with disability from accessing their full potential, and call for a new approach - one that is empowering for both individuals with disabilities, and the communities that they are a part of. These new models, such as critical disability theory and the social constructivist model, draw heavily from broader anti-oppressive, critical theories. Neurodiversity is one such model.

The concept of neurodiversity operates from the basic principle that "minds are best understood in terms of variety and difference rather than deviations from an imagined norm" (Price, 2011, p. 4). This approach to neurological disability has most commonly been connected with the autism spectrum, but can also be expanded to include mental illness or ADHD. Fundamentally, neurodiverse theory frames these conditions in a way that recognizes their generative aspects, and addresses social biases against individuals with these disabilities, while still examining ways to mitigate the real-life challenges associated with each particular condition. Central to this framing is a prioritization of the voices and experiences of neurodiverse individuals, as the theory recognizes that their lived experiences provide the most

meaningful perspectives. Furthermore, it is their lives that are the most significantly impacted by any theories or conclusions determined through this work.

In defining neurological disability this way, the concept of 'normal' is troubled, placing normalcy on a sliding scale dependent on the lived experience of any given individual. Additionally, the commonly held framing of disability as a personal deficit is replaced by a recognition that neurodiverse individuals are impaired as much (if not more) by social barriers, rather than by personal impairments.

This concept may hold significant bearing on the way we educate neurodiverse individuals. Unencumbered by a belief that the role of education should be to mould each unique student into a homogenized and arbitrary 'ideal', teachers are open to explore the unique strengths of their students, promote pro-social connections for *all* students, and celebrate the diversity that a variety of ways of thinking bring to classrooms and communities.

However, in spite of strides being made towards an educational system that values diversity and strives for meaningful and celebratory inclusion of varied ways of thinking and being, supporters of a critical approach to inclusion argue that a neoliberal adoption of the concept of inclusion has led to educators merely paying 'lip service' to differentiation and inclusion, while still maintaining an expectation that students adhere to normalized, but often arbitrary, codes of behavior. Slee (2009) points out that, amidst the emergence of the inclusion movement in education, there has been a rise in service referrals, categorization of disabilities in the education system, and school exclusions for students with disabilities. Goodall (2020) also points out that autistic students are 8 to 20 times more likely to be expelled, in part due to acting out behaviors fuelled by the anxiety of fitting into a homogenized and ill-prepared mainstream system in the name of 'inclusion'. This suggests that the inclusion movement has not achieved its purported goal of creating space for diversities in thought and behavior, but has instead merely inserted neurodiverse students into an archaic system and put the pressure on

diverse individuals to abandon their own ways of thinking and being in favour of an outdated norm.

Education professionals have a tendency, ground in a medical or expertise model of disability, to believe that we know what is best for our neurodiverse students, often preventing us from listening to the self-expertise of our neurodiverse students. This professional blind spot creates a wider implication that is reflected in the hidden curriculum of school communities and, as a result, the assumptions and behavior of other students. Even many well-meaning educators still approach education through what Friere (1970) described as a 'banking' model, focusing on depositing information and ideas with students, rather than encouraging critical thinking and collaborative meaning making. The result is an inevitable erasure of neurodiverse ways of thinking and being, and the development of a system that, while physically inclusive, remains fundamentally exclusionary.

This study explores the extent to which our educational system already employs practices that recognize and respect the diverse richness contributed by our neurodiverse students, as well as examines areas where our practice may be readjusted to better honor individuals' unique strengths, rather than attempt to normalize their behaviors.

This study was driven by two key, critically-oriented questions:

- What are the lived educational experiences of neurodiverse students?
- What strategies can teachers incorporate into their pedagogy to best honour the neurodiverse qualities of autistic students?

The purpose of these guiding questions was to place the disabled experience at the forefront of expertise, exploring teacher practice primarily through a strong understanding of students' perception and experiences.

Theoretical Connections

The research conducted for this project aligns with a framework of Critical Educational Theory. This particular theoretical approach shares many commonalities with concepts of neurodiversity and critical disability theory, and as such, will serve to ground these concepts within an educational framework. Although often "noticeably absent from critical discourse" (Anderson, 2017, p. 476), neurodiverse theory is ground in several concepts that align closely with critical theory.

Examination of disability through a critical lens relies heavily on the broader critical observation that a great deal of collective knowledge, especially that which involves the 'othering' or oppression of groups of individuals, is shaped by complex relations of power. The medical categorization of neurological disability, and the subsequent "treatment" of those disabilities, served the purpose of "othering" individuals to enforce *and* reinforce an arbitrary definition of normalcy. Critical theories of disability all operate with the acknowledgement that many aspects of disability are socially constructed, and that more characteristics of disability are created through cultural and social practices, than are the result of the medial impairments inherent in the disabled individual themself.

Recognition of the social construction of disability leads to a reimagining of our collective conceptualization of disabilities. Exploring neurological disabilities in particular, Smagorinsky (2014) suggests that conditions such as autism are best considered as a type of multiculturalism, aligning critical disability theory with seminal critical pedagogy scholars such as Peter McLaren, who explored the importance of teaching students "on their own terms first" (2007, p. 178). This stands in stark contrast to a previous conceptualization of disabilities that characterized all deviancies as problematic, and "prescribed" medical and educational interventions designed to eradicate specific behaviors, often through means of shaming and dehumanizing behaviorist strategies.

The popular educational practice of behavior modification in individuals with neurological disabilities is an example of a concept that does not align with this critical approach to thinking about disability. The pressure placed on individuals with disabilities to "pass" as typical, alongside the heavy focus on behavior modification strategies used in special education, aligns with McLaren's recognition of the importance of honoring his own students' "street corner milieu" (p. 247). Criticism of this practice also corresponds with Antonia Darder's (2017) critique of the overall behaviorist model of education.

While the intersection of critical educational theory and disability theory holds promise in its potential to alleviate the oppression and unnecessary hardships of individuals with disabilities, the theory is not infallible or limitless in its scope. As with any effective critical theory, self-critique and awareness of bias must play a crucial role to ensure it remains in service of its ultimate goal: to create fully diverse, anti-oppressive communities that contribute to the betterment of *all* members.

Researcher Positionality

In my experience as an educator working with autistic students (in both inclusive and segregated learning environments) I had the privilege of getting to know brilliant students who, although able to demonstrate expertise and mastery in a wide range of interest areas, were not always well-served by our traditional pedagogical structures. These experiences, coupled with several years working in student leadership programs, piqued my curiosity about ways in which we could better build inclusive school communities and the potential roles that student leaders could play in transforming these communities.

I entered into the Theoretical, Cultural and International Studies program interested in examining inclusion from a critical and philosophical standpoint, rather than a more practice-based one. I was interested in exploring the potential for inclusive programming to serve, not

just autistic students, but also their classmates, who would have the advantage of being exposed to different ways of thinking and being through their connections with their neurodiverse peers.

Initially, I was interested in initiatives such as reverse inclusion, where mainstream students work in segregated classrooms as a way to connect with their peers through helping. As I became more exposed to Critical Disability Studies literature and began to better understand the medical and charity models of disability, it became clear that there were problems in the neurotypical centering of that approach. In fact, I began to recognize many of the well-meaning ideas I had about disability and special education as offshoots of an ableist and charity-centred view of disability, that centred a socially constructed idea of 'normality' and placed expertise on the shoulders of those best able to fit into that socially created box.

Aware of the importance of empowering the voices of neurodiverse individuals, I felt committed to exploring my questions about neurodiverse-centred education through the experiences and ideas of individuals on the spectrum. Rather than a curiosity about how to best leverage neurotypical students to support the mainstreaming of neurodiverse ones, I began to wonder about how to better create educational environments that honour diversity and question the natural validity of expectations we place on students who do not fit our mainstream definition of 'successful'. This has been reflected in my own professional practice already, in the much more open and student-centred ways in which I connect with struggling students in my current role as a teacher counsellor, and in the ways I open myself up to the possibilities inherent in unexpected questions and responses from students in my English classrooms. Layering a more critically-minded philosophy into my pedagogy has been transformative and has encouraged me to step back from a mindset of cultivating students into what I (or mainstream society) expects them to be, and towards a stronger understanding of how to support them in becoming the most self-aware and fulfilled version of themselves.

Format of Thesis

This thesis will examine relevant theoretical concepts of neurodiversity, as well as explore an interview-based study of four neurodiverse young adults reflecting on their experiences in public school.

Chapter Two and Three will examine the theoretical and academic climate influencing this study. First, Chapter Two will explore Critical Education Theory and Critical Disability Theory, citing, in particular, some of the parallels and points of tension between the two concepts. Chapter Three will extend these two theories to apply to the concept of neurodiversity, exploring related key ideas between the three concepts, as well as potential areas of tension or growth.

With the theoretical background and current knowledge established, Chapter Four will turn its lens to this study in particular, outlining the methodological approach and offering a general summary of the interviews and process.

Chapter Five will delve into the findings further, offering an in-depth exploration of the interviews and the key themes that emerged. This chapter will be followed by a chapter analysing the data within the established theoretical framework, aligning the emergent themes from the study with established concepts. The concluding chapter will offer actionable recommendations for teacher practice, as well as suggestions for future exploration.

A note about language use

Throughout this paper, a conscious effort has been made to use identity-first language (for example, "autistic student") rather than person-first language (such as "student with autism"). Although the latter has been typically used by researchers and service providers, many members of the autism community have expressed a preference for the former. Bottema-Beutel et al. (2020) point out that identity-first language recognizes "autism as insperable from and fundamental to an individual's experience of the world" (p. 21) and avoids the outdated

insinuation that autism is something negative that needs to be sidelined as part of a personal identity.

Closing

As educational policy becomes more focused on inclusion, it is imperative that educators develop their practice to genuinely foster an appreciation of diversity, and to create a learning environment that recognizes the unique strengths of individuals, rather than attempting to enforce an arbitrary normalcy that ultimately contributes to hierarchical structures of learning and being. Infusing more neurodiverse philosophies into educational practice and acknowledging the expertise of individuals who identify as neurodiverse are both practices that serve to create welcoming classroom spaces that support the unique growth and strengths of individual students.

Neurodiversity supports the inclusive value placed on the importance of diversity, and seeks to develop individual strengths, and turn a critical eye on the vilification of qualities that, while different from "the norm", are not inherently harmful. In providing an education-specific examination of neurodiversity on behalf of the expertise of individuals with lived experiences of neurodiversity, I hope to contribute to an educational movement focused on recognizing and appreciating (rather than pathologizing) diversity, and removing the barriers that have previously resulted in an imbalance of opportunity for many of our neurodiverse students.

Chapter 2 – Theoretical Framework

Educational institutions play a significant role in shaping social structures and values. In delivering curricula and assessing (and therefore, defining) success, educators determine whose voices will be heard and what type of knowledge will be privileged. As a result, the "challenge of shaping social history, fashioning new social relations outside of the social universe of capitalism, new cultural narratives, and rethinking the nature and purpose of schooling" (McLaren, 2007, p. 254) becomes a critically important mandate of educators.

Critical educational theory provides an ideological framework that enables educators and policy-makers to consider oppressive practices inherent in the current educational system. Critical pedagogy (the combination of critical theory and educational practice) fosters educational change that will empower individuals who have been marginalized by a system that reproduces imbalances of resources and power. In acknowledging the oppression inflicted by current educational practice, critical pedagogy seeks new modes of practice that will engage our shared humanity and create communities free of structural injustice. The heterogeneous and constantly shifting theories under the critical umbrella typically addresses the oppression imposed on groups marginalized as a result of their class, race, gender or, to a much lesser extent, disabilities.

In spite of being the world's largest multicultural minority and representing between one fifth and one tenth of Western populations, depending on definition (Devlin & Porthier, 2006; Anderson, 2017), individuals with disabilities are still "noticeably absent from critical discourse" (Anderson, 2017, p. 476). However, there is significant overlap in the core values of both critical pedagogy and critical disability theory, suggesting that the intersectionality between groups more commonly addressed by critical pedagogy and individuals with disabilities, will continue to develop, informing and strengthening both disciplines.

This chapter will provide a brief summary of the emergence of critical educational theory and critical disability theory and explore some of the common ideological alignments between the two. In addition to seeking areas of connection, it will also explore complications and critiques of critical pedagogy from a disability perspective as a reminder of where gaps in the theory still remain.

History of Critical Educational Theory and Critical Disability Theory

Apple et al. (2009) suggest that critical values were being applied to educational theory before it was named as such, citing cases from the 1800s of African American activists boldly questioning the role and purpose of education of their communities within the context of slavery and racial tensions that shaped their lived experiences.

The term itself was coined by Latin American educational activists, most notably Paulo Freire, who worked with the illiterate poor in Brazil to explore their own working conditions and support land claims. Freire believed in education's ability to end oppression through humanizing pedagogies that helped individuals realize their innate power to secure their own freedom from oppressive economic systems, which he believed enslaved everyone from peasant to landowner. Although the movement was initially class-based, feminist and racialized movements influenced the inclusion of other forms of oppression by the mid-70s (Apple & Au, 2009).

The Frankfurt School also exerted significant influence upon the development of critical pedagogy. A group of thinkers historically situated between the collapse of Marxist economic systems and the rise of Fascism, the Frankfurt School "had to refashion and rethink the meaning of domination and emancipation" (Giroux, 2017, p. 33). Many ideologies developed within the Frankfurt School held relevance within educational settings, including their exploration of the crisis of reason, and subsequently, their dismantling of positivism, as well as the concept of hegemony, a tool resulting in the self-policing of entire societies. Their uncovering of

educational institutions as falsely neutral apparatus' that could be leveraged by the State to manipulate whole populations to consent to their own oppression is a concept that has been explored in depth throughout the field of critical pedagogy.

Parallel to the development of critical pedagogy, the critical disability movement began gaining momentum in the 1960s, as individuals with disabilities began to define their own identities and revolutionize their self-perception (Withers, 2012). Prior to this, the disabled experience was dictated by medical professionals, who held the right to define, assign, and address disability, initially by attempting to eradicate it (through the eugenics movement) and later through pity-based narratives or by an importance placed on curing disability above all else (the charity and medical models, respectively). As the voices and lived experiences of individuals with disabilities began to be acknowledged, the conversation about disability shifted from one of individually held tragedy, to one of advocacy for basic rights and resources. This set the stage for several theories that recognized the social construction of disability, advocated for the removal of barriers to participation, and explored the benefits of the diversity that impairment brought to the human experience, alongside the challenges.

Recently, critical theories of disability have developed theories that have built on the core belief that the categorization of disability is constructed, oppressive and potentially unnecessary. These new theories range from a *political/relational* framing of disability (Kafer, 2013) - which acknowledges the medical realities of disability, while still maintaining that socially constructed categorizations of disabilities serve to oppress and undignify individuals with impairment - to a radical model (Withers, 2012) - which rejects even the concept of impairment, seeing any categorization of disability as a penalization inflicted upon those that depart from a socially constructed definition of "normal". Regardless of the extent to which individual theories acknowledge previous medical definitions of disability, the core mandate of critical disability theory remains clear: to remove barriers to the meaningful economic participation and social

inclusion of individuals with disabilities. It is by exploring the ways in which disability has been socially constructed and the means by which individuals with disabilities have been oppressed as the "deviant other" that disability studies aims to ignite systemic change.

Although the critical education movement and the critical disability movement share a tight chronology, follow similar patterns of thought, and work towards common goals, the two did not immediately align as closely as these factors might suggest. In fact, the field of disability studies often asserts that "critical race and gender studies [does] not consider the human experience of disability" (Anderson, 2017, p. 478). Although disability advocacy in the twentieth century did result in the deinstitutionalization of many individuals who were diagnosed as disabled, this process was not synonymous with full inclusion and participation of disabled people in most realms of society. During that time (and continuing even to today) even well-meaning or progressive educators continued to pathologize disability and create unnecessary delineations between students with differing educational needs, in spite of the fact that inclusion "originated as, and struggles to remain, a fundamentally critical project" (Slee, 2009, p. 177). Disability studies' struggle for a voice among broader critical projects, as well specific criticisms leveled by the discipline will be addressed later in this paper.

Core Concepts and Alignment

Heterogeneity is an ideological hallmark of critical education (McLaren, 2007) due, in part, to its recognition of the influence that dogmatic adherence to "infallible" systems of thought has in creating and maintaining systems of oppression. Therefore, pinning down definable characteristics and concrete indicators of critical practice is complicated by a philosophy that values responsiveness and flexibility. More than common practices, critical pedagogy is united by common objectives "to empower the powerless and transform existing social inequalities and injustices" (McLaren, 2007, p. 186). As a result, rather than providing a road map to critical pedagogy and practice, critical theory often provides teachers with the

"critical skills, conceptual means, and moral imperatives to analyze critically the goals of schooling", leading to individually-driven changes to practice (McLaren, 2007, p. xx). Thus, critical education theory suggests that a shift in a teacher's overall philosophy of education, and relationship with their students holds far more value than a regimented and accountable program of studies that strips teachers of their professional autonomy and expects to be effectively and consistently delivered throughout diverse communities without consideration of learner or teacher context.

Although critical educational theory provides little by way of tangible lesson plans and curricula, it is driven by powerful and perceptive concepts, which provide educators a clearer context and an altered lens by which to align their practice. Critical concepts, such as the mechanics of hegemony, a critique of positivism, the consideration of new ways of knowing and being, and the uncovering of capitalist influence on an education system designed to prepare unreflective and productive worker, all relate to the concerns and criticisms leveled by disability studies as well.

Not only do many core concepts of critical educational theory align with critical disability theory, disability scholars highlight the relevance, and potential contributions, of critical disability theory to critical theory and anti-oppressive practice in general. Erevelles (2000), for instance, explores the racialization and genderization of special education initiatives throughout the second half of the twentieth century. As the civil rights movement led to the desegregation of schools, she argues, the imbalance between white and black students in American special education programs points to a continuing and more insidious racial segregation. Not only is disability a highly politicized construct, worthy of consideration by its own importance, its correlation with factors such as geographical circumstance, age, and socio-economic status warrant its exploration through a broader lens of critical practice as well.

Hegemony

As a starting point, critical theory often "attacks the familiar, perturbing commonplace perspectives" (McLaren, 2007, p. 190). In doing so, critical theory acknowledges unquestionably that no knowledge is neutral. Instead of claiming and reinforcing perceived "truths", critical theorists seek to unravel the symbiotic relationship between knowledge and power. In step with traditional critical theory, critical pedagogy uncovered the problems inherent in "the fetishism of facts and the belief in value neutrality" (Giroux, 2017, p. 37). In order to examine the unnaturalness of that which seems so natural, critical inquiry tasks itself with searching out "the breaks, discontinuities, and tensions in history, all of which become valuable in that they highlight the centrality of human agency and struggle while simultaneously revealing the gap between society as it presently exists and society as it might be" (Giroux, 2017, p. 50-51).

As a result, the concept of hegemony - defined by Au and Apple (2009) as "'spontaneous' consent given by the great masses of the population to the general direction imposed on social life by the dominant fundamental group" (p. 85) - plays a key role in understanding educational practice from a critical perspective. Critical pedagogists build upon a recognition that, in modern, capitalist society, order and control are no longer maintained with the use of a physical force, but instead "established primarily through the rule of consent, [and] supplemented by the colonization of all other cultural spheres" (Giroux, 2017, p. 42). Institutions such as schools came to be known, through the work of Althusser, as Ideological State Apparatus', which served to "transmit the 'universally reigning ideology' while simultaneously maintaining the image of being a 'neutral environment purged of ideology'" (Au & Apple, 2009, p. 86). The result of these institutions, which rely on the creation of a homogenous definition and dictate ways-of-being based on narrow cultural norms, results in "the wholesale denial or erasure of communal histories, cultural knowledge, and political self-determination" (Darder, 2017, p. 101). Critical education theorists draw on this central concept to dismantle numerous areas of education, such as discipline, assessment and lesson design.

This overarching concept of social control and consent provides a strong foundation for both critical pedagogy (which explores, primarily, schools' function as hegemonic tools) and critical disability theory (which examines the various social structures and institutions that have created and maintained society's current construction of disability).

Critical disability theory depends upon dismantling ways of knowing and being that have been traditionally venerated for their "expertise", most commonly in their critique of the medical model of disability, which pathologizes disability as a medical condition, diagnosed, treated and "cured" (and therefore, controlled) by medical professionals only. Under the medical model of disability, the individual is not considered the expert regarding their own experience, and disability exists solely in the individual, with no recognition for the social attitudes and barriers that exist to define disability and limit individuals with impairments. This hegemonic belief system continues to infiltrate public awareness of disability, resulting in many individuals, individuals with disability among them, accepting the verdicts bestowed by doctors and psychologists without question, including prescriptions for shock therapy, forced sterilization, and brutal behavior modification programs.

A critique of the "*social functions* of knowledge" (McLaren, 2007, p. 197) also aligns with the concept of social construction of disability. Critical theory acknowledges that knowledge "is never neutral or objective but is ordered and structured in particular ways; its emphases and exclusions partake of a silent logic" (McLaren, 2007, p. 196). It is this silent omission of disabled ways of being that not only oppresses and limits individuals based on human-made diagnoses, but robs all of us of the opportunities to create just communities welcoming to and informed by a range of human diversity.

Despite the pervasive nature of hegemony, critical theory also recognizes hegemony as dialectical and ecological, meaning it is not immune to resistance and its effects can vary greatly depending on context and individual. The issues identified within social structures are

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interactive and each individual "both creates and is created by the social universe of which he/she is a part" (McLaren, 2007, p. 194). While this necessitates a careful and thorough exploration of all facets of any given social contradiction, it also uncovers a hopeful truth about the role of schools as socially constructive institutions: although they can act as sites of continued oppression, they can also, sometimes simultaneously, play a role as sites of resistance and empowerment.

Adding another layer of complexity to this relationship, critical theory recognizes that this fluid relationship between hegemony and resistance is constantly shifting and changing, not least because hegemony often counters resistance by absorbing counter-hegemonic ideas, sterilizing them, and making them part of the mainstream. Hegemony and resistance meet in an "arena of negotiation" (McLaren, 2007, p. 204), each shaping and responding to the other, often with hegemony finding ways to absorb and neutralize resistance. Slee (2009) considers the neoconservative appropriation of inclusive education as a disability-specific example of hegemonic absorption of counter hegemonic ideas. Although initially a "fundamentally critical project" (Slee, 2009, p. 177), the field of inclusive education has been peddled to teachers through a windfall of for-profit publications offering pre-packaged solutions for inclusion, conveniently stripped of any mention of the epistemological tensions, which are crucial to consider in order to fully understand the practice of true inclusion. Far from being a sign of acceptance of the practice of inclusive education, Slee argues that this appropriation as a "research and policy imperative might well prove to be its greatest obstacle" (p. 181). As a result of this threat of absorption, resistance to hegemonic practices must exist as an ongoing tension, constantly renewing itself in new and subversive ways.

Critique of Positivism

Critical theorists' critique of the privileging of specific kinds of knowledge and hegemonic social control also contribute to a critical skepticism of positivism. Critical

pedagogists, such as Giroux (2017), echo the Frankfurt School's dismantling of positivism, pointing out that a lack of historical contextualization and its inability to rationality critique itself as an ideology made it "the enemy of reason rather than its agent" (p. 35) and "an ideological prop of the status quo" (p. 37). Giroux points out that the intensification of the Enlightenment value of rational thought led to a crisis of reason uncovered by the Frankfurt School, whereby reason, void of self-critique or insight, became irrational.

The positivist tendency to categorize individuals and the human experience through a set of conveniently crafted, yet false, dualisms also fosters a practice of othering and subsequent dehumanization that Freire cited as a significant tool of oppression. This duality exerts significant influence on the disabled experience. The casting of disability in a deviant shadow led to a hegemonic practice that allowed controlling classes to define desirable bodies through the creation of a counterpart: undesirable bodies (Withers, 2012). As a result, the oppression of individuals with disabilities became justifiable and seemingly deserved, and the responsibility for emancipation lay in the individual. The breakdown of dualism, or categorization in general (a result of the medicalization of disability), is a step toward countering many of the assumptions and stereotypes that have led to the exclusion and oppression of individuals with disabilities.

Acknowledging New Forms of Knowledge

Leveling a critique upon positivist thought and uncovering the mechanisms of knowledge that were once assumed to be neutral and infallible leaves space to explore other types of knowledge. Many ways of knowing and being have been ideologically suppressed, perhaps due to their emancipatory potential. This generative aspect of critical theory often involves re-emergence of cultural practices and voices that had been previously silenced by dominant culture, or the rediscovery and appreciation of contributions (such as emotional labour) that did not directly enhance capitalist modes of production. In reframing our social and intellectual

values, education can realize the "relationship between love, the body, and knowledge" (Darder, 2017. p. 104).

Critical education often cites a disassociation from the physical body as a means for dominant ideology to alienate individuals from major aspects of their histories, the world and themselves (Darder, 2017). The body, and our perceptions of it, is a complex aspect of critical disability theory. Historically, advocacy for individuals with physical disabilities urged others to look past impairment of the body, considering other aspects of the individual. However, current approaches to impairment value the body as an important part of a holistic experience of disablement. Anderson (2017) expresses this explicitly, insisting: "[i]n teaching about disability, the first step means becoming aware of one's own body - and the bodies of others in the room. The body is everywhere in social life, texts, and public discourse. We just have trouble seeing it, because we are so immersed in our own skin." (p. 476)

Further to this, Kafer (2013) reclaims harsh, body-centered language, such as the term "crippled", to force able-bodied individuals to re-examine their own biases and understandings of disability: "to shake things up, to jolt people out of their everyday understanding of bodies and minds, of normalcy and deviance" (p. 15). This aligns with Anderson's (2017) assertion that: "[t]he disabled human body is one of the last 'body frontiers' to be addressed in education. [...] Disabled bodies disrupt educational environments. That disruption is perceived as a threat" (p. 483). Rather than denying that which may be considered "disabled", critical disability theory recognizes the importance of acknowledging the holistic human experience in order to confront our own bias and examine hegemonic definitions of disablement.

A holistic approach that recognizes the emotionality, intellect and physicality of each person, appreciating diversity in each of those aspects of self, remains a goal of critical disability theory. Disregard of the body, impaired or otherwise, does not suit the purpose of disability studies; instead, an understanding that all definitions of disfigurement or abnormality have

been constructed with the purpose of "othering" individuals with disabilities remains the most important mandate.

Dominant culture also promotes a "notion of the individual as a psychological self, whose intelligence and 'ego strength' is supposedly gauged by the ability to [intellectually] function, irrespective of external conditions" (Darder, 2017, p. 104). Darder references the work of Paulo Freire, who cited a fierce, spiritual and emancipatory love as the cornerstone of his pedagogy. Despite its reputation as qualitative and unscientific, Freire heralded the power of love to unite us in shared humanity and dismantle the structures of domination that hold us all (even those of us privileged by that domination) in a state of oppression.

In consideration of mental health and education, Price (2011) also acknowledges the importance of acknowledging intense emotion as a means by which students may explore the world and uncover their own truths and realizations. Price points out that educational institutions are quick to distance themselves from emotional ways of knowing, even within fields, such as writing or social justice, that rely on emotion as an empowering tool. Emotion is often considered uncivil and deviant, but Price argues that "an accessible classroom neither forecloses emotion nor is overrun by it, but makes constructive and creative space for it" (p. 80). In recognizing multiple ways of knowing and embarking on broad and deep research to truly understand the full human experience, we commit to exploring "the deep, local and historic conditions within which cultures and movements grow and change, and at the *same time* seek evidence of the ways in which global winds carry across sites, bodies, capital, privilege, culture, critique, and despair" (Weis et al., 2017, p. 439).

Freire's veneration of love, in spite of the fact that it led to critiques of his work as "unsystematic and antiscientific" (Darder, 2017, p. 95) and Price's recognition of the academic importance of emotion, even intense emotion, both serve to privilege diverse ways of knowing

and being, as well as to broaden the previously uncontestable definition of valuable and productive intelligence.

Capitalist Influence and The Role of Education in Preparing the Worker

Although it is not a fundamentally Marxist theory, critical pedagogy does cast a condemning eye on capitalist systems. It is logical that a system that allows for a purchase of the livelihood of individuals (living labour) to generate surplus capital (dead labour) for others (McLaren, 2007) eventually leads to dehumanization and exploitation. The role that schools play in generating workers to support capitalism's means is documented and many theorists point out that the education system's current focus on accountability measures and a definition of success shaped by capitalist means has only increased this practice (McLaren, 2007). The symbiosis between capitalist ideologies and modern educational practice leaves seemingly little hope in education's potential to end oppression through social transformation.

However, theorists such as Au and Apple (2009) suggest that a purely Marxist approach depends too reductively on economic determinism to the detriment of the exploration of "culture, ideology, hegemony and relative autonomy in education" (p. 84). This shift towards a neo-Marxist approach also suggests a more reciprocal influence of power and identifies inevitable and impactful acts of resistance to the dominant ideology. This reciprocity not only acknowledges the complexity of power relations, it suggests that there is, indeed, spaces for tension and change, a hopeful consideration often overlooked by theorists to adhered to strictly to fundamental Marxist theory.

It is worth noting, however, that critical theory does not insist upon an orthodox adherence to any Marxist principles. Regardless of whether or not a critical theorist believes capitalism to be an "irrevocable evil," there is a universal recognition that the capitalist system's "pattern of exploitation has produced an economic rationality that infuses current thinking on social and educational issues and continues to contribute to massive social problems such as

racism, sexism, and classism" (McLaren, 2009, p. 191). Critical pedagogy highlights the power that school can have in supporting this system of exploitation by creating workers that are complacent and efficient; however, it also offers an alternative, emancipatory possibility: that schools can be sites of disruption by empowering students to recognize oppression and demand social justice.

Critical disability theory supports a critique of capitalism's tendency to attribute an individual's lack of success within a capitalist system to faults that lay within the individual themselves, rather than in the system that has created significant inequality. This observation mirrors a core critique of the socially constructivist approach to disability studies. The fact that "disability continues to be [seen as] a personal problem afflicting individual people, a problem best solved through strength of character and resolve" (Kafer, 2012. p. 4) stymies the important work that needs to be done by society as a whole to recognize and address the physical and ideological barriers that create oppression. This avoidance not only reinforces the power structure of capitalism, but serves to maintain social order (Slee, 2009).

In consideration of this, Price (2011) asserts that educators should be considering how they can develop a more inclusive practice, rather than diagnosing and searching for flaws within the individual body. Price suggests that teachers "resist facile conclusions about our students based upon their diagnosed, self-identified, *or* suspected neuroatypicalities, and focus instead on ways that their writing and ways of knowing might change and inform our practices" (2011, p. 56). This practice addresses the capitalist practice of individualizing oppression, placing the responsibility to create success back in the hands of those with the power to do so.

However, there are other, very tangible challenges to combatting the way we support access in our current capitalist economic system. The rights-oriented and social construction model of disability emphasizes the importance of removing barriers that prevent individuals with disabilities from securing fulfilling, well-compensated employment; however, there are

tensions in this goal, from both a critical pedagogy and critical disability theory perspective. While a focus on securing employment has necessary short-term benefits to those economically marginalized by society's construction of their disability, in the long-term, advocating for better employment projections "continues to perpetuate the capitalist value that people's worth is connected to their productivity and participation in paid employment" (Withers, 2012, p. 90). Therefore, employment advocacy, while necessary for the immediate quality of life of individuals with disabilities, ultimately risks supporting inclusion by way of assimilation, rather than insisting upon a system that supports inclusion as a human imperative and a means to enrich our communities through a celebration of diversity.

This aligns with McLaren's exploration of the resistance in his own working-class students (2007). Ultimately, success within our current education system means the accumulation of predetermined *cultural capital*, often at the forfeiture of a student's "own cultural capital, street-corner knowledge, and dignity" (McLaren, 2007, p. 230). Thus, even potential advancement requires individuals to be absorbed by the very system that oppresses them. This suggests that the ultimate solution is not more support for working class students (or individuals with disabilities) to fit into the current system, but a re-evaluation of the system altogether. In short, in both a critical education theory and disability studies framework, combating capitalism is a complex balance between resisting a flawed system and addressing the immediate needs of individuals existing within that system.

Focus on Structural Transformation

In the same way that critical pedagogy bemoans the inherent barriers created by capitalist social structures and casts suspicion on the market-driven concept of charity, critical disability theory has moved away from a model that advocates for the *addition* of rights of individuals with disabilities, to one that insists upon a *removal* of structural barriers that prevent "social and economic participation" (Power, 2013, p.206). Powers points out that

focusing too strongly on the acquisition of individual rights to resources merely serves to support a "culture of enforced dependency" (p. 206). Ultimately, an overhaul of a system built to only serve the privileged few is required to achieve critical pedagogy's goal of a society free from exploitation and cultural bias.

Considering inclusive education, specifically, Slee (2009) asserts that the educational inclusion project was not about absorbing students with disabilities into the mainstream, but instead set a goal of "the reconstruction of schools to reflect and represent the diverse identities within their communities" (p. 179). As such, inclusion is not about retrofitting an educational system that was never designed to meet the needs of all students to provide accommodations for individuals with disabilities, but about reimagining a system that recognizes the strengths of diversity, thus benefiting all learners who do not fit into the narrow definition of "normal" that our original system was developed to both serve and create.

Neurodiversity's Alignment with Critical Theory

The concept of neurodiversity stems from critical theory and can be aligned with several core concepts of this broader school of thought. Although there are a few degrees of separation between the two and the concept of neurodiversity has been seldomly mentioned in broader discussions of critical pedagogy, neurodiversity borrows and evolves many key concepts from this overarching theory.

The Complexities of Representation and Redistribution

Neurodiversity is more overtly concerned with representational politics than it is with redistribution. In fact, many discussions around neurodiversity avoid a focus on the distribution of resources altogether. The question of resources does linger under the surface, though. For example, there seems to be an underlying belief that a recognition of the assets of "the unique qualities of individuals with autism" (Bumiller, 2008, p. 980) will lead to educational, cultural, and labour practices that will both embrace the diversity of individuals and provide a diverse

range of opportunities and roles for individuals to fit into. Within this re-framed representation, then, redistribution no longer becomes necessary.

Redistribution is a challenging concept in general within the social constructivist theory of disability. Many theorists echo this previous point: that addressing problematic representations of individuals with disabilities will inevitably lead to a more equitable distribution of resources and opportunities. Theorists also tend to steer away from the discussion of redistribution, as this inches too closely to the charity model, whereby individuals with disabilities are given resources by those with more privilege, thus leading to a continued inequity between the privileged and the marginalized. Social constructivism, neurodiversity among it, insists instead upon a removal of barriers.

However, even this position is open to critique through a critical theory of disability. Some individuals with disabilities depend upon resources distributed through the charity model for their immediate quality of life. To argue strongly against the charity model, they point out, advances the cause of the social constructivist model at the expense of individuals' well-beings.

Fundamentally, however, neurodiversity concerns itself with representation. Although issues of resource distribution are tangible for many individuals who identify as neurodiverse, those resources are considered a right, and the ability to contribute talents in exchange for resource security is considered unquestioningly possible. Therefore, the issue of providing resources for neurodiverse individuals is void. Instead, our social conception of neurodiversity needs to shift in order to offer these diverse individuals the opportunity to contribute to a social economy as a civil right, and as a benefit to our overall society.

Neurodiversity as Multiculturalism

Smagorinsky (2014) advances the concept of neurodiversity to suggest that mental health and cognitive disabilities should be reframed as "a critical area of multicultural education" (p. 15). As such, the neurodiversity movement potentially serves to "bring the study

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of mental health disorders in line with movements that have already taken place over the past 50 years around biodiversity and cultural diversity" (Armstrong, 2015, pp. 349-350). Popular arguments in support of this concept have pointed out "conditions" that were previously labelled with deficit-oriented medical diagnoses, such as homosexuality and drapetomania, a diagnosis assigned to American slaves who attempted to escape their masters. To frame a disability as a cultural diversity is not a new construct. Most notably, the deaf community has promoted the concept of deaf culture, citing both a unique language structure, as well as a set of cultural practices. (Kafer, 2007)

This particular approach creates new intersections between critical education theory and neurodiversity. Peter McLaren (2007) acknowledged his own need to let go of an ingrained desire to mould his students into "upright, middle-class, productive, consuming citizens" (p. 178) in order to have a chance to understand them. Neurodiversity supports this suggestion as well: rather than attempting to mould individuals with cognitive disabilities into the hegemonic social ideal, educators should spend more time observing and recognizing neurodiverse students for who they are. This mandate of teaching students "on their own terms first" (p. 178), as well as of exploring and appreciating all ways of knowing and being, aligns clearly with both critical pedagogy and neurodiverse thought.

It is also from within this exploration of neurodiversity as cultural difference that some theorists make a case for the balance between inclusion and segregated education. Although the inclusion of students with disabilities in the mainstream educational classroom was initially conceptualized as a "fundamentally critical project" (Slee, 2009, p. 177), neurodiversity advocates point out that the need to develop a cohesive and supportive culture of individuals with similar lived experiences make the inclusion project more complicated. Smagorinsky (2014) explores a personal situation where his daughter joined a group of like-minded individuals in an educational program, finding a "culture of acceptance [that] led her and others

to regard their unique neurological makeups as potential assets [and] see aspects of their behaviors as problematic if they hoped to live independently and in peace with their surroundings" (p. 21). This example supports the idea that opportunities for appropriate homogenous groupings, potentially alongside inclusion, allows neurodiverse individuals an opportunity to create a community of individuals with similar life experiences, alongside the development of spaces that "allow for a broader consideration of acceptable ways of being that fit within the scope of multicultural and diversity education, with an emphasis on inclusion and respect" (Smagorinsky, 2014, p. 22).

Behavior Modification, the Body, and Identity

The critical concept of cultural capital also become relevant in this alignment between neurodiversity and multiculturalism. Many educational and "treatment" programs for autistic individuals task themselves with behavior modification and normalization. Thus, the priority imposed on neurodiverse individuals has been learning to "pass" as typical (Ortega, 2013). In discussing the educational experiences of his working class, minority students, McLaren (2007) explored a catch-22: even the students who were most successful within a mainstream paradigm had to grapple with a sense of conflict and oppression. Under the current categorization of normalcy, success just uncovers new forms of oppression.

This concept of "passing" and the process of normalization warrants thorough exploration through a lens of neurodiversity. Although some neurodiversity advocates provide suggestions of how to understand or adopt neurotypical behavior (usually to ease interactions, and therefore life, in mainstream society), the overall purpose of the movement to downplay the harmless eccentricities of neurodiverse behavior and amplify its strengths. Thus, McLaren's privileging of the "celebration, validation, and critical questioning of the symbolic and expressive forms within the specific cultural practices of the students' street-corner milieu" (p. 247) could be easily applied to a practice ground in neurodiversity. In fact, in her personal

manifesto informed by her own experiences as a neurodiverse person, Lawson (2008) continually stresses the value of addressing individuals on the spectrum on their own cultural terms, using this, rather than imposed behavioral expectations, as a starting point.

Rather than waiting on a mainstream social movement, some individuals who identify as neurodiverse have responded to this inequity of cultural capital through a process of counter-diagnosis. Through their own memoir or reflections on their impairments, these individuals lay claim to cultural capital "not in spite of, but *through* their authors' neuroatypicality" (Price, 2011, p. 22).

Darder's (2017) critique of the behaviorist model of education also aligns with the concept of neurodiversity. Darder is critical of the many disciplinary techniques applied in educational settings (and, it could easily be argued, even more readily within special education settings) that transform the body "into an instrumentalized object to be manipulated and dominated through external stimulus" (p. 106). Rather than understanding intent or meaning behind particular behaviors, individual agency is removed from the process and the body becomes "an object that must acquiesce to the teacher's will or be expelled" (p. 104). This occurs as a result of privileging knowledge and ways of being that exist within the "mainstream register" and silencing the rest - it also serves to reinforce this practice.

Neurodiversity advocates are often vehemently critical of the practice of applied behavior analysis therapy, which is a popular treatment for autistic children. This practice employs a strict, behaviorist-based approach in order to normalize individuals' behaviors considered to be "inappropriate", such as atypical communication patterns, repetitive behaviors, or maladaptive sensory coping skills. In actuality, many of those behaviors, although not within the range of those deemed socially acceptable, are harmless and considered to be "inappropriate" based solely on the comfort of the neurotypical professionals employing the treatment (Bumiller, 2008). Further even to this, many of these condemned behaviors serve adaptive purposes. For

example, neurodiverse self-advocates have talked at length about self-stimulating behavior (or, colloquially, "stimming"). These repetitive actions or noises that are often indicative of autism were previously eradicated through a rigid carrot and/or stick behaviorist approach. Through the lens of neurodiversity, however, it is pointed out that these behaviors, while not common or within the narrowly defined vision of "normal" behavior, are not harmful to others and actually serve the purpose of soothing or focusing the autistic mind.

Lived Experience as Expertise

Another important and notable aspect of the neurodiversity movement is its inclusion of the voices and experiences of individuals with disabilities at the forefront of the movement. The movement itself has been driven by individuals who have been diagnosed, or self-identify, as neuroatypical. Walters (2015) points out the critical disabilities studies imperative of privileging the voices of those whose lives are being most affected by our collective conversation about disability, meaning that "the perspectives of neurodiverse students are prioritized" (Walters, 2015, p. 340). This important philosophy and practice also serves to combat the culture of selective silencing that creates "a hierarchy of knowledge, truth, experiences, and persons" (Yoshida & Shanouda, 2015, p. 433).

For all of the connections between critical theory and the concept of neurodiversity, there are also some areas of tension. Price (2011) points out that critical thought still relies on a presumption of normalized rationality, which can be problematic when considering that neurodiversity may accept and advocate on behalf of individuals whose ideas and behaviors would not necessarily fit into a socially accepted definition of rationality. In fact, the development of critical pedagogies relies on the assumption that classrooms will be filled with subjects that possess a certain, pre-disposed type of rationality. In addressing this complication, Price suggests that educators must fully embrace their role as co-learners, being completely

open to "the ways that [students'] writing and ways of knowing might change and inform our practice" (p. 56). Although this educator's mandate is commonly expressed with all critical pedagogies, it takes on a new layer of importance, complexity, and mutual student-teacher trust when considered through the lens of neurodiversity.

Relevance To This Study

Although critical pedagogy professes a mandate to dissolve oppression by empowering historically marginalized groups and dismantling politically-loaded "truths", there is still work to be done in the field in order to achieve intersectionality and acknowledge all marginalized populations (Apple & Au, 2009). There are a number of criticisms of critical pedagogy's alignment (or often lack thereof) with critical disability studies, many of which are also inherent complications in the field of disability studies itself.

First of all, both critical theory (related to disability) and disability studies have garnered significant critique related to the tendency to privilege certain types of disability (typically physical disabilities or mild cognitive disabilities) to the disadvantage or exclusion of other, often more complex, kinds of disability. Although many theorists have acknowledged the benefit of uniting the disabled experience under an umbrella term, the shadow of doing so has meant that the complexity of human impairment is potentially disregarded and that the needs of some members of the disability community have been threatened (Price, 2011; Power, 2013). Power (2013) cautions against complete condemnation of the rights or charity approach to disability, pointing out that, although this approach has the potential to foster dependency and propagate stigma, many individuals depend upon this flawed model in order to meet their basic needs. Power argues that a complete and sudden eradication of this model would greatly reduce the quality of life of those individuals.

Along these same lines, a critical or emancipatory approach to intellectual disability or mental illness troubles critical pedagogy's veneration of rationality. Price (2011) points out that,

even in critical pedagogy, classroom interactions are founded on an assumption of a predefined concept of *reason*. For alternative consideration, Price suggests exploring aspects of postmodernism that call for a "decoupling [of] rhetoric from rationality" (p. 41), valuing the ethical subject, rather than the rational one. This practice would reinforce an anti-oppressive practice that "consider[s] disability as a valuable source of lived experiences, rather than see[ing] disabled bodies as 'something to be accommodated' [ultimately creating] experiences [with] the capacity to transform the educational environment" (Anderson, 2017, p. 478).

Both critical pedagogy and critical disability theory advocate for a change to traditional teaching methods. However, there appear to be differences in what those changes are and what the purported ends of these new shifts in teaching and learning will be. Both disciplines advocate for education that empowers learners by balancing expertise among both the students and the teacher. However, critical pedagogy assumes a more specific and definable end point - the recognition of the ideas that lay beyond traditionally privileged ways of knowing and being and a realization that each individual holds the key to their own emancipation.

Critical disability theory requires a trust in the more abstract and the unknown. The practice of co-constructing knowledge with ethical, rather than rational, subjects, creates a greater sense of unpredictability. However, committing to a loving and reciprocal pedagogy that is open to all lived experiences is the first step in creating communities that resist oppression, and advocate for justice for all members - the ultimate goal of any critical practice.

Chapter 3 – Literature Review

A principle of critical theory is that all knowledge is socially constructed and that no "fact" is concrete or neutral. Although there is a mainstream belief in the infallibility of historical and scientific "facts", critical theorists posit that all knowledge is dependent on context, developed through rhetorical devices, and typically in service to a greater political, economic, or social end. As a result of this basic assumption, the goal of any critically driven discipline is to better understand "the relationship between power and knowledge" (McLaren, 2007, p. 209). Regardless of the field that critical theory may be applied to - law, politics, or education, to name a few - this commitment to recognize the political and social functions of the knowledge that we are fed as "truth" is an important goal of the field of critical studies.

Critical disabilities studies aligns with this goal. In response to "the poverty of approaches to disability that treat disabled people as defective or deficient, [critical disability studies has] advanced instead views of (dis)ability that foregrounds the ways in which societies collectively produce disabling conditions for individuals living with impairments" (Orsini & Davidson, 2013, p. 11). Thus, critical disability studies challenges the mainstream belief that disability is a deficit that resides solely in the body or mind of the individual who has been diagnosed; instead, the theory suggests that an impairment is only a disability to the point that common attitudes, structures, or expectations craft barriers that clash with an individuals' particular needs and abilities. Price (2011) summarizes this approach succinctly and thoroughly, stating:

> "According to DS [disability studies] scholars and activists, disability is popularly imagined as a medical 'problem' that inheres in an individual, one that needs to be fixed ('cured') and is cause for sorrow and pity. DS countermands this dominant belief by arguing that disability is a mode of human difference, one that becomes a problem only when the environment or context treats it as such." (p.4)

Re-establishing this context for disability leads to the inevitable exploration of the ways in which our collective knowledge and opinions about disability have been shaped by complex power

relations, poised to create an "incapable" "Other" to counter-measure a capitalist definition of success.

The social construction model of disability, one approach that stems from a critical theory of disability, is also heavily informed by this theoretical facet. From the standpoint of critical theory, social constructionists argue that the current mainstream conception of disability is not universally factual, but instead based on a medical model that diagnoses disability as something categorically wrong with an *individual*, and "plough[es] into training the [disabled] person to masquerade as 'normal', to be indistinguishable from those without [a] diagnosis" (Clark in Lawson, 2008, p. 9). Within the medical model, a perfect world would not include anyone with disabilities - a vision that fails to acknowledge the talents and personhood of individuals currently living with disabilities. Social constructionists explore the ways in which the concept of disability is a result of context and cultural practices, arguing that these factors are far more influential in creating "disability" than factors such as impairment or individual difference.

This model has become widely accepted among disability activists, leading to more recent recognition that, with a category as broad and varied as disability, it is necessary to explore the ways in which social construction impacts the experiences of individuals based on the specificities of their impairments (Anastasiou and Kauffman, 2011). Although advocates acknowledge that the adoption of a broad identity (disabled) allows individuals to unite as a large and powerful group for advocacy purposes, the varied nature of impairment means that not all aspects of the model of social construction works for every individual condition. In fact, many critiques have been levied towards critical disability theory for focusing too heavily on physical impairments, and thus being less applicable to those whose impairments are cognitive, emotional, or social (Devlin & Pothier, 2006).

Stemming from the social construction model of disability, and attempting to narrow its scope slightly, is the concept of neurodiversity (also termed 'neuro*a*typicality'), which focuses solely on neurologically oriented disabilities. The term, as it is used today, was popularized by autism-rights activist Judy Singer in 1998, who used the term to refer to a universal diversity encompassing both 'neurotypical' and 'neurodiverse' ways of thinking. Since then, the term has gained popularity, most notably in Internet communities of individuals who self-identify as being neurodiverse, and has evolved to include primarily individuals who don't fit into a 'neurotypical' categorization. That the movement is most prevalent in online, rather than traditionally academic, communities speaks to the continuing domination of the medical model of intellectual disability within academic discourse. However, the continued development of critical disability theory in academia has resulted in an exploration of the concept of neurodiversity through a more formalized academic framework. This has led to more widespread recognition of the model, as well as more pointed critiques.

Although applicable to any disability that impacts neurological functioning, the neurodiversity movement has been most widely associated with a constructivist approach to the autism spectrum. For the purpose and scope of this study, the term will be used primarily to refer to individuals who identify as being somewhere on the autism spectrum; however, many of the concepts can easily be applied to individuals with cognitive disabilities or mental illnesses.

Within the boundaries of the medical model, autism is typically defined through an official list of diagnostic criteria published in the American Psychiatric Association's Diagnostic and Statistical Manual of Psychiatric Disorders. These criteria focus specifically on *deficits* in areas such as communication, social-emotional reciprocity and relationship building, as well as a focus on restrictive or repetitive behaviors and routines. This focus on deficit contrasts original definitions of autism by Leo Kanner and Hans Asperger, both of whom noted significant strengths of autism. Problematically, Bottema-Beutel et al. (2020) note that this definition

restricts our conception of autistic ways of thinking as "linguistically, culturally, and politically constructed in relationship to a normal/abnormal binary" (p. 21) that automatically identifies any difference as a deficit that must be treated and cured.

In contrast, the neurodiversity movement centers on the belief that intellectual disabilities, such as autism, ADHD, or those that would warrant a mental illness diagnosis, are not, in fact, disabilities, or even impairments, but examples of natural and evolutionarily important diversities in human cognition and an important part of personal identity. Gillespe-Lynch et al. (2021) sum up the three key tenants of the movement: "(1) there is no such thing as a 'normal' brain and the reality of diversity (neurodiversity) is good for society, (2) neurodivergent people should be accepted as they are rather than pursuing 'normalization' for its own sake, and (3) many (but not all) of the challenges neurodivergent people face arise from societal inequalities" (p. 203). Like other critical disability theories, neurodiversity does not propose that the difference between neurodiverse and neurotypical individuals is non-existent - on the contrary, the neurodiverse model depends on "a critical biological understanding [...] that AS [autism spectrum] and NT [neurotypical] people are distinctly different" (Brownlow & O'Dell, 2013, p. 101). However, as Armstrong (2015) points out, there is no universal measure of a standard human brain, any conception that we have created of "normalcy" is just that, a socially created concept of typical thought. In this particular aspect, neurodiversity provides support to the concept of social constructivism as "a compelling example of a condition that cannot be straightforwardly characterized as disabling" (Bumiller, 2008, p. 971). As a result, advocates for this theory suggest that "neurological differences are to be honored and respected just like any other human variation, including diversity in race, ethnicity, gender identity, religion, sexual orientation, and so on" (Armstrong, 2017, p. 11).

Even further, neurodiversity advances the point that this diversity is beneficial to our communities and that it adding richness and advancing our social and technological worlds.

This has led to the development of autism or neurodiversity pride groups, aligned with the key ideologies of this model and focused on celebrating the strengths of their diagnoses (and self-diagnoses). Within an educational application, acknowledgement of the generative aspects of neurological conditions provides perspectives which, when engaged fully, "have the capacity to transform the educational environment" (Anderson, 2017, p. 478). Bumiller (2008) suggests that "although neurodiversity is most important to people who identify as being on the spectrum it also has the potential to enrich society and change how we understand ourselves and other people" (p. 982).

Neurodiversity offers important and exciting possibilities to an educator's critical practice. For example, Walters (2015) presented a case study exploring the impact of traditional writing pedagogies on neurodiverse students. She explored the fact that "a critical pedagogy better attuned to neurodiversity can support the alternative social literacies of neurodiverse students and resist stereotypes of ASD writers as asocial" (p. 340). This new educational perspective does require a shift in the way we, as educators, accommodate and address difference. It demands a wider range of strategies to connect with students. However, Price (2011) argues that, most importantly, it requires a shift towards openness on the part of educators, and a stronger desire to meet students where they are at and offer to them what we can.

The concept of neurodiversity contributes to critical debates in other disciplines as well. Just the reconsideration of the way we privilege particular types of neurological functioning over others forces us to confront the way in which we measure valued citizenship, as one who "is an avid consumer in the market, makes appropriate demands on the state, and conforms to conventional family forms" (Bumiller, 2008, p. 983). If we are to re-envision valued citizenship to include individuals who may be incapable, on some levels, of adhering to that definition, what

follows is a complete reconsideration of the way in which we define citizenship, and the hegemonic purposes that such a definition serves.

However, neurodiversity is neither a straightforward, nor a complete theory, and as such, requires more consideration and refinement, especially when one considers the evolving nature of what we know about autism (Orsini & Davidson, 2013). Continuing to turn a critical eye on this theory aligns with the mandate to be constantly re-evaluating and critiquing all forms of thought and knowledge, even those from within one's particular theoretical framework (Giroux, 2017). It is also a necessary practice to ensure that the pendulum does not swing so far away from the valid aspects of a medical model, and aspects which have significantly beneficial impacts on the lives of those diagnosed with intellectual disabilities.

Neurodiversity in Educational Practice

To address and honour the diversity of thought in classrooms, Walters (2015) and Price (2011) suggest that multiple avenues and connections to communication must be explored, rather than a complete change to the way we teach. They point out that no approach is universally effective for everyone, and that the best we can do is offer multiple options in all aspects of learning. This approach, again, suggests a practice that will be beneficial to all learners, allowing even those considered "neurotypical" to explore their learning styles and needs, identifying what works best for them. Within this practical suggestion, removing barriers means opening up to new possibilities, rather than creating new barriers to impede a different group of individual learning styles.

Price, in particular, discusses the importance of "open[ing] as many different channels of communication as possible, in hopes that at least one with be accessible enough for a given student to use it, and trust that our own attitudes will have much to do with student response" (p. 89). Price's suggestion does not depend on a *change* to the way we teach, but an *opening* of the approaches that we use, both in terms of methods and in terms of attitudes. Price points out

that flexibility and multiple approaches tend to benefit all participants, not just those who identify as neurodiverse, tying back to the core idea of a spectrum of neurodiversity - each individual occupies a different place in terms of their brain functioning and their intellectual and social needs. A wider variety of approaches, and a respect for that diversity, is beneficial to all.

Also key to the practical application of neurodiversity is a strengths-based approach. As Withers (2011) points out: "[w]e are rarely recognized for the contributions that we make *because of our disabilities*" (p. 117). These contributions are numerous and varied. Lawson (2008) explores the idea of *monotropism*, which she defines as an ability to maintain "single attention governed by a tight system of highly focused interests that take precedence over everything else" (p. 20). This is in contrast to *polytropism*, which is the more common ability to divide attention and sensory-processing. Although developing the ability to divide attention is considered a sign of typical development, Lawson has no trouble finding instances where this ability would be an asset. Similar to this, it has been suggested that typically autistic traits, such as "the tendency to perseverate or to systematize" play a valuable role in finding success in modern society (Orsini & Davidson, 2013, pp. 7-8).

Fostering these newly realized talents requires that educators trust in the unknown and allow the diversity among their students to guide their practice. Price (2011) asserts that neurodiverse individuals may stray further from our socially constructed conception of rationality than most other groups, but that this should not negate the value of what they have to share. An approach that embraces intellectual diversity requires a full commitment to embracing the unexpected results that will be inevitable in education that celebrates diverse ways of thinking. It truly requires educators to let go of their socially enforced roles as "experts" and learn alongside their students.

Challenges and Areas of Tension

As with any critical theory, as much as it is important to challenge dominant norms and ideas about neurological disabilities, it is equally important that neurodiversity "reflect on the shortcomings of emancipatory ways of self-fashioning and identity politics within the autistic self-advocacy movement" (Ortega, 2013, p. 76). Anastasiou and Kauffman (2011) make the important point that, when opening up the floor to the voices of lived experiences as academic expertise, it stands that those voices are also "subject to the same kind of testing, regardless of whether their originators or proponents have disabilities" (p. 367). It is important, in developing any social construction-based model, to be wary of swinging too far towards canonizing the personal. Anastasiou and Kauffman levy a caution against the adherence towards personal experience as public truth, providing the reminder that "[e]very public truth should be open to careful logical analysis and empirical verification" (p. 369).

Much in the same way that Giroux (2017) expressed the crisis of reason, whereby a movement that was once in pursuit of a greater understanding shifted to become a blind adherence to positivist thought, without consideration of the oppression and short-sightedness that aligned with that, the neurodiversity movement has been accused of straying to far towards an oppressive end point. Kafer (2013) points out that "there is a difference between denying necessary health care, condoning dangerous working conditions, or ignoring public health concerns (thereby causing illness and impairment) and recognizing illness and disability as part of what makes us human" (p. 4). Inherent in this acknowledgement is the recognition that, as a viable theory, there is a limit to how far social constructivist theory can reach.

Orsini and Davidson (2013) remind theorists that science is not fundamentally the enemy of critical theory, offering the suggestion to, instead, be "critical of all reductive approaches to and representations of autism, regardless of their disciplinary origins, and

particularly of those that are neglectful of the views and voices of the individuals and groups most intimately affected" (p. 15).

Also ironic is the way in which, as Ortega (2013) points out, the concept of neurodiversity doubles back to a biological basis by arguing on behalf of diverse brain structures. Thus, for neurodiversity advocates, "atypical neurological wiring forms the basis of these differences and the construction of an identity" (p. 78).

Despite a widespread acknowledgement within critical disability theory that binaries contribute to a hegemonic 'othering' of individuals in service to the power of those deemed to be the 'norm', neurodiversity champions often create a very clear and 'othering' binary between AS and NT individuals. Anastasiou and Kauffman (2011) suggest that this is partially a rhetorical tactic to garner political support. However, this tactic may not necessarily build towards a more emancipatory situation for all individuals - it merely runs the risk of putting new individuals in a position of oppression.

There are also some concerns about the impact of such an intensely anti-medical and anti-charity movement model on the lived experiences of those whose livelihoods have been shaped by a charity or medical model. Power (2013) points out the challenge in recognizing the social construction movement and rejecting the charity approach without creating more barriers for individuals who may require a benevolent focus on their rights, as well as medical intervention, to manage or live with their disability in current times. Lawson (2008) begins to address this by, again, calling into question the way we have social constructed a system by which we offer individuals support. She suggests that it is not necessary to conceptualize of difference as negative, or ignore its existence in order to support it, arguing that "[i]ncorporating individual 'difference' into societal life, however, might mean necessitation of my difference becoming visible, and I will need to show the world what I require to enable me to live life normally for me" (p. 46).

However, many socially constructed theories often adhere most effectively to those who are still able to live (semi-) independently, or even those who have the capacity to be able to advocate on their own behalf. Ironically, this mirrors the critique levelled at critical disability theory for focusing too strongly on the interests of individuals with physical disabilities over individuals with cognitive disabilities. Anastasiou and Kauffman argue that a constructionist approach, which often privileges the experience of a single person, extrapolating it to the experiences of the many, has the potential to re-create oppressive and rigid systems of thought, or even to essentialize its most important and complex ideas. If the ultimate goal of critical disability theory is to be reached - betterment of the lives of individuals with disabilities - theorists need to avoid committing yet another act of silencing or oppression by only including those that they deem worthy to step out from under the disability umbrella.

Just as many neuroatypicalities are distributed upon a spectrum, the manner in which theorists approach social constructionism exists upon a spectrum as well. Recognizing and exploring this spectrum is one potential way to mitigate some of these pitfalls. Many theorists, such as Smagorinsky (2014), acknowledge that there are challenges to being neurologically atypical, but also asserts that "a good part of the hell of being atypical follows from being treated by others as social abnormal or deviant" (p. 19). Vygotsky (as cited in Smagorinsky, 2014) presented a conceptualization that recognized a *primary* disability, which was the diagnosed condition, and a *secondary* disability, which was imposed by society and typically more problematic than the primary disability. It is that secondary stigma that many individuals who adopt a more moderate approach to neurodiversity hope to eliminate.

An emergent use of social constructivist models suggests that, in reality, disability can be conceptualized through both a medical *and* a socio-political lens (Anastasiou & Kauffman, 2011; Orsini & Davidson, 2013). Beyond even this, many insist that a viable model recognizes and

acknowledges the role that each approach can play, as well as the political tension that emerges as these models interact with each other. Many of the tensions of the social constructivist model could be addressed by considering what Kafer proposes as a political/relational model, which "neither opposes nor valorizes medical intervention; rather than simply take such intervention for granted, it recognizes instead that medical representations, diagnoses, and treatments of bodily variation are imbued with ideological biases about what constitutes normalcy and deviance" (p. 6). This is similar to the identification of truth as *relational*, rather than *relative* within critical theory (McLaren, 2007). Kafer's model leaves space to acknowledge (and even appreciate) the impact that the medicalization of impairment has had in the lives of individuals with disabilities; however, it also leaves that model open to criticism and development. Furthermore, it guards against the critique that a purely social constructivist model presents an unrealistically idealized goal of the complete eradication of any negative aspects of impairment through the complete removal of barriers.

Ultimately, as with any critical theory, it is crucial that thoughts and ideas are self-critical, and aware of their political and social implications. The concept of neurodiversity is no less politically and socially charged than any other ideology, and as such, it needs to exist under consistent critique and redevelopment. Orsini and Davidson (2013), in their introduction to critical autism theory, stress how important it is that researchers "question the received wisdom about what constitutes knowledge and must consistently and forcefully challenge the divide between science and humanities as well as other overly simplistic and harmful dichotomies, including that between fact and value" (p. 14). Although the neurodiversity movement holds clear potential to alleviate the stigma and oppression faced by neurodiverse individuals, its role as a politically driven tool of advocacy must be reflexive in order to ensure it maintains the flexibility and self-reflexiveness to contribute towards the ultimately critical goal of an acknowledgement of the value of fully diverse and just communities for *all* individuals.

Although a relatively new idea, the concept of neurodiversity has clearly developed and gained momentum over the past few decades. A great deal of opportunity for future exploration of the topic remains, including developing a deeper understanding of the lived experiences of self-identified neurodiverse young adults, as well as a better understanding of how this new perspective may tangibly shape educator practice by taking into account those lived experiences.

Chapter 4 - Methodology and Methods

The purpose of this study was to consider strength- and diversity-based educator strategies for working with neurodiverse students (more specifically, autistic students). Research that is ground in a Critical Disability framework privileges the expertise of individuals who are most intimately impacted by their impairment. Keeping to this philosophy, I designed my study using a critical, qualitative methodology. My intention was to reflect education as experienced by specific neurodiverse individuals, and to use this experiential information to uncover potential strategies that may help educators support neurodiversity in their classroom. This study focused on echoing the experiences and ideas of individuals on a neurodiverse spectrum with the expectation that these ideas would be weighted alongside perspectives of educators, as well as policies and structures currently inherent in the educational system.

To achieve this, I used an interpretive interview method. Creswell (2013) points out that interview methods provide the advantage of allowing for participants to provide historical information and do not rely on direct observation of participants. This was particularly useful for this study, as it allowed participants to reflect on their school experience as a whole and from a perspective that was distanced from the events being examined. However, he also cautions that interview methods have key limitations, such as the fact that information is indirect, filtered through the narration of the interviewee and subject to their interpretations. Considering communication challenges faced by many autistic individuals, Creswell's concern that "not all people are equally articulate" (p. 241) is also particularly salient, as this limitation not only has the potential to impact participants' responses, but may also have bearing on whether or not an individual will be able to participate or will require assistive technology in order to do so.

The interpretive aspect of this method anchors the interviewer's role as one who seeks to understand the experiences of their participants, and to co-construct meaning based on participant experience. A qualitative and interview-based approach was important, as it allowed

for a deeper understanding of the lived experiences of neurodiverse students. Additionally, it aligned with a critical theoretical framework in its focus on privileging the voice of those with disabilities as 'experts' of their experiences, as well as recognizing that the varied nature of individual experiences may not fit neatly into statistical data or categories. As such, the purpose of this methodology was not to create widely generalizable, statistical data, but instead to deeply reflect the experiences of a few individuals within context.

To honour the participant-driven nature of this study, a semi-structured interview format was selected. Participants were informed about the nature of the project prior to beginning the interview and questions were designed to be open-ended, with prompts pre-determined to facilitate responses when necessary. Participants were also given an opportunity to include information about other experiences or ideas that they considered to be of importance. The purpose of the study was transparent to participants from the beginning.

Interpretive epistemologies emphasize the discovery of meaning as part of the research process. Ellis (1998) suggested beginning with an entry question as a jumping off point to spiral between uncovering information and adjusting research approach. To adhere to this concept of a spiral, participants were interviewed twice, allowing questions and research direction to be adjusted as unexpected information and recurring themes were uncovered. Between interviews, participants were encouraged to record any related thoughts, memories, or ideas that occurred to them. During the second interview, participants were given an opportunity to share and expand on what they recorded.

The central questions that framed this research were:

- **What are the lived educational experiences of neurodiverse students?**
- **What strategies can teachers incorporate into their pedagogy to best honour the neurodiverse qualities of autistic students?**

With these broader questions in mind, specific interview questions focused on developing a thorough and authentic understanding of each participant as an individual. From there, we explored what their unique experiences (both positive and negative) suggested about the ways our education system addresses neurodiversity, the supports that are in place for neurodiverse students, and changes that could be made to ensure that our system reflects and embraces the diversity of thought within it.

Process

Interviewee sampling was purposive (Sarantakos, 2013, p. 177) and based on participant self-selection. I initiated the search for participants by contacting several autism organizations (Autism Edmonton, Adaptabilities, etc) to explain the project and see if they would be willing to connect with their members, either through a general callout or by contacting members they thought would be suitable participants directly. Interested participants were invited to contact me via email for more information.

In embarking on this study, I was also open to snowball sampling in the cases where organizational staff or study participants referred individuals who may be interested in participating. In these cases, the referee was asked to pass along my contact information and allow potential participants to contact me directly, in order to ensure their privacy was respected, or to confirm that the participant was comfortable with me reaching out via email if they preferred to not make first contact.

Prior to beginning the interview, participants signed an informed consent form. They were briefed on the overall framework and purpose of the interview, as well as matters of ethical concern and confidentiality. Participants were given the opportunity to ask any questions that they had, and were assured that they could withdraw their participation, either in answering a specific question, or in completing the interview as a whole.

Two interviews, lasting approximately an hour each, were conducted with each participant. They were audio recorded and later transcribed. The first interview was supported by a set of pre-determined questions (Table 4.1). These initial questions provided a framework for the conversation, while allowing ample room to direct the interview in a direction of interest for the interviewee. The questions focused on establishing general information about the participant's education and connection to neurodiversity, exploring some of the positive and negative aspects of their educational career (through a neurodiverse lens), and beginning to reimagine a school experience that would better address both the strengths and challenges of neurodiverse students. Between interviews, participants were asked to consider what their conceptualization of a neurodiverse-centered school system, as well as a fully inclusive school system, would look like.

The second interview focused on follow up from previous responses and participant's thoughts between interviews. Participants were also given the opportunity to share any final thoughts they had, or information that they felt was important, but that hadn't been included in responses to questions.

This multi-loop approach (Ellis, 1998, p. 25) enhanced researcher understanding by allowing for reflection on initial data, followed by an opportunity to follow up after that reflection. It also added an additional layer of trustworthiness to the interpretations of my findings, as I was able to confirm initial themes and ideas that were developed from the first interview with participants to clarify that my interpretation of their experiences was accurate. Ultimately, all information gathered was examined as a part of the whole, regardless of its chronology.

Table 4.1 - Specific Interview Questions:

- Tell me about your educational history - where did you go to school? What kinds of classes did you take?

- How do you define 'neurodiversity'? Why is this self-definition important to you?

- Tell me about a time where you felt like the strengths of your neurodiversity was beneficial during your education.

- Tell me about a challenge of your neurodiversity that you had to overcome in your educational experience. What was the challenge and what did you do to move past that challenge?

- Tell me about someone who was particularly helpful to you throughout your educational journey?

- If you could change one thing about your school experience, what would you choose to change? How would you change it?

- What are some skills that you felt you contributed to your school or classroom community during your schooling? What were some skills you had, but maybe felt you weren't able to contribute? What were the barriers to you sharing those skills?

- How has your school experience prepared you for life now? What are some things that you wished you had learned during grade school?

- What advice would you give to a neurodiverse student about to enter high school? (Or Jr High? Or school in general?)

- What advice would you give to a teacher who has a neurodiverse student in their classroom?

- Between interviews: Explore what a neurodiverse-centered education might look like. Explore what a fully inclusive (to neurodiverse and neurotypical students) education might look like.

In practice, of course, the process of identifying participants and conducting interviews required flexibility and some variation from the initial plan.

Despite my initial plan of reaching out to several, very supportive organizations, and succeeding in having them promote the study to their various members, few participants contacted me through these means. I was able to find one of my four participants through this approach. The other three were identified through a snowball focused approach, and by reaching out to professional colleagues and networks. In each of these cases, the participant was contacted first to see if they were open to being interviewed (and to ensure their confidentiality) and I made a connection once they had indicated that they were open to knowing more about participating.

Once that first contact was made, participants were keen to connect and open to traditional interview formats. Three interviews were conducted in person, and one via Zoom (due to physical distance, rather than discomfort with face-to-face interviewing).

The prepared list of questions served as an icebreaker to instigate conversation, but in most cases the discussion quickly became much more organic, with participants' responses setting the direction for further questioning. In each case, however, we ensured all questions had been covered. However, in many situations, it was the digressions or points of interest of the participants that generated the most meaningful or thoughtful reflection.

Ethical and Contextual Considerations

Extra supports were offered to participants if necessary. Participants were invited to bring an advocate to the interview if they felt they needed extra emotional or communicative support. (Advocates signed a non-disclosure form at the beginning of the interview.) Given some of the challenges that autism can present in social and communicative spheres, assistive

technologies and accommodations were welcome. These could include the use of augmentative and alternative communication technologies, online or email-based interviews, or opportunities for participants to reflect on and write responses to questions after the interview took place. As an interviewer, I remained open to hearing any other concerns that participants had and to working in partnership with them to find an accommodation or solution.

The interviews were designed and conducted with my own positionality as a neurotypical educator in mind. To ensure that participants felt comfortable sharing truthful responses to questions, I identified several intervening factors (Sarantakos, 2013, p. 294) and ensured that participants were regularly made aware of my openness to suggestions of other accommodations that might allow them to fully and comfortably articulate their ideas and experiences. Additionally, participants were assured at the beginning of both interviews of the study's intention to magnify neurodiverse experiences and ideas without judgement. Shannon Walters' 2015 study of autistic students' experiences in a first year college writing class articulated the positionality and responsibilities of a neurotypical researcher when exploring the autistic experience. Walters strived to reduce ableism in the research environment by making "access a key concept" in the study and by encouraging participants "to set the terms of [their] interaction and communication" (p. 344). Using Walters as a guide, I prioritized participant autonomy and efficacy throughout the study. Also in line with Walters, I purposefully checked in throughout the study, to allow me to build awareness of my own "positionality and neurotypical standpoint" (p. 344).

The semi-structured format ensured that some questions were pre-planned to initiate the conversation, but that the questions themselves allowed participants control over the information that they choose to share and that I, as the interviewer, was open to and encouraging of participants' role in shaping the direction of the conversation. A member check after the interviews were completed also empowered participants to ensure they had

represented themselves in a manner with which they were comfortable. To provide participants a chance to reflect on some of their responses, rather than expecting they share everything on the spot, they were encouraged to record pertinent ideas that came to them between interviews.

Participants

Four participants were recruited for this study. Each participant was interviewed twice and given the opportunity to include an advocate during their interview. All participants had graduated high school and had enrolled, or were currently enrolled, in a post-secondary program. Two of the participants were male and two were female. Additionally, three of the participants had formal autism diagnoses, whereas one had not been formally diagnosed, but self-identified as autistic. All four participants were able to complete the interview through a verbal conversation format.

The first participant, Julia, had completed high school, but struggled personally throughout, often facing consequences for skipping, as well as experiencing drug addiction throughout high school. She had moved cities to attend a post-secondary art program. After facing inadequate accommodations in the post-secondary program, she had taken a hiatus and was successfully creating and selling her own art. She planned to return to the post-secondary program. She had also been only recently diagnosed with autism, after going through several other incorrect diagnoses, including one for bipolar disorder. Her autism diagnosis had been a result of her own self-advocacy after learning more about it through online communities.

The second participant, Emily, was a doctoral candidate in a Biological Sciences program. She had missed out on a formal autism diagnosis as a child because she lacked one criterion during the assessment, but maintained a self-diagnosis that helped her to better understand her own thought and behavior patterns. Her passion for helping endangered animals had driven her academic ambitions since the age of nine. She had successfully navigated

grade school and post-secondary to this point, but often by going against recommendations made by teachers and counselors.

The third participant in this study, Brandon, was a university undergraduate student with a career plan in Medical Laboratory Sciences. Despite possessing the academic capabilities necessary to navigate a challenging post-secondary program, he had spent his elementary years in a segregated classroom for students with severe emotional and behavioral challenges. Initially given an ADHD diagnosis (this was amended to an autism diagnosis in grade 6), Brandon shared that he spent a lot of his elementary years working on simple rote memorization, while having his behavior heavily monitored and controlled. It wasn't until entering a mainstream (and, later, academic challenge) educational program and connecting with academic-minded peers that he really felt he began to blossom and be challenged as a learner.

The fourth and final participant was Trevor. Trevor was a recent high school graduate and currently working on his first Open Studies courses in university. He chose to include a parent advocate in both interviews to provide support and help navigate through the discussion. He seemed to credit a lot of his academic success to his own abilities to focus on information of interest, relationships with teachers who really took the time to understand him, and the support of his parents, who often provided additional educational support or acted as advocates on his behalf.

Although each participant had faced their own unique challenges throughout grade school, all had demonstrated a capability to find success in, not only their public educations, but in challenging post-secondary programs as well. It is worth noting that this narrative of overcoming structural obstacles to find success within a flawed system is not universal, and as such, this similarity must also be considered as a potential source of bias in the study's ultimate findings.

Data Collection and Data Analysis

Interviews were transcribed shortly after they took place (with the initial interview always being transcribed and reviewed prior to the second interview). Non-verbal cues were not included in transcription unless they were considered to shift the meaning of the interviewees words or were included purposefully by the interviewee.

Analysis was completed in five phases. The initial phase consisted of interview transcription. In order to familiarize myself with the data further, I transcribed each interview personally. This allowed me to make note of initial observations, which was particularly helpful between the first and second interview, as I was able to address initial findings with participants to confirm their accuracy.

The second phase consisted of a close reading and coding of the data. Any significant ideas suggested by the participants were written down verbatim on separate slips of paper to allow for malleable data manipulation in the third phases. During the third phase, these ideas were physically grouped into naturally occurring categories. I paid special attention to ideas raised by multiple participants and areas where participants' experiences intersected. However, key ideas raised by single participants were also included in this data.

In the fourth phase of analysis, these categories were then grouped into the four umbrella themes that will be explored in the Findings and Analysis chapters of this thesis. The fifth and final phase consisted of generating the report to explain each of these categories using specific data from the original transcribed interviews.

The concept of "education" was considered holistically, and could include anything from classroom instruction, to social/relational support, to assistive technology availability. As such, the recommendations that emerged from the data were widespread and could be relevant to teacher practice, school administrator policy, or even school community building.

Additionally, this study was designed without a specific driving hypothesis. This supported a critical approach, and highlighted the importance of me, as a neurotypical researcher, avoiding shaping the data or interviews to suit my own preconceptions. Instead, I crafted interview questions to initiate the interview but remained open to the directions that participants chose to steer the conversation, to allow participants ideas to fully drive the recommendations generated. This approach also allowed for "an openness to behold or contemplate life in its wholeness and complexity." (Ellis 19)

The opportunity to conduct two interviews with participants helped to develop a richer understanding of the information uncovered. Interviews were not analyzed chronologically, but instead in a loop, moving back and forth between interviews and allowing ""[e]ach transcript and field note [to] become part of a whole and the meaning of each [to] be reconsidered in relation to the whole" (Ellis, 1998, p. 26). Although data from the initial interview was examined to inform the second interview, the final analysis did not differentiate depending on chronological order.

As with any study, particularly qualitative and interview-based studies, trustworthiness in my findings was an important consideration as I gathered and analyzed my data. Guba (1981) identified four criteria for establishing trustworthiness in qualitative studies: transferability, credibility, confirmability and dependability. Efforts were made to address these criteria as fully as possible throughout the design, process and analysis of the evidence. Some key strategies that were employed to ensure trustworthiness included detailed description of my research process and context (transferability and dependability), direct, tangible and often verbatim evidence provided to support results (confirmability), and member checks, both in person during the second interview and through email after the interviews (credibility).

To maintain the critical disability studies framework of this study, it was important that my interpretation of the participants' interviews acted to amplify their own lived experiences

and ideas, rather than alter or negate their ideas in favor of educator-created 'best practices'. To fully honour the lived experiences of participants, it was important that the recommendations made not be filtered through an educator's lens. Recommendations were presented as is and should be considered as a piece of the puzzle, in conjunction with information from other stakeholders.

With the design of the study established, the following chapters will provide an in-depth exploration of the findings and their implications for education.

Chapter 5 - Findings

Creating educational spaces that honour diversity of thought, abilities, and experiences is a complex, but worthy undertaking. Underlying the complexity already implicit in systemic change is the uniqueness of neurodiversity for each individual. The four participants interviewed provided a wide range of educational experiences and perspectives. Participants themselves even referenced the challenge of making broad statements based on individual experiences of neurodiversity, citing the often referenced observation: "If you know one person with autism, you know one person with autism."

Despite this, several recurring themes emerged within multiple participants' experiences. The four most common themes, which can be broken down into smaller components, include: questioning the purpose and benefactor of education, exploring the impact of appointed versus natural expertise, understanding neuro-specific challenges, and recognizing the power of relationships.

The Purpose and Benefactors of Education

Interests-Based Programming

All four participants spoke passionately and intelligently about their personal interests, demonstrating a high level of mastery in areas of particular focus They also each spoke to the fact that those particular areas of interest had developed at a very young age.

For instance, much of my conversation with Emily focused on a very specific career path related to advocating for endangered animals. She recalled seeing a television special about pandas at the age of nine and a half and was so moved by these great creatures and enraged by their vulnerable status that she set a career goal then and there, and has not wavered from that path since. She recognized that this intense and long-term focus was out of the ordinary: *I know I always cut an unusual path. Even talking to school teachers or even students [...] it always surprised them as to, like, 'You know what the hell you want to do with your life?!'*

Julia was also successfully pursuing a career as an artist, although she hadn't been as singularly focused on those interests throughout her schooling. When asked what she would change about teacher practice in her experience, she stated: *They could do a better job at nurturing special interests, because I felt like I knew what they were when I was younger - they're the same things they are now - but I took a really long break in them because nobody encouraged them.* In her case, a lack of support from educators in fostering her special interests hadn't steered her closer towards chosen areas of curricular study. Rather, it had served to create potential future barriers in her career and livelihood.

Trevor and Brandon also spoke openly and excitedly about their passionate areas of interest. In the cases of all participants, these interests had brought them fulfillment, and the potential for life-long learning. They had eagerly become self-taught experts, organically employing many of the skills we strive to teach students, albeit with little support from formal education experiences, which they tended to see as hindrances to their development.

Summing up the importance of interests-based programming, not just for neurodiverse students, but as a beneficial practice for all students, Brandon stated: *I think the interests of someone young are remarkably fragile, but I wouldn't call them fleeting. I think to dismiss them as that would be doing a massive disservice.*

Authority and Compliance

The theme of compliance within education, or education as a tool for social reproduction emerged through several of the interviews. This theme was often in opposition to two major strengths that participants saw as key aspects of their neurodiverse identities: a focused ability to develop a great deal of knowledge around personal interests, and the ability to 'think outside the box' and see solutions that others might not have noticed. Julia summed up the impact of this ideological conflict extremely succinctly: "*There's gotta be something wrong if learning is my favorite thing, but school is my least favorite thing.*"

The first key aspect of this underlying theme was the impact of control structures - such as formative assessment and tightly controlled assignments - in impeding the joy of genuine learning. Learning for learning's sake is often heralded as a goal for well-meaning educators, but the ability to truly foster this attitude amidst ingrained educational practices, such as curricular driven programming and formative, numerical assessment, often creates a barrier to education that is driven by students' natural interests and curiosity. Brandon mentioned teachers who allowed him to delve deeper into his learning through asking a lot of questions, but acknowledged *that becomes, in its own right, a balancing act because I'm taking away from the curriculum that they have to teach so that people can get good grades.*

Emily had a particularly unique experience with the implicit focus on control and order in public education, related to her early self-awareness and passion focus. Her high school offered streamed programming, including a tech-based science program for students who planned to enter into the world of work after high school completion, rather than attend post-secondary programming. She specifically noted that this decision frustrated the administration at her school, as it subverted the expectation that an academically focused student belonged solely in academically-streamed programming. It is interesting to note, as well, that Emily's ability to move between these two programs was likely because she was deemed to be "capable" enough for the more rigorous courses; had she been initially streamed into the career program, it is unlikely that taking classes in both areas of campus would have been an option for her.

Later in her post-secondary career, Emily faced similar push back from another administration over her interest in completing a Chinese language and culture minor alongside her Science major. In this case, she adhered to the administration's recommendation. However, she felt that her decision to do so, in hindsight, was not the right one, and she expressed regret about backing down several times throughout our discussions. Although she acknowledged the

challenge a blended program would have presented, she felt, in retrospect, that she would have risen to it and ultimately been glad she had followed her own path.

Brandon also talked at length about the tendency for the education system to *bring out the very best in people who can work in an environment that's structured, rigid, and looks to create someone who's honestly capable of being a cog [... but does not inspire] a particular enthusiasm.* He, along with Trevor and Julia, cited their ability to solve problems in unconventional ways, or to notice things that were often overlooked as one of the most significant strengths of their neurodiversity. As a result, however, this left Brandon in a disadvantaged position during his educational journey:

> *I think I have the ability to be unorthodox in thinking, but I think, in the end, I'm not necessarily going to be valuable as a strict cog in the machine. I think I have the potential to do interesting things. I don't think I have the potential to be the most proficient cog, though.*

This realization has significant implications in considering who is served by public education. In this case, not only was a student disadvantaged by the system in place, but the clear strengths that he did have to offer, were not acknowledged or valued by the programming or curriculum offered. Additionally, the social benefit of using education to nurture a diverse community bolstered by individualized strengths is not supported by these practices. Essentially, the only potentially positive outcomes of this factory-based educational structure seem to be ease of large-scale instruction through compliance.

These observations were often linked to a loaded concept for the participants: the marking structure. Participants agreed that the heavy focus on marks hampered creativity and self-driven learning, and arbitrarily privileged certain kinds of learning over others. In three out of the four participants' experiences, marks had gotten in the way of them expressing a multitude of knowledge that they were able to recall easily. Trevor's advocate remembered a time when he had exclaimed in frustration, *I just wish they could let me show them what I know, not what they think I need to know!* Brandon lamented the education system's failure to

teach students the skills necessary to adapt and continue learning independent of the classroom. And Julia spoke about the pressures of a marks-oriented system eclipsing what could have otherwise been genuine enjoyment of learning: *There's just so much pressure put on you that you can't enjoy any part of it and think about the parts you want to enjoy. […] You need this grade, this grade, this grade, this grade, or you're not going to make it in university, blah blah blah. And you're going to fail at life.* On top of this, the attainment of good marks were not necessarily linked to intellectual abilities, but rather the ability or motivation to *stick to the level of knowledge that you're on* (Brandon).

In all of these cases, marks had not been a motivator for further learning, and were dubious in their main purpose of determining what students are actually capable of. However, it is worth noting that, in spite of these misgivings, all of the participants had been successful in demonstrating the level of achievement needed to advance to a post-secondary program.

Public versus Post-Secondary Models of Education

Given the much more self-driven nature of post-secondary education, it was no surprise that several participants had found success and fulfillment in their post-secondary programs.

Although she had stepped away from her Fine Art program due to challenges with the accommodations department at her school, Julia talked about her own personal experiences with the program providing an opportunity to use her personal interests to scaffold skill-building in other areas:

> *If I'm really interested in something, I will gladly learn about it. [There should be] more freedom to be able to make it more interesting to us personally. […] I always thought, my whole life, I hated writing. I was always like, 'English is my least favorite subject. I hate it. I hate it. I hate it.' […] And then I came to art university and I took an art history class and I got to pick any artist and just write […] and now I like to write things for fun. And all it took was letting me write about something I actually gave a shit about.*

The opportunity to write about an area of personal interest, an opportunity that is often more plentiful at the post-secondary level, transformed not only Julia's understanding of that

area of interest, but her attitude and engagement towards an important educational skill she had previously written off as detestable.

Emily also determined that her post-secondary education had been a better fit for her, overall, than her public schooling. Drawing on her knowledge of her strengths, personality, and habits as a learner, she stated, *I have a focus, passion […] just because I'm independently stubborn. So that's more of a personality trait of mine. So I really think it's the focus and the ability to work on one thing at a time and buckle down and do the studying, and being able to sit still for hours on end.* Not only did high level post-secondary programming support her in making her professional passions and goals a reality, but personal traits related to her neuroatypicality allowed her to navigate this rigorous programming successfully.

It is important to note that these sentiments were not universal among participants. Trevor shared that he felt more comfortable with his public school education when asked about his preference directly. Trevor had previously talked about his appreciation of classes where he was able to make connections with other students and engage in collective work (a contrast from what other participants had shared). He was also the participant who had most recently started his post-secondary program.

Appointed versus Natural Expertise

The questioning of expertise, including challenging the status of those normally considered "experts", defining helpful and not helpful expertise, and considering other sites for more broad definitions of expertise, was a common thread in my conversations with participants.

The Medical Model and Participants' Relationship with Diagnosis

As is the case with many Critical Disability considerations, the participants' complex relationships with the medical model of their condition was clear in their stories of diagnostic processes, and the need for legitimization of their conditions.

Misdiagnosis was a very common experience for participants. Brandon was originally diagnosed with Oppositional Defiant Disorder until his grade 6 teacher questioned the diagnosis. He referred to it as *pretty obviously sloppy* and pointed out that, even though his parents were teachers he was not immune to being mis-labeled.

Julia and Emily also had complicated journeys through the medical diagnosis process (I will address this more below, when discussing gender-significant concerns). As an added complication to this, Julia pointed out the necessity of a diagnosis to legitimize her requests for accommodation: *I've had a lot of experiences [where] if you don't have the papers, they won't take it seriously.* She went on to point out that, on top of being at the mercy of an outsider's perspective when undergoing diagnosis, the process itself is expensive, mentally taxing, and lengthy. Diagnosis itself, although still considered a requirement for many supports, holds a level of exclusivity and is not as unbiased as "experts" would have you believe.

In spite of the social legitimization that comes with diagnosis and the life-changing impact that a diagnosis can have on an individual's life, it is clear from participants' experiences that the process is not infallible. This casts some significant questions on our over-reliance on the expertise of the medical model.

Self-Expertise

Although it was the judgments of medical experts that had the greatest influence on the accommodations that participants would be able to access in school, most participants demonstrated a high level of self-expertise. Julia spoke about thriving as she embarked on a new challenge of being self-employed. Not only was her artistic business doing well financially, she felt like the power it gave her over organizing her own day allowed her to craft schedules that she knew would work effectively. This autonomy was a sharp contrast from her experiences with formal education and employment.

Emily's self-awareness was evident in both her own academic planning, and her self-diagnosis. As mentioned, Emily maintained an unwavering focus on her career path beginning in elementary school. She paired this with a mature understanding of her own strengths and weaknesses as a learner, pointing out that she made the decision to hold herself back in the fourth grade, feeling she needed another year to grasp the material. Her self-awareness extended into adulthood, informing even her own diagnostic characteristics. She shared early in our interviews that she identified as neuro*atypical*, rather than neurodiverse, explaining that the term did a better job of explaining her particular thought patterns and ways of seeing the world. This level of self-reflection and detailed exploration demonstrates a clear sense of expertise and awareness.

Community-Expertise

Most notably, it was often a community approach to expertise that seemed the most beneficial to participants. Trevor, in particular, talked about the importance of building a team of support, including family members and educators. Having his parents included in the interview as advocates reinforced this. For example, when talking about working through math word problems in the evening, Trevor's dad spoke confidently of knowing effective ways to explain concepts to Trevor, as well as an understanding of appropriate boundaries in terms of workload and understanding. Trevor's mother pointed out the importance of Professional Development for teachers, and in lieu (or addition to) that *it's critical that you have that relationship with the family so they can explain and help you. It's not an adversarial relationship. It's an advocacy*. Trevor acknowledged the benefit of having parental support to help with teaching concepts, recognizing which teachers were helpful in his educational journey, and building a team of in-school support to help Trevor navigate any challenges he encountered.

What Emily shared would be the most helpful, in terms of expertise, for her was not based in the medical model, but instead connected to her own personal passions. In her

experience, a helpful "expert" would provide career guidance, rather than dictating expectations to her based on what *they* felt was the appropriate path.

Julia's vision of ideal expertise was similar in terms of the expert's ability to allow the individual to take the lead, but she focused more on this in relation to her neurodiversity: *It's just very nice to have someone who actually understands and I don't have to try and educate them. [...] I felt like I was having to advocate for myself, like to the doctor. I need someone who understands it better than I do because I don't understand it.*

Gender-Based Considerations

Further complicating the question of medical expertise is the clear imbalance between male and female diagnoses. Both male participants had been diagnosed in elementary school. Both female participants, however, had a much more complicated relationship with their diagnostic process.

Julia had only recently been diagnosed with autism. Prior to this, she had been diagnosed with and medicated for a number of other mental health conditions, including bi-polar disorder. She described several experiences on the medication, including one that led to a "psychotic breakdown". She viewed many of the medical prescriptions she had been given as quick-fix solutions that took the place of real relationship and strategy building: *everyone just took it as, 'Oh well... I don't know. Let's just give her these pills.' And I remember they gave me these pills and it numbed my brain [...] and I felt like I had no personality and like I couldn't be a kid with an imagination so I refused to take them.*

Ultimately, Julia's diagnosis was self-driven. After watching several videos from a YouTube vlogger on the spectrum, she began to consider the fact that some of their similarities could be a result of her own potential neurodiversity. She approached a psychiatrist with the suspicion and was successfully diagnosed as a result. When asked about changes that would have helped her more moving through her educational career, she noted the need for there to be

more awareness about the ways neurodiversity could present in females, and a better way to diagnose girls earlier, mentioning that, in spite of all her struggles in grade school, she had just been dismissed as *a really shy girl.*

Emily, on the other hand, was not formally diagnosed. She had seen a specialist as a young child, but had missed the diagnostic criteria by one item. In response, she pointed out that historically diagnostic tools for autism had been created mainly for males, and that the medical system was just now beginning to catch up and realize that *[t]he symptoms of autism spectrum disorders in women are more subtle than in men.* In spite of being overlooked for a formal diagnosis and support, Emily continued to identify as being on the autism spectrum, and her mother had supported her development by providing what she considered to be informal social skills training.

This type of self-diagnosis seemed to be common amongst neurodiverse females. Julia shared that, in her Facebook group for autistic women, about half of the participants were self-diagnosed.

Underdiagnosis of autism in females is noted in neurodiversity literature as well. Happe and Frith (2020) note, in their research review, that although female formal diagnoses have risen in the past few decades, there are still a large number of girls being un- or mis-diagnosed. They also point out that "females are diagnosed later than males and require higher symptom expression for diagnosis" (p. 221). Some of the explanations for this include an exclusion of females from autism research (leading to diagnostic criteria reflecting autism in males), a social bias towards consider autism as 'male-oriented' and the fact that autism may present differently in females (which may explain why girls on the spectrum may often be inappropriately considered for another 'close fit' diagnosis instead).

Beyond the question of diagnosis, there were other significant considerations related to the female experience of neurodiversity that both participants had in common. Notably, both

female participants spoke about the exhaustion of having to 'pass' as neurotypical. Both shared that they were able to do this very well, by memorizing a script and certain gestures, but Julia also mentioned this ability to adapt presented its own challenges in that people *don't really understand what's going on inside and they don't take it as seriously.*

Addressing Neuro-specific Challenges and Barriers

The neurotypical model of autism tends to focus on recognizing and supporting the many strengths that align with an individual's neurodiversity. However, it is equally important to recognize that neurodiverse individuals also have to navigate challenges, both as a result of their condition and as a result of systemic barriers created by a neurotypical-favoring school system. Exploring ways to mitigate these challenges and remove these barriers remains an important consideration, even within a more socially constructed model of autism.

Social Supports

Most participants talked about social difficulties that negatively impacted their educational experiences. Trevor talked about attempting to understand social cues and other people's communication as trying to speak *a foreign language* and Julia shared that she felt at a loss when it came to the neurotypical social skill of *mindreading*. Emily described social situations as draining; although she had developed many of the behaviors needed to navigate social interactions, constantly presenting as neurotypical was exhausting because she found herself *trying to do the behaviors perfectly, because if [she doesn't and loosens] up a little bit too much and do things the way that may come more natural, somebody may call [her] our for it.*

Self-advocacy is also difficult under these conditions. Emily stated that *sometimes [I] don't know whether it's ok to go and bother somebody, or when to ask someone for help.* Trevor and his advocate both shared that, even if he feels comfortable asking someone for

support, often finding the right words to ask or regulating himself enough to understand what he needs is a challenge, so he more often finds himself freezing up.

An approach that many educators take to addressing these types of social challenges (and the sensory challenges explored below) is to expose students to challenging situations in order to build tolerance and resiliency. This is a flawed solution, however. Julia, for instance, shared that she never built a tolerance, but instead just isolated and exiled herself, later turning to drugs to help her cope with these unavoidable circumstances. By mid-way through high school *[e]veryone thought I was doing such a good job [...] but I was just always fucked up. And they thought I was normal when I was fucked up*. None of the participants shared that these forced situations helped them to build a worthwhile level of tolerance, instead viewing them as necessary evils (at best) or significant hindrances to what could have otherwise been a more meaningful and enjoyable educational experience.

Sensory-Specific Challenges

The mention of sensory challenges related to the school environment was universal among participants. Most notably, Julia pointed out that her desire to be able to relate to other students and socialize, countered by the overwhelming challenges she had dealing with sensory overstimulation, especially with noise, was a big factor that led to her initially self-medicating with street drugs. The challenges mentioned by all participants tended to relate to either the school environment itself, the tasks required of students, or students' relations to other classmates.

The sensory challenges presented by the physical building and school environment itself were prevalent, but varied. Trevor talked about developing headaches and illness from the lighting used in most school buildings, Julia struggled with the level of noise, and Emily had a hard time with the crowded hallways and lack of personal 'space bubbles'. Many participants agreed that access to quiet, sensory spaces could have a huge impact on their comfort and ability

to learn. Julia reminisced about spending time in a sensory room at her mother's workplace as a child, not realizing at the time that's what its sole purpose was. Based on the regulatory impact of that space, she felt confident in the impact of schools *having a space where I feel comfortable in the school, having a room that has the lights off and that you can sit on the floor. That you can go recharge for a second.*

Beyond the physical space, participants mentioned the sensory challenges presented by some of the ways in which instruction was designed. This could be as simple as students' method of recording notes and assignments (Julia talked about her frustration with typing over handwriting, while Brandon could not handle writing with a pencil from a young age - this contrast reinforces the importance of knowing your student well and willing to be flexible in accommodating their needs.) Julia also talked about spaces for work, pointing out that she would be willing to spend double the time working on a project if she could work in her own, quiet space, rather than a noisy classroom or office.

The sheer volume of people in a school presented sensory challenges for many participants as well. Trevor shared that one of the major things he would change about his school experience was *the class when there was a substitute teacher*. The unpredictability of other students' behaviors, shift in routine, and added chaos of having a new person managing the class was often overwhelming to both his sensory processing, and his sense of order. Emily shared that her vision of a neurodiverse-centred or truly inclusive educational experience would include teaching all students how to maintain a level of personal space with others and recognize considerate patterns of movement in crowded areas, as other people's proximity was often a great source of unease to her. Although participants acknowledged the need for crowded spaces in a universal public education setting, they brought up many challenges associated with that, and suggestions about ways to support neurodiverse students with navigating those challenges.

It is important to note that these sensory difficulties would often manifest themselves in illness or pain, which could be experienced in the body in unique ways that may not be understood by neurotypical educators and classmates. Challenges, in general, could also often lead to neurodiverse students acting out in ways that would appear to be mere misbehaviors to teachers. Trevor's advocate shared the important reminder that *[i]t's really easy to see the behavior and not see the person in the behavior. Because they're just as trapped in that behavior as the teacher feels.*

Resilience

Despite facing significant barriers, both related to their neurodiversities directly and the boundaries inherent in the educational and medical systems, participants spoke thoughtfully about their past experiences and demonstrated a great deal of resilience when reflecting.

Julia, for example, reflected that her late diagnosis, while difficult in many ways, was timely, as she may have struggled with the stigma of an autism diagnosis earlier in her adolescence. Brandon, as well, stated that *I think a lot of the stuff that happened the way it did had to happen that way.*

When asked about the important learnings they took away from their grade school experience, many of the participants cited a sense of personal agency and the self-motivation that emerged from their challenges within the system as being one of the most valuable things they took away from their experiences. Julia shared that her educational experiences *taught me that you don't have to suffer. If you don't like the way something is going, it's not like 'Yeah, well shit sucks. You've got to toughen up.' You can find a way to do it a different way.* Although developing an education system that is more aware of its inherent bias to specific types of thinking and striving to understand and remove barriers for individuals with more diverse thought remains an ultimate goal, it is also important to note and honour the power of agency and resiliency in the students we teach.

The Power of Relationships

Participants talked about the impact that relationships had on their educational experiences. Although participants talked about challenging or negative aspects of relationships, interviews tended to focus much more on the positive impact of relationships with peers, like-minded individuals, and educators.

Individualized and Genuine Educator-Student Relationships

Positive relationships with educators could make or break participants' experiences in the classroom. Julia shared her feeling that *there's just a lot of teachers out there who hate children* but for the most part, participants were more keen to discuss the positive aspects of their teacher-student relationships.

Overwhelmingly, participants talked about the importance of educators taking the time to get to know their students. Trevor's advocate pointed out that the best teachers he had were ones who didn't look at each class as a *class*, but rather as a group of individual students with distinct needs and personalities. Trevor reinforced this by speaking fondly of a Jr High teacher who was able to talk about fantasy films with him, but was equally able to share in the distress of his female students when the boy band OneDirection broke up.

This drive to understand students as individuals had relational and educational benefits. Teachers who took the time to be curious about the complexities of each of their students opened themselves up to an ability to better understand emotions and needs. For example, Julia talked about her desire for connections and support from educators, in spite of the fact that she didn't outwardly express a need for it: *Even though I would have been standoffish and I probably would have looked like I didn't want help at first, because I never would have gotten it before, I desperately wanted it*. Trevor's advocate pointed out that a key to understanding whether a student truly needs a break from an activity, or whether they are acting on avoidant tendencies and would benefit from being gently pushed a bit more, is in understanding that

student better as an individual, and making a call specific to that student's temperament. Ultimately, Brandon pointed out that the importance of meaningful conversations to get to know individuals and their needs was a practice with benefits for all students, not just those on the spectrum.

Getting to know students didn't expect an immediate or innate understanding of the people in their classrooms. Emily pointed out that she merely wished that her school administrators would have talked to her about her career goals and the choices she was making about her educational programming, rather than automatically condemning those choices. She felt an open and honest conversation would have been all it would have taken to understand *why I wanted to go [into the vocational program] and realize that my desire was not a whim.*

That need for teachers to be human and not infallible carried on throughout other discussions of impactful teachers. Relatable and genuine teachers allowed students to feel comfortable approaching them and fostered open communication that gave neurodiverse students a more confident idea of where they stood. Julia pointed out that she would have loved if a teacher had just let her know that they were having a bad day, as this would have prevented her from internalizing their negative reactions and worrying that she had done something wrong. She spoke fondly of her favorite teacher, a high school Social Studies teacher who she said *was a teenager once and remembered what it was like to be a teenager. So he took that into account when talking to you.* He was willing to listen when she shared truthfully, and prioritized long-term relationship building over constantly 'scolding' her for poor choices. In spite of the transformative relationship she was able to build with an approachable teacher, she shared that he was, by far, the exception and not the rule.

In Brandon's experience, teachers who were able to build up a level of reciprocal trust were the most positively memorable for him. Through his time in Behavior and Learning Assistance classrooms - segregated programs that often support the learning of students who

tend to lash out verbally and physically, he pointed out that the best teachers he had *weren't the ones who are physically capable of stopping me from being violent. They're the ones who couldn't physically stop me because they were too old to do so. [...] The ones who are the most vulnerable are the ones that I worked best with, which seems counterintuitive.* He went on to explain that those teachers often developed relationships through demonstrating emotional vulnerability and making it clear to students that they were invested in the student's best interest. It was through these intentions that his teachers were able to build a reciprocal trust with him. He pointed out one specific experience of a significant conflict with a teacher. The conflict had escalated and nearly became physical, but when that teacher shared his emotions openly and honestly afterward, Brandon realized that *he* had been the one who had betrayed the trust in the relationship. This socio-emotional realization was a significant one for Brandon, who shared that *one of the numerous disadvantages that I was dealing with because of my condition is I had no real sense of how to consider someone else's emotional mindset.* This breakthrough understanding was facilitated by the strong relationship he had built with the teacher prior to the conflict, and the teacher's willingness to be open and honest about his own emotions.

The ability for teachers to build these relationships and demonstrate these skills genuinely seemed to be the most important aspect. As Brandon stated: *If someone's completely boring and there's no indication that they're doing anything more than going through the motions of teaching, I'm going to do nothing more than the motions of pretending to learn.* All of the participants were genuine in their learning and communicating when engaged in what they were doing, so it made sense that anything less than that genuine engagement from their educators would be doing them a disservice and risk a completely ineffective relationship.

Diverse Communities

Participants' experiences with classmates were not without their challenges. Julia pointed out that kids could be very insensitive, although she expressed that this was significantly due to the fact that adults did not often provide the education required for children to be more aware of the challenges faced by classmates who did not fit the commonly held idea of 'normalcy'.

It is worth noting, as well, that participants' experiences with classmates were varied. Trevor, for example, cited working with other students in his Phys Ed class, and getting to know students in general as one of his favorite parts of grade school. All participants talked about developing social circles, especially in Jr High and High School, that provided them with meaningful social interactions.

Participants also talked about the importance of neurodiversity within our communities, pointing out the various ways in which their unique ways of looking at the world enriched their classroom communities. Brandon drew on his knowledge in a personal area of interest (the history of technological development) to point out that *a lot of the time it's someone who's an outsider swapping into another field that create an opportunity for there to be a revolution in actual design. […] someone who presents another line of insight.*

Brandon and Trevor both talked about times where they had pointed out something that no one in the class, even the teacher, may have noticed before, and Brandon suggested that allowing other students to be a part of a conversation between the teacher and a student who is genuinely interested in an aspect of what they are studying can have benefits for the entire learning community. Ultimately, Emily suggested that a truly neurodiverse or inclusive educational system focused on *thinking about how to education everybody as to how to respect everybody's thought processes, instead of expecting everybody to think in one way.*

Creating Like-Minded Connections

The importance of creating and fostering connections with like-minded people was significant for participants. This was for an array of reasons, including a better sense of self-awareness, a level of comfort, or even the pure joy of having individuals to share interests and passions with.

Both Brandon and Julia talked about consuming media (books and vlogs) and searching out groups of people who were also neurodiverse as a way of better understanding themselves. In fact, in Julia's case, it was stumbling upon the YouTube channel of a neurodiverse woman she heavily identified with that caused her to seek out a potential diagnosis of autism. She pointed out that understanding herself and connecting with like-minded others to develop a better understanding was a cyclical process for her: *It's hard because having those people in my life has been so essential, but also realizing who I am was the first step to meeting them*.

Recognizing that neurodiverse individuals may socialize differently was a big part of developing comfortable relationships for several participants. Julia explained, *I like being with the people I care about but not having to constantly interact and listen to each other, because I find that getting the words out of my mouth takes a lot of the thinking to get the right words, so it can be really stressful*. She talked about the importance of taking time with a close friend throughout the day in high school in order to "reset" as an important strategy to help her manage anxiety and get the best out of the rest of her day, but she also pointed out that often teachers we suspicious of this need, seeing it as a waste of class time when, in reality, it was often a way for her to maximize a slightly shortened period of time.

Emily and Brandon also spoke fondly about their groups of friends who gathered around appreciating their shared interests. It was common for participants' relationships to focus on being activity-based. For example, Emily had often gravitated towards other anime fans, and social evenings often consisted of watching various anime series', while Brandon talked about

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connecting with a group of life-long friends in Jr High, when he began spending time with some more academic focused, less social classmates.

Ultimately, Julia pointed out that, although educators tend to try to group students together based on opposite strengths (such as putting more outgoing students with quieter students, it's important to *recognize that if there's two kids who quietly learn together, maybe you should introduce them to each other, and they can work in a group together and they'll probably work a lot better together because they'll probably be more similar.*

The development of inclusive communities and the opportunity for neurodiverse students to connect with like-minded peers and models are two, somewhat contradictory ideas. This inherent contradiction is why relational, and not prescriptive, pedagogy is so important in developing critical inclusive practice. As Lawson (2008) points out: "Understanding the social rules of any group and knowing how to implement them is crucial to inclusion. But understanding how these change and teaching adaptability to 'difference' are also crucial to inclusion." (p. 96) Developing these learning opportunities is complex and challenging, but not impossible. It seems that educators need to be prepared to be open and flexible, recognizing that many contradictory goals may exist for any of their students, and their role is to help navigate the complexity of this paradox, not provide a universally "correct" answer.

Chapter 6 - Discussion

This study examined the lived experiences of neurodiverse students and strategies (ground in Critical Pedagogy) that teachers could incorporate to honour the neurodiversity of their autistic students.

Conversations with participants unearthed several major themes, including considerations about the purpose and benefactors of our public education system, questions about who we label (and do not label) as experts of the neurodiverse experience, recognition of the importance of understanding and addressing challenges specific to neurodiversity, and emphasis on the importance of a variety of genuine relationships within educational spaces. Each of these themes align with ideas that are already prevalent in Critical Theory and Critical Disability Studies.

Within the field of Critical Pedagogy there are ample areas of connection with Critical Disability Theory. It was clear in a review of the literature that the two areas had multiple points of intersection. These alignments continued to strengthen as I examined the thoughts and experiences of my interviewees.

Participants' experiences reflect theoretical ideas such as the flaws within the medical model of disability, the problematic influence of capitalist and neo-liberal ideologies in educational spaces, and the importance of heterogeneity in critical pedagogy. Considering the intersections between my data and established theory is an important starting point in exploring the implications of this research on educator practice. This chapter will explore those intersections between my findings and established theory.

The Purpose and Benefactors of Education

Conversations with all four participants raised questions about how our purported purposes for education aligned with actual teacher practice. In spite of a mandate of education

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as heterogeneous and student-centred, participants' experiences still reflected an outdated approach to education that focused more strongly on compliance and uniformity.

Brandon made several comments that highlighted the role schools play in reproducing a capitalist system, an idea discussed at length by McLaren (2007). Brandon identified education's tendency to favour compliant behaviors that would help someone become an effective *cog in the machine*. He identified expectations that students *stick to the level of knowledge that you're on* as an example of the ways that schools stifle creativity and reward students for following a designated script of learning, one that has been disseminated top-down from the teacher. This aligns with McLaren's observation that "neoliberal educational policy operates from the premise that education is primarily a sub-sector of the economy" (p. 27).

In addition to these examples, many personal stories and perspectives revealed the hegemonic nature by which schools obtain student consent for control. Brandon and Julia both alluded to the stress caused by an overemphasis on obtaining high marks, even though those marks often did not truly reflect a students' abilities or learnings. Ironically, in Julia's case, it was the imposition of these capitalist measures of success, and the stress of chasing these rigid goals that, in part, overwhelmed her and led to acts of resistance on her part, such as school refusal and skipping.

This has particularly interesting implications for neurodiverse students. Brandon shared that he felt he was an 'out-of-the-box' thinker with the capability to do interesting things, but that he didn't have the capability to be the *most proficient cog*. Each of the other participants referenced their strengths including the tendency to solve problems or conceive of ideas in non-traditional ways. However, this strength was stymied by the neoliberal tendency for education to exist as a factory model, with rigid parameters related to 'correct' thought.

The concept of heterogeneity also algins with this idea. Although McLaren presented the concept to encourage educators to think of Critical Pedagogy as a broad theory that influences

personalized and diverse practices, the concept could extend to Price (2011) and Walters' (2015) suggestions that teachers consider multiple avenues of communication and connection with students as a way of creating opportunities for neurodiverse students.

The ideas that arose from my conversations with participants uncovers another potential site of heterogeneity: broader, interests-based programming. All four participants had achieved impressive mastery in areas of personal academic interest, and all four participants spoke of the most successful learning experiences being ones where they were given freedom to apply learning to personal interest or to explore their own avenues of thinking. Lawson (2008) points out that, in grade school, students are often directed to move away from areas of interest and focus on what the whole is learning, while at University, the ability to focus unwaveringly in an area of speciality is considered "a sign of commitment and intelligence!" (p. 96) This speaks not only to the validity of heterogeneous learning, but also to the potential enrichment opportunities available to students who are given a voice in the direction of their educational programming. Ultimately, applying heterogeneity to curricular programming and student products of learning has the potential to present more meaningful and emancipatory learning experiences for all students, not just those who are neurodiverse.

Definitions of Expertise

Participants shared many personal experiences that challenged society's over-reliance on the medical model of disability as the ultimate expert in the disabled experience. Brandon, Julia, and Emily's stories of misdiagnoses reinforce Happe and Frith's (2020) demonstration of the many ways in which medicine continues to develop new conceptions of autism and reflect back on former misconceptions. Although, as recognized by Anastasiou and Kauffman (2011), as well as Orsini and Davidson (2013), this does not discredit valuable contributions from the medical model of disability (indeed, participants did not see a need to eradicate medical intervention entirely and recognized some of the positive supports provided by this model), it serves as an

important reminder that the positivist, medicine-centred approach to disability can only be part of our understanding. Of equal importance should be the lived experience of those who are most intimately impacted by the disability label.

Other theoretical problems with the medical model were also addressed throughout the interviews. Julia discussed the irony that, when she was regularly involved in illegal drug-use, people close to her, including her own father, assumed that she was coping well. Through the eyes of a medical conception of disability, she was "passing" as neurotypical, despite being at a low point in terms of her mental and physical health. Currently, with a proper diagnosis and neurodiverse-centred support, Julia shared that she is thriving. In this case, thriving includes accessing the accommodations that suit her neurodiversity and building a lifestyle that supports, rather than stifles or erases, her identity as a neurodiverse person.

The concept of 'passing' comes up often in Critical Theory related to autism and other neurodiverse disabilities. Bumiller (2008) highlighted the progression from medicine's focus on institutionalization to a focus on 'cure' and normalization. The concept of 'passing' is an important part of this transition. Because diagnostic criteria often include an individual's inability to understand social conventions, social development and education is often "measured in terms of [students'] progress toward acquiring normal social skills." (p. 976) Mitchell et al. (2021) point out a worrying research trend that identifies "a strong association between camouflaging autistic traits [and] poor mental health behaviors in autistic people." (p. 2) Aligning with this idea, participants were quick to point out that therapies or educational experiences that emphasized their abilities to 'fit in' with neurotypical expectations did not change their natural thought or behavior patterns. Rather, it just taught and enforced their adherence to a neurotypical script, a practice that often caused more inner distress. Ultimately, participants were aware of many 'normal' social conventions on an intellectual level. Learning

these skills was not the problem; rather, it was the discomfort or perceived futility of enacting these arbitrary behaviors that often had a greater impact on participants' behaviors.

The concept of 'normal' is problematic in this context as well. Lawson (2008) points out that, for neurotypical individuals, socially-centred behaviors evolve from being considered *their* own definition of desirable behavior, to a universal 'norm'. Eventually, a naturally neutral preference, such as preferring to spend time alone, rather than in a group, becomes defined as incorrectly 'abnormal'. Lawson points out the power of language in these cases: "When one hears words like *difference* and *diversity*, one feels a sense of colour and excitement. When one hears words like *disorder* and *deviant*, one feels fear and suspicion." (p. 63) Not only is the naturalization of neurotypical behaviors oppressive to neurodiverse individuals, but once their own behaviors are deemed to be 'abnormal', those behaviors are often subject to arbitrary value judgements that further serve to stigmatize neurodiversity.

This is explored further within the concept of 'the double empathy problem' (Bottema-Beutel et al., 2020; Mitchell et all., 2021). The double empathy problem points out that autism is, in part, defined by a lack of understanding of neurotypical behavior, without the equally important recognition that neurotypical people are often unable to extend that same understanding to autistic ways of being and thinking. Mitchell et al. (2021) recognizes this as a "failure of empathy in both directions" (pp. 3) but points out that the onus is placed on autistic individuals, as the social minority, to understand and adopt mainstream behaviors as the stakes to fit in are higher in their circumstances.

Participants' self-awareness and expertise were evident throughout my discussions. They spoke of understanding what they needed, in many cases, during their grade school education. For example, Emily demonstrated a great deal of self-awareness related both to her learning (as evidenced by her self-motivation and awareness related to her career path) and her neuroatypicality (as evidenced by her self-diagnosis). Power (2013) highlighted the ideological

shift from providing disabled individuals with supports to live independently, towards *removing barriers* that stymied successful independent living, highlighting the fact that the former continued to support a "culture of enforced dependency." (p. 206) Experiences such as Emily's reinforce the importance of Power's delineation.

It is clear that participants are able to determine their own needs and abilities; it is often structural or authority enforced barriers that prevent those needs from being met. In order to better adhere to the core Critical Theory mandate of self-empowerment, more opportunities to allow neurodiverse individuals to be truly recognized as experts on their own experiences and needs must be created.

Addressing Neuro-Specific Challenges

A common critique of CDT models that focus too heavily on social constructivism, is that they deny many significant challenges that exist in the disabled experience (Kafer, 2013; Orsini & Davidson, 2013). In examining the responses from my participants, it was clear that grappling with those challenges was an important part of the educational journeys. Price (2011) offers the important reminder that, a truly supportive neurodiverse approach to education "would emphasize helping students learn to maximize their strengths *and* minimize their weaknesses" (p. 13, emphasis added). Much in the same way that Critical Race Theory cautions against an erasure of race in favour of re-branding race as a social and cultural categorization that significantly impacts experience, many approaches to neurodiversity recognize the importance of considering the aspects of difference and disability that negatively impact individuals' lives. In both cases, this is a starting point for exploring solutions that will help to minimize or eradicate these challenges.

Keeping this in mind, it becomes even more important to allow participants to lead the way in explaining their most significant challenges and exploring whether supports need to be provided, or barriers removed, to allow them to reach their full potential. As highlighted in the

last section, participants demonstrated thoughtful and nuanced understanding of their educational journeys, so focusing again on lived experience as expertise, in this case, may be the best solution to recognize challenges, while still maintaining the autonomy and dignity of individuals.

In first exploring information about neurodiverse-specific challenges, it is worth revisiting Vygotsky's (cited in Smagorinsky, 2014) categorizations of primary and secondary disability. This is to say that some of the challenges raised by participants, such as those related to sensory processing difficulties, were related to their diagnosed disability, and would be best supported by educators exploring ways to remove barriers and accommodate as a natural challenge inherent with neurodiversity. Others, which could be categorized as part of a *secondary* disability, were a result of social conditioning or unnecessary stigma. These challenges, such as all participants' difficulties understanding social 'norms' or discomfort with large social groups, potentially required an examination of personal biases on behalf of educators and communities.

Emily brought up the importance of finding ways to help all students to understand that neurodiversity exists, and of providing supports to help neurotypical students better understand how their own, socially-reinforced habits and behaviors could, in fact, be problematic for their neuroatypical peers. A shift towards 'social skills training' for neurotypical students could reframe what society considers normal and acknowledge the validity of neurodiverse ways of thinking. This focus on other ways of knowing and being also echoes aspects of anti-oppressive multicultural education.

Ultimately, the most important consideration when reconsidering neurodivergent challenges is the importance of recognizing and honouring the resilience of the individuals facing those challenges. This is a crucial factor in avoiding a medical or charity model conceptualization of those challenges - one that reopens the problematic view of disability as

being an individualized "problem" to be solved through a "cure" or by depending on the goodwill of others. Focusing on the ample and evident examples of resilience supports a self-empowerment model and acts as a reminder that our role, as educators and allies, is to identify and remove barriers, not to act as saviors.

The Power of Relationships

The importance of developing strong, authentic relationships with educators, peers and other members of the learning community shone as one of the most meaningful influences on positive educational experiences for all participants. Stories about these relationships were varied and personal, but some commonalities developed within the data. Most notably, the importance of educator-student relationships that were individualized and genuine, and the balance between creating inclusive communities, while still leaving opportunities for neurodiverse students to create like-minded connections were two major ideas that emerged in theory and the interviews.

The forging of student-teacher relationships was a key point of discussion for all participants. In each person's case, authenticity and reciprocity were the hallmarks of a successful relationship, whether a student pinpointed a specific relationship with a teacher, or whether they were discussing what they wished teachers would have done differently. This emphasis on authenticity relates directly to Darder's (2017) Friere-inspired pedagogy of love. Darder speaks to the importance of authentic knowing our students, in turn leading to a genuine and radical love. Darder's caution against "simply superficial responses and stereotypical distortions" (p. 97) relates directly to participants' experiences, such as Julia's story about approaching a school counselor about a suicide attempt, only to have been taken through safety protocol, sent to emergency, and never again acknowledged by that counselor. Reflecting on the experience, it was an enactment of protocol, rather than embracing genuine love and vulnerability (as Darder and Friere would recommend), that drove the counselor's actions. The

bleak result of these types of relationships, Darder warns, is a complete "disabling the heart, minds, and bodies of students - an act that alienates students, forecloses their self-determination, and undermines their political formation." (p. 103) Unfortunately, these types of interactions, and their unintended consequences, were reflected in participants' journeys.

Participants also highlighted the meaningfulness of their relationships with teachers who were open to understanding who they were, rather than those who were driven by their own expectations of what they wanted their students to be. Trevor's positive experiences with teachers who viewed students as individuals, rather than part of a greater class, and who demonstrated a genuine interest in getting to know those individual students was one example of this. This finding aligns very closely with McLaren's (2007) realization that he was able to be most "effective with these students when [he] dignified their own experiences as worthy of inquiry" (p. 178). McLaren's acknowledgement that, in order to truly empower his students, it was crucial that he let go of his own expectations has significant implications when reflected back on the experiences of my participants. Teachers' commitment to elevating the experiences of each individual student is neurodiverse ideology enacted on an individual scale.

Interview conversations about building truly inclusive and neurodiverse-aware school communities also aligned with several theoretical concepts. Anderson (2017) spoke about the impact that disability could have on the educational community, reasoning that if disabled lives were recognized as a valuable variation to 'mainstream' experience, rather than something to be accommodated for, there would be great potential to "embody pedagogies of justice, interdependence, and respect for difference" (p. 477), just as a start. Although he was talking about making space for disabled teachers in academia, his statements were echoed in discussions with participants, such as when Brandon and Trevor pointed out times that they contributed meaningfully and uniquely to class discussions, or when Emily shared the importance of educating neurotypical students to have a better understanding of diversity.

Darder's pedagogy of love is relevant here as well, in its recognition that diversity "can either stimulate greater curiosity, imagination, and questions, or cause dissonance, frustration, and anger when students are not provided substantive opportunities for expression or guidance about the wisdom their cultural knowledge offers" (p. 100).

A final aspect of relationships that came up in several interviews was the importance of being able to connect with like-minded peers and role models. Although one of the expectations (and perceived strengths) of inclusion is its tendency to mirror a democratic value of democracy within the educational community, participants shared that the benefits of inclusive classrooms were often matched or outweighed by some of the emotional and mental costs that they experienced. This mirrors Goodall's (2020) observation that mainstream educational integration without changes to the educational environment and teaching practices to support autistic students leads to a practice "which in reality is assimilationist, integrationist and at worst exclusionary." (p. 1286) Although inclusion itself wasn't fundamentally problematic (in participants' experience or the literature), participants' stories suggested that, sometimes, it was important to allow students who did not parallel mainstream learning and expectations time to work with or learn from others who shared a similar neurological identity. In doing so, these students would be given the opportunity for their ways of thinking and learning to be privileged as the majority or would have a chance to benefit from shared experiences of navigating a neurotypical-centred world.

A heavy focus on inclusion in a system that continues to privilege neurotypical thought risks the marginalization or erasure of neurodiverse experiences and can reinforce a medical model by insisting on adherence to the majority. Opportunities to connect with like-minded peers or learn from neurodiverse role models allowed participants to better understand their neurodiversity and strengths within context. Emily, for example, explained that her family shared some traits that were commonly seen as neurodiverse. Although she didn't directly make

the connection between these two things in her interviews, many aspects of her story through grade school pointed to an early confidence in her diversity (evidenced by her determination to follow her career path) as well as a supportive understanding from her parents. Julia, on the other hand, spent her grade school years feeling unable to fit into her expected role as a student. It wasn't until she began making connections with neurodiverse women through online platforms, such as YouTube and Facebook, that she felt confident in requesting a diagnosis and seeking to better understand her unique strengths, rather than stressfully forcing herself to adhere to an imposed norm. This aligns with Slee's (2007) critique of neoliberal inclusion. He points out that the critical aim of inclusion was originally "not for assimilation, or absorption into the mainstream, but for the reconstruction of schools to reflect and represent the diverse identities within their communities." (p. 179) Unfortunately, participants shared a number of experiences that suggested the opposite: as a result of inclusive programming, they often found themselves in positions requiring assimilation, rather than positions that recognized the richness that diverse ways of thinking brought to their learning communities.

Through conversations with participants, it became clear that inclusion requires an understanding of the dynamic social needs of each individual student and a commitment to a relationship that is open to navigating those needs. To approach it otherwise is detrimental to the critical project of inclusion itself, and counter to the ultimate goal of fostering a more diverse community through education.

Chapter 7 - Conclusion

This study explored the responses to two critical questions related to the impact of educational experiences on neurodiverse students:

- What are the lived educational experiences of neurodiverse students?
- What strategies can teachers incorporate into their pedagogy to best honour the neurodiverse qualities of autistic students?

Participant responses were insightful and highly personalized. Among the many experiences and ideas uncovered during interviews, a number of key themes emerged:

1) Considerations about the purpose and key beneficiaries of education
2) Definitions of expertise (as it relates to both education and the neurodiverse experience)
3) Addressing neuro-specific challenges
4) The power of relationships

These broad themes were reflected in complex and varied ways throughout theory, the literature, and my participants' experiences. An exploration of these ideas uncovers significant and worthwhile considerations for teachers' practice when working with both neurodiverse *and* neurotypical students.

This modest study and review, however, is just a starting point for discussions about neurodiverse educational practices. Ultimately, this study raises more questions and areas for further exploration than it offers definitive answers. As with any critically-minded project, constant revisitation of core theories and ideas is a key tenet of practice, in part because the breadth of the topic warrants constant in-depth exploration, and in part because openness to habitually adjusting teacher practice based on student experience is a theoretical cornerstone of critical pedagogy.

Implications for Teacher Practice

The participants interviewed for this study shared personal stories that shed light on positive and negative experiences with teachers, or accommodations that they wished educators had made for them. Those experiences, coupled with relevant theoretical ideas and concepts, have yielded potential recommendations for teacher practice. It is important to note that these suggestions are not merely niche recommendations for neurodiverse-centred practice; rather, as participants pointed out, they are best practices that have the potential to positively impact the educational experiences of neurotypical students as well. Acknowledging this should not serve to diminish the challenges faced by neurotypical students nor to weaken the movement by homogenizing ways of thinking, but to recognize that removing barriers for one group should not add barriers for another. Instead, as Walters (2015) and Price (2011) explore, adherence to more neurodiverse-centred pedagogies should lead to an expansion of the strategies we use with students, rather than a complete shift. Ultimately, this expansion has the potential to benefit all students.

The recognition that resisting oppressive systems benefits everyone also aligns with Friere's (1970) assertion that the oppressor is equally trapped in their role within an oppressive system as the oppressed is. Friere's recognition that critical pedagogy serves the greater good for all is important for educators to keep in mind when framing the results of this study within their own practice.

As McLaren (2007) pointed out, it is important to remember that Critical Pedagogy is not a practice that can be achieved through following a prescriptive set of steps. In fact, to treat it as such could potentially create a rigid system that merely recreates oppression and positivism with a mere shift in approach. Instead, Critical Pedagogy is a continuous learning process whereby educators develop an awareness of the theory behind their practice, develop a range of strategies and tools, and then apply that knowledge to the specific circumstances of their

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communities and their students' lived realities. This necessitates embracing the potential

tensions created when the final goal is not a concrete and immovable solution. With that in

mind, the following recommendations are offered as part of any educators personalized practice:

- **Providing heterogeneous learning opportunities for all students**

This suggestion is grounded in the experiences of all four interview participants, as well

as the theory of critical educators such as McLaren (2007), Walters (2015) and Price (2011).

Allowing for flexible learning projects supports several critical and neurodiverse goals. First, by

providing greater flexibility within the overarching structure of the curriculum, we are

honouring the cultural or experiential realities of our students. This calls to mind McLaren's

observation that he had a far better chance connecting with his students when he stopped trying

to mold them into who he thought they should be and began trying to find ways to better

connect with who they actually were.

Flexible and heterogeneous learning opportunities also recognize students' self-expertise

as learners. The availability of student choice unseats the teacher as the ultimate 'expert' over

students' experiences. Instead, the teacher becomes an expert in the subject matter to the extent

that they are able to engage with a wider variety of approaches to the curriculum, as decided by

the students. The students themselves take on the role of experts in their own learning and

experiences. Donaldson et al. (2017) also recognize that a pedagogy focused on choice and self-

direction is an important part of self-determination, which in turn supports "an individual's

ability to be the agent of their own actions, to pursue their own goals, to face challenges, to

achieve success and to learn from mistakes." (p. 61)

Finally, approaching learning in a more heterogeneous, student-driven manner

addresses a common trait of neurodiverse learners: their ability to maintain an intense focus on

mastery in areas of personal interest. Although this suggestion has the potential to benefit a

broad range of students, neurodiverse *and* neurotypical, it specifically addresses neurodiverse ways of thinking.

- **Recognizing students themselves (and their appointed allies) as the experts in their learning needs**

Friere (1970) defines authentic education as "not carried on by 'A' for 'B' or by 'A' *about* 'B,' but rather by 'A' *with* 'B' (p. 93). As such, if we are to teach for emancipation, "emphasiz[ing] student experience" (McLaren, 2007, p. 241) becomes a key aspect of our pedagogy, and students' intimate knowledge of that experience becomes the central resource.

Providing greater student choice within curricular parameters is just one way to defer to students as the experts in their own experiences. An openness to hearing students out and creating space for them to share what they need is a crucial aspect in creating a democratic and empowering educational environment. This may require that teachers relinquish some control over student behavior, or recognize, as Julia pointed out, that students *aren't always out to get them*.

There are also several added layers of complexity related to this idea. First of all, allowing for individuality of needs is highly important here. Even in conversations between different study participants, it was clear that something that worked well for one participant would have had a detrimental effect on another. To this end, it is crucial teachers recognize the importance of *individualized* advocacy, rather than assuming an umbrella solution for all neurodiverse individuals. Secondly, Trevor's advocate pointed out that, just as with any individual, what someone *wants* may be at odds with what they *need*. For example, someone with a strong level of avoidance as part of an unhealthy coping method, might avoid certain tasks or environments despite the fact that facing those same things may be an important first step in personal growth. Therefore, acting in someone's best interests becomes a delicate task of truly hearing and seeking to understand their requests, while also working alongside them to recognize the complex nature

of many suggestions. In these cases, strong and genuine relationships become paramount (and will be addressed later in this section).

Trevor's interviews also suggested that parents and other close allies should also be approached as important members of a student's support team. I do not disagree with this, but know that each individual's relationship with their parents is complex and unique to their situation. In Trevor's case, he fully agreed that his parents had been important advocates during his educational journey. In this indirect way, deferring to Trevor's parents as advocates was an extension of empowering Trevor's self-advocacy, as he identified them as having an accurate view of his experiences. This was evident in their rapport throughout the interview as well, as both parental advocates checked in often with Trevor to confirm the accuracy of what they had shared about his experiences.

In other cases, students may not feel as comfortable with their parents speaking on their behalf. Thus, an important first consideration when building a team of advocates for a student remains their personal belief about who is most qualified to speak on their behalf. This also leaves space for students to identify other individuals who they feel may be well-qualified to represent their needs, including other professionals or even those that would have traditionally been considered "experts" under a medical model. The difference here is that their expertise is not institutionally appointed, but instead identified as an act of empowerment by the neurodiverse individual.

- **Considering ways to support self-advocacy**

Another important aspect to consider when creating a more empowering environment for neurodiverse students is the ways in which we, as teachers, can support and scaffold self-advocacy. Students pointed out they often struggled with some of the skills needed to advocate for themselves, although they were perfectly capable and aware of what they needed. Neurodiverse-related challenges, such as being unsure of common social rules of engagement

(in Emily's case) or finding it challenging to articulate a complex need (in Trevor's case), were often significant barriers in participants' journeys towards stronger autonomy.

An emancipatory education is not characterized by the traditional model of the educator "lead[ing] the students to memorize mechanically narrated content." (Friere, 1970, p. 71-72) In fact, emancipatory education practices do not centre the educator as the creator of knowledge. Instead, pedagogy should aim towards reconciling the distinctions between teachers and students, working towards a system where "both are simultaneously teachers *and* students." (Friere, 1970, p. 72) In this particular circumstance, the student creates learning by determining what supports or changes are needed, and by becoming empowered in advocating for those changes. The teacher helps to uncover the student's awareness and provides support in understanding and self-advocating.

A neurodiverse-centred critical curriculum, then, could involve support to help individuals better understand how to overcome some of the barriers to self-advocacy, perhaps by providing social stories about appropriate advocacy, or materials with sentence stems or ideas of how an individual might articulate what they need.

- **Recognizing and honouring the complexity of neuro-specific challenges**

The frequency with which participants acknowledged some of the challenges they faced throughout their education suggested that, although neurodiversity is a strengths-based theory, this does not mean that pedagogy that honours neurodiversity should ignore the significant challenges faced by individuals on a neurodiverse spectrum. Rather than denying these challenges, educators should acknowledge them in a way that honours their complexity. Bottema-Beutel et al. (2020) state explicitly that "autism itself can be celebrated while still recognizing impairments and support needs." (p. 21) Alongside this idea, they advocate for the importance of recognizing barriers within neurotypical environments that impact neurodiverse individuals, acknowledging the relationship between autism-related challenges and the

environment, and in doing so, support a nuanced view of neurodiversity that views it as "both a difference *and* a disability." (p. 21)

Acknowledging challenges within a strengths-based practice requires that teachers avoid assuming anything about these challenges, that they consider the socially constructed nature of the challenge (and how their own implicit bias may be contributing to it), and that they allow the student, as the person most intimately impacted, to lead the way in helping the teacher understand the support required.

Although the neurodiverse experience is varied and avoiding assumptions about any one individual's challenges is an important aspect of building relationships and allowing for self-autonomy, it can be helpful to understand some of the common areas where barriers might impact learning for neurodiverse students. Based on the literature and my interviews, two common areas that are often challenging for neurodiverse students are navigating the social sphere and coping with overwhelming sensory stimuli. In both of these cases, it is worthwhile to consider the extent to which we have constructed a false normal around behavior expectations. For example, are the social expectations we have of our students fundamentally and globally important, or have we ascribed the importance ourselves? Have we created or tolerated overwhelming stimuli unnecessarily in the learning environment? Beginning with questions such as this may help to remove barriers to comfort and learning for neurodiverse students in a way that is truly inclusive and recognizes "the reconstruction of schools [necessary] to reflect and represent the diverse identities within their communities." (Slee, 2009, p. 179)

Although it is true that overcoming some challenges requires hard work and learning on behalf of the neurodiverse student, starting with the initial assumption that the expectation or environment we have created may very well be an unnecessary social construct is an important anti-oppressive step in undoing some of the harm inflicted by a historical over-reliance on a medical model of disability that places the fault solely within the individual.

- **Focusing on genuine and open relationships**

Building strong relationships with neurodiverse students and other stakeholders was consistently highlighted as the most powerful strategy in support of a positive, neurodiverse-centred pedagogy. Genuine, student-centred relationship building creates social comfort for neurodiverse students and models a diverse and truly inclusive learning community. This practice is also integral in many of the other best practices mentioned above; without a genuine understanding and open dialogue with students, it is difficult to provide individualized learning opportunities, understand when something is a challenge to be avoided or one to be surmounted, or foster the comfort needed for a neurodiverse student to speak candidly about their own learning needs. Ultimately, relationship building allows both students and educators to build an individualized understanding of each other, rather than applying expectations based on a label and an institutionalized diagnostic list. It is only when we recognize the need to teach students "on their own terms first [... and dignify] their own experience as worthy of inquiry" (McLaren, 2007, p. 178) that we can lay the groundwork for their self-empowerment.

Educational relationships exist in many different iterations. Darder (2017) points out that many educators present an outward, clichéd approach to care, stating stereotypical phrases such as "I love all my students" without really understanding the true human complexity that is inherent within emancipatory love. This surface level conception of love does little to advance an anti-oppressive pedagogy. Instead, it was clear from speaking with interview participants, that several important factors contributed to positive and transformative relationships with their most significant and memorable educators.

First of all, a willingness to be human and vulnerable was both appreciated and necessary to create a genuine reciprocal relationship with each student. Added to this was the importance of committing to fully understanding that student. This often meant the most notable teachers were able to shift their approach to connect genuinely with the wide variety of

students in their class, demonstrating that they were committed to understanding each student as an individual, not just as part of the greater classroom whole. Related to both vulnerability and genuine understanding is the willingness to be flexible. Encouraging student autonomy in their learning is only truly supported by an educator's willingness to shift their pedagogy and expectations as that individual's learning journey unfolds. This flexible approach to teaching is the final characteristic in creating pedagogical relationships that support meaningful and emancipatory learning.

Recommendations for Further Study

The purpose of this study was to contribute to the broad fields of Critical Pedagogy and Critical Disability Studies through a firsthand exploration of neurodiversity and neurodiverse educational experiences. The interviews conducted provided insight into both positive and negative impacts of the education system and teacher practice on participants' educational experiences. However, the information collected is not comprehensive by any means and aspects of the study design and implementation included both planned and unplanned limitations that could be addressed in future studies.

As a qualitative study based in personal narrative, it is important to note that participants' experiences can only really speak for themselves. Although there is valuable information to be discovered through an in-depth exploration of an individual's experience, the extent to which that information can be extrapolated depends entirely on the circumstances of future individuals. As such, these findings can only be considered as a contribution to a bigger picture, one which may never be fully defined. However, this reminder is inherent in critical practice, as the need to remain open to new possibilities and individualized perspectives is a driving force in ensuring that dogmatic and potentially oppressive practices are not redeveloped from new critical ideas.

Because critical practice often requires the holding of two contradictory ideas at the same time, constant re-evaluation is necessary. As a result, this need to constantly re-examine our ideas and approach each individual student without preconceived notions based on past experiences with others is less a flaw in the study, and more an ingrained and important aspect of critical practice.

There is still a need to explore neurodiversity from a more intersectional standpoint. Although theorists such as Bumiller (2008) address some connections with neurodivergence and gender, more exploration in these areas would help to provide a more nuanced understanding of the intersections between these different identities. Conversations with the two female participants in my study uncovered some interesting relationships between gender and disability, such as the inconsistencies of diagnosis between the genders and the social expectations that seem to be placed more strongly on neurodiverse females.

Other minority identities such as race and class intersect with disability and neurodiversity in significant ways that require further study. Happe and Frith (2020) point out: "[a]utism research has typically focused on white males in high-income countries, and it is only very recently that researchers are recognising that most autistic people live in low- and middle-income countries. How culture, ethnicity and socioeconomic status affect not only pathway to diagnosis, but also the manifestation of autism and developmental adaptation, has yet to be properly explored." (p. 229)

In regards to study design, the practice of community-based participation research has recently emerged in many areas of critical research. Donaldson et al. (2017) point out that "the autism community has been the *subject* of much research, but rarely have they been involved in the development of said research, which can lead to feelings of distrust, issues with study validity, and challenges with study effectiveness." (p. 59) In light of this, an additional

recommendation for future research would be to continue to seek out ways to include autistic researchers or other members of the neurodiversity community in all stages of research design.

A final limitation of this study that should be considered in future work is the positionality of participants. Although my initial call for participants was broadly for autistic individuals (or those who identified as neurodiverse) between the ages of 18 and 28, all four of the participants that volunteered to be interviewed had completed their high school education with a fair amount of success, enough to be admitted into post-secondary programs. This meant that, even though they had faced challenges during their grade school education, they had been able to navigate the system relatively successfully. In addition to this, they were all verbal and capable of a fairly significant degree of independent living (although two participants still lived with their families). This has already been pointed out as being particularly problematic by researchers such as Simplican (2019), who raise the issue that a large number of people - many whose neurodivergence or disabilities prevent them from participating more fully in society, nevermind participating in an interview for a graduate thesis – are absent from discourse that significantly impacts their livelihood. Not only does this lead to an erasure of a berth of significant experiences in general, but there are also some notable consequences of merely representing the stories of those who are able to adhere to some level of socially constructed 'normalcy'.

Many facets of Critical Disability Theory are at odds with medical and charity models of disability, and often understandably so. However, many of the individuals who are not included in the conversation shaping CDT rely on the medical and charity models for their own well-beings and livelihood. Continuing to understand the balance between a need for medical support and honouring the socially constructed aspects of disability in neurodiverse theory and practice is a crucial consideration to ensure that emancipatory practice includes all members of the disability community.

A truly inclusive and critical pedagogy requires that educators consider the myriad of ways in which hegemonic thought has contributed to a practice that excludes or disadvantages members of our school community. The experiences of neurodiverse students are one example of the ways in which an arbitrary and socially constructed vision of 'normalcy' has prevented genuine inclusion, and emancipation, of all students.

However, Critical Pedagogy, Critical Disability Theory, and educator practice that honours neurodiversity each provide us with some potential remedies for this injustice. Through a better understanding of the lived experiences of neurodiverse individuals, educator commitment to building more genuine, student-centered relationships, and educational programming that allows for diversity of thought and interests, the potential to evolve towards a more empowering educational system and society becomes an increasingly tangible reality.

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