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DISABILITY IN EDUCATION FROM A NEURODIVERSITY STANDPOINT: A MULTI-ARTICLE DISSERTATION

A Dissertation

Presented to the Faculty of

Antioch University

In partial fulfillment for the degree of DOCTOR OF EDUCATION

by

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DISABILITY IN EDUCATION FROM A NEURODIVERSITY STANDPOINT: A MULTI-ARTICLE DISSERTATION

This dissertation, by Isabelle Kluge, has been approved by the committee members signed below who recommend that it be accepted by the faculty of Antioch University in partial fulfillment of requirements for the degree of

DOCTOR OF EDUCATION

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ABSTRACT

DISABILITY IN EDUCATION FROM A NEURODIVERSITY STANDPOINT: A MULTI-ARTICLE DISSERTATION

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This theoretical multi-article dissertation is a broad examination of education, including trends in our school system, juvenile justice system, and cultural/media system to address the disproportionate targeted failure of students with disabilities from a neurodiversity standpoint. Research shows how our current education system is not the practice of freedom for all learners, but rather a reproductive practice that teaches forms of group-based privilege that results in the disproportionate outcome of school failure, oppression, and incarceration for students with disabilities. Creating liberatory learning spaces for neurodiverse students of all races must include challenging White supremacy, neurotypical superiority, and a standardized one-size-fits-all design approach to learning. Creating neuro-inclusive learning spaces requires a paradigm shift to include a broader understanding of forms of human diversity and to foster more positive ways of thinking about human differences within spaces of learning and teaching. This dissertation is available in open access at AURA (https://aura.antioch.edu) and OhioLINK ETD Center (https://etd.ohiolink.edu).

Keywords: neurodiversity, special education, inclusive education, disability

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CHAPTER I:

MY INTRODUCTION TO AUTISM AND NEURODIVERSITY

When my son, Jasper, was diagnosed with autism at the age of 6, I knew very little about autism and neurodiversity. Before his diagnosis, Jasper's teachers occasionally would mention that he did not initiate interaction with his peers, that he really enjoyed playing with trains, or that he needed more time to complete his work. To me, he was just my son, and he was unique. I did not view him as having deficits in comparison to other children. He was always one-of-a-kind with his own interests, a child who learned at his own pace, and who chose to observe others rather than initiate conversations with them. He was affectionate, kind, compassionate, playful, sweet, and focused on what interested him. He attended private schools with small class sizes where I taught as a middle school and high school English teacher.

As he progressed from kindergarten to the first and second grade, we noticed that if he struggled to understand what to do in class, or was overwhelmed with the difficulty of the task, he would get frustrated. When he would get frustrated, he would rip his paper or play with his pencil. Sometimes, he would roll his pencil back and forth, and other times he would break it or toss it across the room. That was his way of saying that he needed extra support and that he was overwhelmed. At his age, he was not able to verbalize it or understand why he needed help when the other students seemed productive and on task. His behavior became his way of communicating. However, this behavior was not viewed as communication, but rather, was viewed as misbehavior. He began being sent to the office for minor behavioral issues. These stemmed from not having appropriate support and not having his learning needs met. His behavior was interpreted as challenging and difficult. He was eventually asked to leave private

school and was told that he was not a fit for their school. We tried several other schools and received the same message from them as well.

As a mom and educator, it occurred to me that perhaps being neurodivergent meant that he was not a fit anywhere because of, as I will argue, how school environments and classrooms are designed for the neurotypical majority of students. His feelings of being overwhelmed occurred in environments that did not center and value his diversity of ability and neurodivergence. In such environments, he was viewed as deficient and problematic. What was deficient and problematic was his learning environment, its values, ideology, and expectations. This led me to rethinking education and what it truly means to be inclusive. While the emerging neurodiversity movement has gained some degree of attention and momentum, what remains to be seen is a classroom and an education system that truly values the diversity of human minds, in addition to all kinds of human diversity, by centering neurodiversity as a naturally occurring diversity in human beings rather than viewing neurodivergence as a deficiency or a set of problematic traits. A neurodiversity approach to education includes a radical rethinking and reimagining of policies, curriculum, expectations, learning environment, and school culture.

Statement of Purpose

My dissertation study hopes to contribute to the articulation of a wider critical "neurodiversity standpoint" on key areas of education today, questioning and illuminating its predominant forms and norms as implicated in the subjugation, marginalization, and othering of neurodiverse learners' styles and needs. My aim is to apply insights from critical pedagogy, critical disability studies, and the burgeoning neurodiversity movement to problematize and challenge current forms of special education and general education classes that pathologize students that do not fit society's definition of typical or normal learners. In such cases, the body

and the mind are seen through a set of cultural default settings arrived at by ableist cultural values rooted in the medical model of disability. It is time to rethink schools' failure at inclusion and to challenge schools' habitual pathologization of "deviant" student behavior as a complex systemic issue that has more to do with schools' policy environment, culture, values, and ideology relating to the appropriateness of student differences and needs. As I have learned in the education of my own child, and as increasingly announced today by the neurodiversity movement, the struggle for justice and emancipation in and through education today demands that we learn to counter unscientific social norms related to neurodiversity as well as the hegemonic discourse that pathologizes learning differences and so serves to marginalize the neurodivergent for being educationally atypical.

Rather than engage in a larger empirical study or produce a more autoethnographic account of my own experiences of neurodiversity as both a possible source of hope and a de facto abject within the majority of schools today, I will seek to engage and add additional intervention into the published disciplinary discourse on neurodiversity by authoring a multi-article dissertation. The overall purpose across the three articles that will comprise my dissertation is to reconceptualize disability and neurodivergence in education as itself a positive form of diversity, that it should be considered a type of cultural asset that demands full inclusion rather than as a deficiency based in biological and medical definitions of one's personhood that must be compensated for and restricted to various degrees.

My theoretical study interrogates how disability and neuro-atypical students are framed in schools, with particular attention to special education, and how from a critical pedagogical position, schools are uncritically reproductive of larger socio-political ideologies relevant to the study. My research also seeks to create opportunities to reconstruct how disability is experienced

and functions within the learning community towards the prefigure of a more just, democratic, and inclusive society in which neuro-atypical students can find belonging.

Using a bricolage approach for my inquiry, I incorporate the theoretical frameworks of critical pedagogy and critical disability studies in combination with the emerging paradigm of research on neurodiversity, to critically examine how schools and the popular culture can work productively to deploy hegemonic conceptions of disability and how these constructions of disability often impact disabled and neurodivergent students. Through a critical position that resists and unsettles the normalization of a "hidden curriculum" of disability and neurotypicality, it is hoped that the need for alternative forms of neurodiverse learning communities can be better supported and practically imagined.

Statement of the Problem of Practice

As mentioned previously, the purpose of this three-article dissertation is to reconceptualize disability and neurodivergence in education as a form of diversity. The first article examines the role of media in shaping our cultural understanding of neurodivergence, differences, and disabilities. Media images and narratives have the power to deeply influence public opinion, establish societal norms, and reinforce cultural values. The depiction of disability and neurodivergence in the media can influence the public perception of disability and neurodivergence. Often, a character with a disability serves as a lens through which an audience views and understands that disability. The issue is who gets to define disability, normality, and what it means to be neurodivergent. This article is an exploration and a critique of neurodivergent characters and argues for a critical media pedagogy to enable audiences to think critically about how their worldview is mediated through media, and how to address ideological messaging in terms that run counter to the aims of the norm.

The second article brings together research on autism and neurodiversity, special education, and disability studies to show why special education needs a paradigm shift from its current pathology paradigm of disability to a more equitable and inclusive neurodiversity paradigm. A shift in paradigm allows for greater support and inclusion for neurodivergent students. The neurodiversity paradigm in education encourages neurodivergent students to discover and develop their unique strengths and abilities, and to build a positive sense of self, rather than being labeled and defined by their deficits.

The third article addresses the school-to-prison pipeline for students with disabilities. According to the National Center for Learning Disabilities, it is estimated that 60%–75% of youth within the juvenile justice system have a disability, of which students with disabilities are three times more likely to be arrested than their non-disabled peers (Snydman, 2022). Based on these statistics, special education and juvenile justice have complex, interrelated histories. The links between schools and prisons are deeply embedded, and there is an urgent need to build an understanding of how disabled students are channeled out of schools and into prisons so that these mechanisms can be named and disrupted.

The purpose of my dissertation is to examine education broadly, including habitual trends in the system of schools, the juvenile justice system as it connects with schools through the disproportionate targeted failure of students with disabilities, and the encompassing geist of our cultural/media system from a neurodiversity standpoint. The goal is to expose and challenge the oppressive devaluation of the disabled and neurodivergent in our society towards the hope of transforming it into a more equitable, accessible, inclusive, and barrier free environment.

Transformation will occur as we surrender center stage and make space for the disabled and neurodivergent to be empowered to develop agency and a voice, and for them to become a

community of conscious and critical citizens and agents of social change—the neurodiversity standpoint.

Guiding Research Questions

My research is guided by the following questions:

- 1. How are schools complicit in "teaching" disability as part of the standardization and normalization of what it means to be a person in society?
- 2. How are nonformal educational spaces beyond the school, such as represented by the media, "teaching" disability similarly?
- 3. How do these socio-political constructions of disability impact disabled, and neurodivergent students?
- 4. How might the education of disabled, and neurodivergent students, as well as students generally, be transformed through an emancipatory critical pedagogy that centers neurodiversity?

Researcher Positionality and Standpoint

I position myself as a bricoleur, layering critical pedagogy, the neurodiversity paradigm, and disability theory, and propose a neurodiversity standpoint on education, media, and the school-to-prison pipeline. I am a foreign-born Canadian citizen living and working in the United States. I was born in Tokyo, Japan, and was raised both in Hong Kong, China, and in Toronto, Canada. My identity can be described as a White, middle class Canadian, born to German and French-Canadian parents. I am an educator that has spent more than a decade teaching in private schools in both Canada and the United States. In addition to being an educator, I am the mother of a neurodivergent autistic child. I view disability and neurodiversity from three distinct perspectives: as an educator, as a mother, and as a scholar-practitioner.

My standpoint on neurodiversity and disability is informed by my lived experience as the parent of a neurodivergent child, as an educator with neurodivergent students, and as a transdisciplinary neurodiversity scholar-practitioner. Furthermore, I position myself as a mission-oriented scholar practitioner. I am a feminist, anti-racist, disability scholar-practitioner who has been informed by critical theory, critical pedagogy, disability theory, and the neurodiversity moment's ideas and literature. I seek to advocate for and contribute to the neurodiversity movement as a public intellectual with an intersectional and transdisciplinary approach to social justice.

Significance of the Study

While there is increased attention to Special Education in many schools around the nation, along with a growing movement and call for inclusive education as a space beyond the general education/special education binary, a critical diagnostic of special education would find that most are predicated upon and reproduce injustice for its students and communities. My work seeks to generate critical intervention into this norm and promote system transformation accordingly.

In addition, while there have been critical scholars who have promoted more just and liberatory forms of education in relation to issues of disability, a review of the literature suggests that critical pedagogy scholars are not yet well-versed or in dialogue with the neurodiversity movement. This work represents an olive branch towards building that larger movement and inter-scholarly dialogue.

Finally, just as the neurodiversity movement is beginning to raise forms of transformative advocacy in schools, so too is the still emerging field of critical media studies. While treatments

of disability can be found in critical media scholarship, there is a gap still in the literature specifically in exploring such work from the standpoint of neurodiversity.

Theoretical Framework/Method/Methodology

This study employs a meta-methodological approach (Pratt et al., 2020) of bricolage—an eclectic approach to social inquiry that is centrally guided by a commitment to the constructivist nature of research, in which authors of inquiry seek to engage questions as complex problems of understanding. Bricolage is a metaphor "for understanding an alternative way of making methodological choices and bringing forward the mindfulness entailed in these choices" (Pratt et al., 2020, p. 7). To employ bricolage in this way, a so-called "bricoleur" must consider the wide array of relevant tools and ways of knowing, as well as sources of information, that are available to them in a given space and time, even as they make various choices about how to organize their reflections and provide empowered conclusions as part of the research process. Bricoleurs have the ability to "(a) cobble things together, (b) to understand and engage available resources, and (c) to use a combination of existing analytical moves to solve a particular problem" (Pratt et al., 2020).

As conceptualized by Denzin and Lincoln (1999) and further theorized by Kincheloe (2001; 2004a; 2004b; 2004c; 2004d; 2005) and Berry (2004a; 2004b; 2006; 2011), bricolage research is a critical, multi-perspectival, transdisciplinary approach to inquiry which uses qualitative methods for critical social purposes. There are some important benefits to the methodological bricolage approach. Pratt et al. (2020) argue that the process of using methodological bricolage offers a deeper connection to data because it requires researchers to consider the various choices they have to make to meet the challenges inherent in a particular study. In addition, methodological bricolage "builds off the pluralism that has been the hallmark

of qualitative methods and enables the potential for new methodological innovations to emerge that can ultimately benefit both the research and the field" (Pratt et al., 2020, p. 22).

Choosing a bricolage approach is not arbitrary, rather, it serves many purposes for my work. On the one hand, as Pratt et al. (2020) argue, the politics of academic research today reflect unjust and dangerous transformations of many fields and the larger institutions that constitute them towards a "narrowing" of approaches (i.e., standardizing, disciplining, normalizing). As an Antiochian scholar-practitioner in the EdD program, I knowingly stand against this tendency. Further, as a standpoint intellectual committed to neurodiversity, such narrowing of the terms of research and education directly antagonize that which I seek to advocate for and represent legitimately in my work, namely, that neurodiversity is against cognitive narrowing and normalization. Lastly, since my work in the program will take the form of producing multiple academic papers that critically and transformatively represent my advocacy, each with its own set of questions and methods for possible answers, a methodological framework of bricolage research is not only descriptively useful but almost logically demanded.

My research combines a bricolage of critical theory, critical pedagogy, critical disability studies, and neurodiversity in a multiperspectivist and transdisciplinary framework. This bricolage approach provides a "multiplicity of theories to attempt to capture the complexity and conflicts of the contemporary era" (Best & Kellner, 2001, p. 6). The role of these theories is "to provide weapons for social critique and change, to illuminate the sources of human unhappiness, and to contribute to the goals of human emancipation and a democratic, socially just, and truly ecological society" (Best & Kellner, 2001, p. 15). Each theory provides key illuminations of social experience from different vantage points "that supplement and complement each other. At stake is the development of modes of social theory and cultural criticism adequate for capturing

salient aspects of our contemporary predicament and connecting them with projects of radical democratic social transformation" (Best & Kellner, 2001, p. 19).

In The Postmodern Adventure, Best and Kellner (2001) argue that a paradigm shift has been underway in the realms of theory, the arts, science, and culture at large due to dramatic socioeconomic, scientific, and technological developments over the past few decades. Best and Kellner (2001) note that "confronting the turbulence, excitement, and unpredictability of the day immerses us in what we are calling 'the postmodern adventure'" (p. 7). The postmodern adventure involves "leaving behind the assumptions and procedures of modern theory and embracing a dynamic and ongoing encounter with emergent theories, sciences, technologies, cultural forms, communications media, experiences, politics, and identities" (p. 7). It involves "the traversal and exploration of emerging social and cultural spaces, alive with fresh possibilities for thought, action, and personal and social change" (p. 7). The postmodern adventure calls for altering definitions of natural, social, and human reality, and requires "innovative modes of representation, mapping, and practice" (p. 7). Contemporary developments are so "highly complex, that they elude simple historical sketches, reductive theorical explications, and facile generalizations" (p. 13). What is required is a crossing of theoretical borders into a new transdisciplinary and multiperspectivist space. Border crossing and transgressing boundaries between fields provides new insights and produces valuable results (Best & Kellner, 2001). The question is which theoretical perspectives can guide us into a better future.

While academic and other theoretical grappling with the present moment appear less overtly concerned with naming and understanding this period as "postmodern," the problems and the possibilities raised by modernity have arguably globalized and become even more complex.

Thus, the demand from critical theory for a crossing of theoretical borders into a new transdisciplinary and multiperspectivist space remains methodologically central. As mentioned in the previous section, the core theoretical frameworks that inform my bricolage are critical theory, critical pedagogy, and critical disability studies in combination with the emerging paradigm of research on neurodiversity.

Critical Theory

Critical theory undergirds this study. While it is possible to read critical theory backwards in time and find other possible historical origins and practitioners of such work, it first became openly used as the name of the work done by the radical intellectuals associated with the Institute for Social Research in Frankfurt, Germany known as the Frankfurt School.

These early critical theorists built on Marx's critique of the political economy of liberal capitalism (Hosking, 2008). In his essay Traditional and Critical Theory, Horkheimer contrasted his view of traditional theory with critical theory (Horkheimer, 1972). He proposed a theoretical approach to providing an account of the social forces of domination that understands its theoretical activity to be connected to the object of the study (Rush, 2004). Since first proposed in 1937, critical theory has come to include "a wide range of descriptive and normative bases for social inquiry which have the practical aim of maximizing human freedom and ending the domination of some groups by others defined by class, power, race or other social construct" (Hosking, 2008, p. 3). In contrast to traditional theory, critical theory does not claim to be normatively objective—"its purpose is to explain oppression and to transform society with the objective of human emancipation" (Hosking, 2008, p. 3).

While critical theory has developed through multiple generations since the foundational work of someone like Karl Marx, it can be generally ascribed that the ontological position of

critical theorists is that of historical realism (Rehman & Alharthi, 2016). In the tradition of historical realism, it is assumed that a true reality exists, but that it has been "shaped by cultural, political, ethnic, gender and religious factors which interact with each other to create a social system" (Rehman & Alharthi, 2016, p. 57). Epistemologically, critical theory is intersubjective and understands that no object can be researched without being affected by the researcher (Rehman & Alharthi, 2016). Furthermore, "knowledge endorsed by those in power (politically or educationally) is to be viewed critically. The rules that legitimize some bodies of knowledge and delegitimize others should be questioned" (Rehman & Alharthi, 2016, p. 57).

Critical theory claims that both the subjects and objects of inquiry are socially and historically natured. There is no value-free position from which a universal truth claim can be made. Horkheimer rejected the notion of objectivity in knowledge by pointing to the fact that the object of knowledge is itself embedded into a historical and social process (Corradetti, 2011). Thus, critical theory aims to abandon naïve conceptions of knowledge-impartiality (Corradetti, 2011). Knowledge can only be obtained only from acts of inquiry that are embedded within a larger sociocultural, historical, and political matrix—one in which the struggle for "humanization" through education (Freire) has been named as an abiding moral concern and possibility. As such, positivist and value-free inquiry guided by proper scientific method that seeks to universalize knowledge while discounting the ideological implications should be rejected for the purpose of human emancipation through consciousness and self-reflection (Corradetti, 2011).

One of the primary tasks of critical social theory, then, is ideology critique. Ideology incorporates both "discursive" and "non-discursive" elements. That means that in addition to propositional contents or performatives, it includes gestures, ceremonies, and a set of beliefs—a

worldview—characterized by conceptual schemes (Corradetti, 2011). Ideological criticism has the function of unmasking wrong rationalizations of present or past injustices. Thus, ideological criticism aims at proposing alternative ways for constructing social bounds. The ultimate aim of critical research is not merely to explain or understand society but to change it.

In addition to ideology critique, the struggle for recognition is a key concept in critical theory. Axel Honneth, who belongs to the third generation of critical theorists associated with the Frankfurt School, argues that more attention should be paid to the notion of conflict in society and among social groups. For Honneth, conflict represents the internal movement of historical advancement and human emancipation (Fleming, 2014). This struggle for recognition characterizes the fight for emancipation by social groups. This fight constitutes a subjective negative experience of domination—a form of domination attached to misrecognitions. To be able to transform social reality, one needs to come to terms with negations of subjective forms of self-realization (Fleming, 2014). Honneth (1995) notes that the struggle for recognition explains social development and how social groups establish, institutionally and culturally, expanded forms of recognition. Internal conflicts lead to social change. This change is driven by inadequate forms of recognition and the struggle for recognition becomes a form of social praxis. It becomes clear that in critical theory, the social and the personal are connected. The theory of recognition establishes a link between "the social causes of experiences of injustice and the motivation for emancipatory movements" (Fraser & Honneth, 2003, p. 113). The neurodiversity movement, after the manner of critical theory, is an attempt to negate the misrecognition of neurodivergent individuals within an ableist society and education system. By negating this misrecognition of the neurodivergent, the neurodiversity movement demands that education and

personhood be recognized through the emancipation of so-called "disabled persons" on terms of their own movement's advocacy.

Critical Pedagogy

A second theoretical framework I employ in this study is critical pedagogy. Critical theory forms the foundation for critical pedagogy. Critical theory enables the educational researcher to see the school "not simply as an arena of indoctrination or socialization or a site of instruction, but also as a cultural terrain that promotes student empowerment and self-transformation" (McLaren, 2002, p. 62). Critical pedagogy is fundamentally concerned with understanding the relationship between power and knowledge, and with transforming oppressive relations of power in a variety of domains. It is grounded in a social and educational vision of equality and is rooted in the belief that education is inherently political (Kincheloe, 2008). Paulo Freire is one of the founders and advocates of critical pedagogy. Giroux (2020) notes that the legacy of Freire's work is a testimony to a pedagogical project where he devoted his passion "to help students develop a consciousness of freedom, recognize authoritarian tendencies, connect knowledge to power and agency, and learn to read both the word and the world as part of a broader struggle for justice and democracy" (p. 175). Critical pedagogy has a very clear objective: to transform the reality of education and society with an emphasis in overcoming the inequalities of the oppressed (Freire, 1968/2018).

Critical pedagogy insists that one of the primary tasks of educators is to make sure the future points the way to a more socially just world. This pedagogy challenges educators and students to empower themselves for social change, to advance democracy and equality while advancing their literacy and knowledge (Shor, 2002). Education cannot be neutral. It is directive in its attempt to teach students to inhabit a particular mode of agency, enable them to understand

the larger world and one's role in it, and to experience in the classroom a new understanding of the possibility of a more just, and democratic life. It does this by interrogating how and why knowledge gets constructed the way it does, and "how and why some constructions of reality are legitimated and celebrated by the dominant culture while others clearly are not" (McLaren, 2002, p. 63). Critical pedagogy seeks to understand how power works through the production, distribution, and consumption of knowledge within institutional contexts and desires to empower students as informed subjects and social agents (Aronowitz, 2008).

Critical educators know that pedagogy is not simply about teaching methods or practices, but it is about political practice that provides the knowledge and social relations that enable students to explore what it means to be critical citizens and how to deepen their participation in the promise of a greater democracy (Aronowitz, 2008). Therefore, critical educators endorse theories that recognize the problems of society as more than simply isolated events of individuals. Rather, these problems form part of "the interactive context between individual and society" (McLaren, 2002, p. 61). Critical educators find it necessary to appreciate "not only many bodies of knowledge but also the political structure of the school, and wider forms of education in the culture" (Kincheloe, 2008, p. 8). Furthermore, critical educational theorists view knowledge as historically and socially rooted, and interest bound. Knowledge is never neutral or objective "but is ordered and structured in particular ways; its emphases and exclusions partake of a silent logic. Knowledge is a social construction deeply rooted in a nexus of power relations" (McLaren, 2002, p. 63). Therefore, critical educators also examine knowledge for the way it misrepresents or marginalizes particular views of the world.

Too many classrooms today lack critical thinking, self-reflection, and imagination due to the focus on teaching for the test while disciplining those that undermine school rankings. In these types of classrooms, students are ill prepared to become informed, self-reflective, democratic citizens with agency. It is the role of critical educators to become aware of the ideologies that inform their own teaching by asking themselves how certain pedagogical practices have become so habitual or natural in school settings that teachers accept them as normal, unproblematic, and expected. These pedagogical practices need to be examined because they are socially constructed.

In addition to examining pedagogical practices, critical educators understand that the curriculum represents much more than a simple program of study, a classroom textbook, or a course syllabus. Rather, curriculum "represents the introduction to a particular form of life; it serves in part to prepare students for dominant or subordinate positions in the existing society" (McLaren, 2002, p. 74). The curriculum favors certain forms of knowledge over others and therefore, critical educational theorists are concerned with how representations in textbooks, curriculum materials, course content, rules of conduct, classroom organization and social relations embodied in classroom practices benefit dominant groups and exclude subordinate ones. This is referred to as the hidden curriculum. The hidden curriculum includes the teaching and learning styles emphasized in the classroom, as well as the messages expressed to the student by the physical and instructional environment, teacher expectations, and grading procedures. The hidden curriculum deals with the ways in which knowledge and behavior get constructed, outside of course materials and scheduled lessons.

In addition to examining knowledge construction and the hidden curriculum, critical educators also explore how schools are implicated in the process of social reproduction, and how they perpetuate or reproduce "social relationships and attitudes needed to sustain the existing dominant economic and class relations of the larger society. Social reproduction refers to the

examine how schools are implicated in the reproduction of social structures and classes through the socialization of students and through the establishment of social practices that reflect and promote the dominant ideology and culture. One of the primary goals of critical educators is to create conditions for students' self-empowerment in which they learn to critically appropriate knowledge to broaden their understanding of themselves and the world they live in, to be able to challenge the taken-for-granted assumptions about the way things are and how they can be resisted and transformed.

According to McLaren (2020), critical pedagogy will remain a vital force when teachers assume the role of public intellectuals and social activists "who are able to work with the insight that what is happening in the classroom cannot be disconnected from what is happening in the local community, the school district, and the wider precincts of democracy" (p. 1248). When asked what the future of critical pedagogy might be, McLaren replied that the future of critical pedagogy can be found in educational spaces where critical educators across the country help to fuel conscientization among students, and where they teach intersectionality. It is by "sheltering the persecuted, and only by creating conditions of possibility for new and emancipatory forms of praxis in all spaces of human sociability can we obtain as a people a new birth of freedom" (p. 1248). This work is accomplished by teachers, activities, community members, workers, and other critical citizens who learn to dream "beyond the limits of imposed on them by the neoliberal state" (p. 1248).

It is also important to note that while liberatory pedagogies, particularly critical pedagogies, are concerned with students who are marginalized in school, they have often failed to include students with disabilities. The future of critical pedagogy must also include the

disabled as an oppressed and marginalized group. In her work, Susan Gabel (2002) argues that disabled students, as an oppressed and marginalized group, are not present in the texts of critical pedagogies. Gabel asserts that one of the conceptual problems with critical pedagogy is the absence of ability diversity in its discourse. Rather than acknowledging and celebrating differences of ability, "critical pedagogy has ignored such differences and thus has constructed theoretical discourses that assume relatively similar academic ability among all pedagogical subjects" (Gabel, 2002, p. 191).

Ability diversity refers to "the range of cognitive, physical, emotional, and perhaps even behavioral ways humans interact with and live in the world" (Gabel, 2002, p. 183). Gabel's implicit argument is that ability diversity should be considered among the other diversities such as race, ethnicity, gender, culture, sexual orientation, etc. Diversity "is the umbrella concept and within diversity we find ability diversity, racial diversity, gender diversity, and other variations" (p. 183). Disability, on the other hand, should be considered "a status of oppression or identity that usually stigmatizes an individual" (p. 183). Disability, race, or gender, however, are not inherently problematic. Social forces make them problematic.

The concern with critical pedagogy is that it does not account for people with diverse abilities at the stage of theorizing and therefore cannot adequately account for them in practice (Gabel, 2002). Gabel notes that Freire, as with most critical pedagogical scholars, "omits ability diversity in his discourses about pedagogy" (p. 185). Freire never explores how critique and self-transformation play out in the lives of the disabled. Gabel's argument is that "if a theoretician considers disabled people as innately deficit, the next step too easily becomes thinking of their segregation or marginalization as warranted (or at least unquestioned) or considering them less able to benefit from subject matter teaching" (p. 187). However, if a

theoretician understands disabled people as members of a marginalized group "who have distinct ways of interacting with their world, the next step is to imagine how they and their distinct ways of living in the world alter our theorizing and, subsequently, our practice" (Gabel, 2002, p. 187). We are left with the following conceptual problem in critical pedagogy: insufficient representation, faulty assumptions about ability, and inadequate ideas about diversity.

The issue is that the classroom might look different when we consider students of all abilities. It might include wheelchairs, computers for communicating, and other assistive technologies. It might also feel different when we consider the flow of the lesson to accommodate students who process information differently. Gabel points out that "the rhythm, the time, and space of life can be different when one lives with people who interact, move through, or communicate with the world in diverse ways" (Gabel, 2002, p. 187). Critical pedagogy might even be theorized differently "so that class issues were considered from the perspective of disabled people who are generally unemployed or underemployed and who usually live in poverty" (p. 187). One consequence of the absence of disabled people from liberatory pedagogies is that they incorrectly assume "that all marginalized people are represented in the educational communities in question or that representation does not require significant alteration of ideas about those communities" (p. 188). Students with diverse abilities might need accommodations, flexibility with curriculum, or different classroom organization in order to fully participate in the classroom. It requires a fundamental shift in how lessons are planned, classrooms are organized, and how teachers deliver curriculum.

In the end, Gabel asserts that liberatory pedagogy must "be conceptually inclusive while it is also pragmatic about the real world of teaching and learning and the interests and desires of students and their families" (Gabel, 2002, p. 192). The balance of power must be shifted so that

decisions about education for ability diverse students must be shared by students and their families (Gabel, 2002). Critical pedagogy cannot be fully inclusive until its discourse begins to account for people of diverse abilities and considers the ways learning communities can be configured to include students whose "pace of life or movement through time and space are highly diverse, and whose bodies look and function in diverse ways" (p. 196). What is needed is a liberatory pedagogy that is inclusive of ability diversity and that considers the diversity of human bodies and minds.

Critical Disability Studies

A third theoretical framework employed in this study is critical disability studies. A critical disability studies framework views disability as both a lived reality in which the experiences of people with disabilities are central to interpreting their place in the world, and as a social and political definition based on societal power relations. The field of critical disability studies seeks to change conventional notions of disability rooted in the medical model of disability. Rooted in the social model of disability, critical disability theorists scrutinize the concepts of physical and cognitive impairments as well as the social norms that define particular characteristics as impairments or deficits.

Critical disability theory (CDT) is a framework for the analysis of disability which centers disability and challenges the ableist assumptions shaping society. CDT is derived from critical social theory. CDT adopts a version of the social model based on the principles that "(1) disability is a social construct, not the inevitable consequence of impairment, (2) disability is best characterized as a complex interrelationship between impairment, individual response to impairment, and the social environment, and (3) the social disadvantage experienced by disabled people is caused by the physical, institutional and attitudinal (together, the 'social') environment

which fails to meet the needs of people who do not match the social expectation of 'normalcy'" (Hosking, 2008, p. 7). CDT recognizes the inevitability of difference and conceives of equality within a framework of diversity. Its goal is theorization in the pursuit of empowerment and equality, and to remove barriers to education, employment, and full inclusion by actively engaging with cultural and material productions of difference.

Neurodiversity Paradigm

Lastly, a fourth theoretical framework utilized in my research is the emerging neurodiversity research paradigm. The concept of neurodiversity "refers to perceived variations seen in cognitive, affectual, and sensory functioning differing from the majority of the general population or 'predominant neurotype', more usually known as the 'neurotypical' population' (Rosqvist et al., 2020, p. 1). According to Nick Walker, neurodiversity is the diversity of human minds and the variations in neurocognitive functioning among human beings (Walker, 2021). The neurodiversity paradigm is a specific perspective on neurodiversity that asserts that neurodiversity is a natural and valuable form of human diversity, and that the concept of a normal brain or correct style of neurocognitive functioning is culturally constructed (Walker, 2021).

Standpoint Theory

As a *bricoleur* engaged in critical theoretical inquiry on behalf of the neurodiversity paradigm, I methodologically engage and reflect upon my sources, the problems and possibilities that they pose, and the choices that I make during my research as a scholar-practitioner informed by standpoint theory. As part of the tradition of critical theory, standpoint theory is about the production of knowledge and practices of power (Harding, 2004) and has been described as a methodology for the study of power relations (Rolin, 2009). Methodologically, standpoint theory

works to explain "accounts of nature and social relations not otherwise accessible—accounts that provide valuable resources to social justice movements. And it helps to produce knowledge and shared consciousness in oppressed groups—to create oppressed peoples as collective 'subjects' of research rather than only as subjects of others' observation" (Harding, 2004, p. 3). Per critical theory, standpoint theory argues that knowledge is socially situated. Thus, "to the extent that an oppressed group's situation is different from that of the dominant group, its dominated situation enables the production of distinctive kinds of knowledge" (Harding, 2004, p. 7). The goal is to identify oppressive features and to turn them into "a source of critical insight about how the dominant society thinks and is structured. Thus, standpoint theories map how a social and political disadvantage can be turned into an epistemological, scientific, and political advantage" (Harding, 2004, p. 8).

Standpoint theory enables us to understand how each oppressed group has its own critical insights about society. Harding (1991) claims that those who are unprivileged with respect to their social positions are likely to be privileged with respect to gaining knowledge of social reality. According to Harding, unprivileged social positions are likely to generate perspectives that are "less partial and less distorted" than perspectives generated by other social positions (p. 121). Therefore, social-scientific research should "start out from the lives of unprivileged groups in order to gain more objective knowledge of social reality" (p. 124). As a methodology, standpoint theory offers distinctive forms of oppositional and historically alternative knowledge about reality that are likely excluded from dominant forms of thought on social matters and which, by including and valuing them, a more democratic and coherently objective form of social understanding and behavior may be possible.

Writing from a Black feminist standpoint, Patricia Hill Collins (1986) argues that the status of "outsiders within" reflects a unique standpoint on society and self. It offers a particular way of seeing reality because the outsider-within sees both from the outside looking in and from the inside out—providing a rich understanding of the epistemological nature on a given problem of inquiry as constituted by a center-margins analysis (hooks, 2000). While Collins's work has provided distinctive analyses of the complex matrix of domination that comprises experiences of race, class, and gender (Collins, 1986), outsider-within critiques can and should be advanced across all forms of oppression. In this study, I will argue for a neurodiversity standpoint on education, particularly special education, to interrogate how disability and neurodivergence are framed in schools, and how disability is experienced and functions in the learning community. I will also be drawing on Black feminist standpoint to explore the intersectionality of disability, special education, and how this plays out as a school-to-prison pipeline for disabled students of color.

References

- Aronowitz, S. (2008). Against schooling: For an education that matters. Paradigm.
- Berry, K. S. (2004a). Structures of bricolage and complexity. In J. L. Kincheloe & K. S. Berry (Eds.), *Rigour and complexity in educational research: Conceptualizing the bricolage* (pp. 103–127). Open University Press.
- Berry, K. S. (2004b). Feedback looping for increasing complexity. In J. L. Kincheloe & K. S. Berry (Eds.), *Rigour and complexity in educational research: Conceptualizing the bricolage* (pp. 128–146). Open University Press.
- Berry, K. S. (2006). Research as bricolage: Embracing relationality, multiplicity and complexity. In K. Tobin & J. L. Kincheloe (Eds.), *Doing educational research: A handbook* (pp. 87–116). Sense Publishers.
- Berry, K. S. (2011). Embracing radical research: A commentary on "To the next level: Continuing the conceptualization of the bricolage." In J. L. Kincheloe, K. Hayes, S. Steinberg, & K. Tobin (Eds.), *Key works in critical pedagogy* (pp. 279–284). Sense Publishers.
- Best, S., & Kellner, D. (2001). The postmodern adventure: Science, technology and cultural studies in the third millennium. Routledge.
- Collins, P. H. (1986). Learning from the outsider within: The sociological significance of Black feminist thought. *Social problems*, *33*(6), s14–s32.
- Corradetti, C. (2011). Critical theory and Frankfurt School. In *Internet Encyclopedia of Philosophy*. https://iep.utm.edu/critical-theory-frankfurt-school/
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1999). *The SAGE handbook of qualitative research* (3rd ed.). Sage Publications.
- Fleming T. (2014). Axel Honneth and the struggle for recognition: Implications for transformative learning. In A. Nicolaides, & D. Holt (Eds.), *Spaces of Transformation and Transformation of Space. Proceedings of the XI International Transformative Learning Conference* (pp. 318–324). Teachers College, Columbia University.
- Fraser, N., & Honneth, A. (2003). *Redistribution or recognition? A political-philosophical exchange*. Verso.
- Freire, P. (2018). *Pedagogy of the oppressed* (50th anniv. ed.). Bloomsbury Academic. (Original work published 1968)
- Gabel, S. (2002). Some conceptual problems with critical pedagogy. *Curriculum Inquiry*, 32(2), 177–201.

- Giroux, H. A. (2020). On critical pedagogy. Bloomsbury Academic.
- Harding, S. G. (1991). Whose science? Whose knowledge? Thinking from women's lives. Cornell University Press.
- Harding, S. G. (Ed.). (2004). *The feminist standpoint theory reader: Intellectual and political controversies*. Psychology Press.
- Honneth, A. (1995). *The struggle for recognition: The moral grammar of social conflicts.* MIT Press.
- hooks, b. (2000). Feminist theory: From margin to center. Pluto Press.
- Horkheimer, M. (1972). Critical theory: Selected essays. Herder and Herder.
- Hosking, D. L. (2008, September 2–4). Critical disability theory [Paper]. 4th Biennial Disability Studies Conference, Lancaster University, UK.
- Kincheloe, J. L. (2001). Describing the bricolage: Conceptualizing a new rigor in qualitative research. *Qualitative Inquiry*, 7(6), 679–672.
- Kincheloe, J. L. (2004a). Introduction: The power of the bricolage: Expanding research methods. In J. L. Kincheloe & K. S. Berry (Eds.), *Rigour and complexity in educational research: Conceptualizing the bricolage* (pp. 1–22). Open University Press.
- Kincheloe, J. L. (2004b). Redefining rigour and complexity in research. In J. L. Kincheloe & K. S. Berry (Eds.), *Rigour and complexity in educational research: Conceptualizing the bricolage* (pp. 23–49). Open University Press.
- Kincheloe, J. L. (2004c). Questions of disciplinarity/interdisciplinarity in a changing world. In J. L. Kincheloe & K. S. Berry (Eds.), *Rigour and complexity in educational research:*Conceptualizing the bricolage (pp. 50–81). Open University Press.
- Kincheloe, J. L. (2004d). Redefining and interpreting the object of study. In J. L. Kincheloe & K. S. Berry (Eds.), *Rigour and complexity in educational research: Conceptualizing the bricolage* (pp. 82–102). Open University Press.
- Kincheloe, J. L. (2005). On to the next level: Continuing the conceptualization of the bricolage. *Qualitative Inquiry*, 11(3), 323–350.
- Kincheloe, J. L. (Ed.). (2008). *Knowledge and critical pedagogy: An introduction*. Springer Netherlands.
- McLaren, P. (2002). Critical pedagogy: A look at the major concepts. Routledge/Falmer Press.

- McLaren, P. (2020). The future of critical pedagogy. *Educational Philosophy and Theory*, 52(12), 1243–1248.
- Pratt, M. G., Sonenshein, S., & Feldman, M. S. (2020). Moving beyond templates: A bricolage approach to conducting trustworthy qualitative research. *Organizational Research Methods*, 25(2), 211–238.
- Rehman, A. A., & Alharthi, K. (2016). An introduction to research paradigms. *International Journal of Educational Investigations*, 3(8), 51–59.
- Rolin, K. (2009). Standpoint theory as a methodology for the study of power relations. *Hypatia*, 24(4), 218–226.
- Rosqvist, H. B., Chown, N., & Stenning, A. (Eds.). (2020). *Neurodiversity studies: A new critical paradigm*. Routledge.
- Rush, F. (2004). Conceptual foundations of early critical theory. In F Rush (Ed.). *The Cambridge companion to critical theory* (pp. 6–39). Cambridge University Press.
- Shor, I. (2002). Education is politics: Paulo Freire's critical pedagogy (Kindle edition). In P. Leonard & P. McLaren (Eds.), *Paulo Freire: A critical encounter* (pp. 24–35). Routledge.
- Snydman, J. (2022). *Unlocking futures: Youth with learning disabilities and the juvenile justice system*. National Center for Learning Disabilities.
- Walker, N. (2021). Neuroqueer heresies: Notes on the neurodiversity paradigm, autistic empowerment, and postnormal possibilities. Autonomous Press.

CHAPTER II: LITERATURE REVIEW

Models of Disability

The Medical Model of Disability

Since the beginning of the 20th century, disability has been primarily conceptualized within the medical model and has been the dominant paradigm of disability in America. (Shyman, 2016). The medical model provides a way of describing the norms that have traditionally governed disability in society (Areheart, 2008). This model relies on normative categories of "disabled" and "non-disabled" and presumes that disability is a personal medical problem (Areheart, 2008). Medicalization is a key element in the construction and reproduction of individual disability. Medicalization is important in the reproduction of capitalist society that advances private, corporate interests, and an emergent 'medical-industrial complex' (Navarro, 1976). It encourages an ideology of "victim-blaming" (Oliver & Barnes, 2012). A key feature of the medicalization of disability is the assertion that able-bodied and able-minded is "normal," and those that are not, are abnormal, deficient, less valuable, and inherently flawed.

In the medical model, disability is viewed as a physical condition intrinsic to the individual and is a result of deviation from a norm (Thurman et al., 2019). The locus of the disability lies within the individual. Disability is considered a form of deviance from the accepted norm. The traditional medical model tends to "reduce patients to a disease entity and focuses on isolating and eliminating the disease" (Schneider Jamner & Stokols, 2000, p. 9). It narrowly focuses on reducing symptoms and on interventions focused on deficiencies (Swarbrick, 2006). In this deficit-based approach, individuals as viewed in terms of their illness or disorders, and what is often overlooked are "people's interests, skills, abilities, and potential to achieve personal goals" (Swarbrick, 2006, p. 312). The medical model narrowly focuses on

illness or symptom management. Understood as a biological trait, disability leaves the individual in need of physiological assistance to remediate the effects of the disability (Areheart, 2008).

The medical model of disability does not take into consideration the environment in which one lives, which includes access to support, cultural norms, and economic factors that impact the quality of life of individuals. At its core, the medical model is centered on "the dichotomous categories of 'disabled' and 'non-disabled' in order to frame acceptable levels of intellectual, behavioral, and social functioning" (Shyman, 2016, p. 368). Within the medical model, the focus is on treatment from an external counteractive source to rehabilitate difficulties caused by the disability or curing the individual in order to attain, or approach, "normality" (Areheart, 2008). The goal is to isolate a set of particular "indices of disability, usually in the form of definable physical or intellectual characteristics, which separates those for whom 'normal functioning' is attainable without treatment and those for whom it is not" (Shyman, 2016, p. 368).

The considerable power of the medical profession today "depends on the medicalization of society and the concomitant granting of a virtual monopoly on diagnosis and treatment of illness to trained specialists" (Couser, 1997, p. 18). Modern Western medicine bases its authority on its "presumed expertise and humanitarian intent" (p. 19). In the medical model, the politics of medical discourse favors the professional (Couser, 1997) and relies solely upon expert medical knowledge to remediate difference.

The Social Model of Disability

The social model is drastically different from the medical model of disability (Oliver, 1983). The medical model deals with medical prevention, cures, and rehabilitation. The social model mandates barrier removal, independent living, accommodations, and anti-discrimination

legislation. The social model of disability has its roots in the struggle of disabled people for the realization of their civil rights. It provides "a way of conceptualizing the disadvantage experienced by people with impairments which emphasizes the social, economic, and environmental barriers to participation in society" (Burchardt, 2004, p. 735). One important distinction made by the social model is between impairment and disability. Impairment is defined as a condition of the body or mind, and is an attribute of the individual (Burchardt, 2004). Disability is defined as the loss or limitation of opportunities to take part in society on an equal level with others (Burchardt, 2004). Disability arises from the physical environment, social attitudes, and economic conditions in which individuals with impairments find themselves.

Therefore, disability is the outcome of an oppressive relationship between people with impairments and the rest of society (Finkelstein, 1980).

The social model considers the individual with an impairment as being disabled due to the social, physical, and institutional environment (Areheart, 2008). The focus is not on the physical or cognitive limitations of persons with disabilities but on the failure of the environment to adjust to their needs (Hahn, 1986). This model looks at the barriers within a social context which prevent individuals with disabilities from achieving the same level of functioning as a non-disabled person (Dubois & Trani, 2009). Therefore, from this perspective, society itself needs to be redesigned to improve the way it supports and meets the needs of people with disabilities (Oliver, 1996). In the social model of disability, the experience of disability is not inherent or inevitable given a particular medical condition, rather, it depends upon one's social context (Areheart, 2008).

Tom Shakespeare (2017) argues the medicalization of disability is an obstacle to effective analysis and policy, and a social model approach is indispensable. The social model of disability

emerged in resistance to the medical model and that resistance "is inherent within all strands of the social model: resistance to stigma, disablement, social oppression, political and economic exclusion" (Gabel, 2009, p. 7). The social model of disability and the social interpretations of disability reject the clinical and medical model of disability that pathologizes difference and does not consider the lived experiences of disabled people. In this model, disabled people resist the medicalization of disability and the imposition of medical authority over their lives (Gabel, 2009).

Oliver and Barnes (2012) attempt to develop a social theory of disability to counter the medical and psychological perspectives on disability. In their view, disability is redefined as social oppression and exclusion. They locate disability within the context of society and social organizations "with particular emphasis on the working of the economy, politics, and culture" (p. 31). They center their attention on the ways impairment and disability are produced as individual and as medical problems with a capitalist society. They stress the importance of investigating the interplay between people's experiences and their wider historical and political circumstances. They argue for a sociological re-assessment of commonsense thinking and behaviors. So-called "natural" "attitudes, institutions, processes, and structures are dependent on social factors and contexts, which are supported and transformed by human action" (p. 13).

By drawing attention to social, economic, and physical barriers, the social model rejects the idea of disability as a personal tragedy. The barriers to full participation in society are not intrinsic to the individual, rather, they are social in nature. Therefore, it is a matter of social justice that these barriers be removed and dismantled (Oliver & Barnes, 1998). Making the shift from the medical model to the social model of disability transfers the focus from a limited biomedical perspective to a wider perspective, "incorporating rights, justice, empowerment and

choice" (Dubois & Trani, 2009, p. 195). The goal of the social model is to empower people with disabilities by removing barriers, increasing social inclusion, and adjusting the social environment to fit individuals. The next section is an overview of Autism Spectrum Disorder and how it is defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM), the medical model of disability, the social model of disability, and the neurodiversity paradigm.

Defining and Understanding Autism

Autism Spectrum Disorder and the DSM

Autism research has changed substantially since Kanner first identified and described cases of 'infantile autism' in 1943 and Asperger in 1944. One prominent change has been the increase in diagnoses and prevalence over time. It was once considered a rare condition; however, it has greatly increased in prevalence. Prevalence is the number of individuals in a population that have a condition relative to other individuals in the population (Centers for Disease Control and Prevention [CDC], 2022). The prevalence of autism spectrum disorders has steadily increased of the last decade (Kulage et al., 2014). In 2012, The (CDC reported the prevalence of autism spectrum disorders as 1 in 88 children. Currently, approximately 1 in 44 children have been identified with autism spectrum disorders (CDC, 2022).

Grinker (2007) notes there is a clear rise in prevalence of autism, and that there are more people with a diagnosis of autism now than at any time in history. This is due to cultural factors that have changed our perspectives on children and mental disorders (Grinker, 2007). This shift in how we view autism is part of a set of broader shifts taking place in society. The growth of child psychiatry, "the decline of psychoanalysis, the rise of advocacy organizations, greater public sensitivity to children's educational problems, and changes in public policies have together changed the way autism is diagnosed and defined" (Grinker, 2007, p. 4). The diagnosis

of Autism Spectrum Disorder (ASD) has changed substantially since its inception due to evolving screening, assessment, and monitoring techniques (Matson, 2016). The diagnosis of ASD is based on presenting behavior and developmental history. The criteria used in diagnosis have evolved over time because of research and increased understanding of autism. The criterion for diagnosing ASD is found in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-V) published by the American Psychiatric Association. The DSM is a guidebook used by mental health professionals in the diagnosis of many mental health conditions. The first edition, the DSM-I, was published in 1952, and the latest edition, the DSM-V was published in 2013. The DSM is not only a diagnostic manual; it is both a "medical guidebook and a cultural institution" (Carey, 2008, para. 5). Many researchers have explored whether changes in the DSM over the years have affected autism prevalence rates.

For autism, several important developments occurred in the latter half of the 1960s and during the 1970s related to defining and diagnosing autism. Rimland (1964, 1968) created the first checklist for assessing characteristics of autism. Research also suggested autism was a distinctive concept and not the earliest manifestation of schizophrenia. Therefore, Rutter (1978) proposed a new definition of autism that included delayed social and language abilities beyond general developmental level, as well as restricted interests and repetitive behaviors—all with onset early in a child's life (Rosen et al., 2021). This new definition proved highly influential in the advent of DSM-III.

Autism first appeared in the DSM-III as Infantile Autism. The criteria are simplistic; infantile autism is listed as having an onset before 30 months of age, pervasive lack of responsiveness to other people, gross deficits in language development, peculiar speech patterns, bizarre responses to the environment, and absence of delusions (American Psychiatric

Association, 1980). These simplistic criteria likely affected the prevalence rates at the time. At the time that autism was first recognized in the DSM-III, it appeared to be a rare disorder with a rate of 3 in 10,000 children in one of the first studies (Treffert, 1970).

Following the DSM-III, the DSM-IV-TR attempted to be more specific and to broaden the diagnostic criteria to include different symptoms and deficits. In the DSM-IV, infantile autism is changed to Autistic Disorder. The criteria are broken up into three groups of symptoms with examples of each. These examples include impairments in social interaction, impairments in communication, and restricted or repetitive patterns of behavior. This is known as the triad of impairments. It refers "to the basic triad problems underlying autism as impaired social interactions, impaired social communications and restricted behavior patterns" (Wing et al., 2011, p. 768). Social interaction was added to the DSM-IV-TR; it did not appear in the DSM-III. Also, the DSM-IV changed the wording in regard to the communication and language criteria. What was worded as delays in language development in the DSM-III was changed to impairments in communication in the DSM-IV (APA, 2000). One criticism of the DSM-IV-TR is being responsible for widening the criteria for autism spectrum disorder and may have contributed to the recent marked increase in prevalence rates (Wing et al., 2011).

Due to advances in research, there have been more changes made from the DSM-IV-TR to the DSM-5. According to DSM-V, to meet the diagnostic criteria for autism, a child must have persistent deficits in the following three areas of social communication and interaction: 1. Deficits in social-emotional reciprocity, 2. Deficits in nonverbal communicative behaviors used for social interaction, and 3. Deficits in developing, maintaining, and understanding relationships (APA, 2013). In addition to these deficits, they must also have at least two of four types of restricted, repetitive behaviors: 1. Stereotyped or repetitive motor movements, use of objects, or

speech, 2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of behavior, 3. Highly restricted, fixated interests that are abnormal in intensity or focus, and 4. Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment (APA, 2013). Symptoms must also be present in a person's early development period, and cause clinically significant impairment socially, occupationally, or in other areas (APA, 2013).

Essentially, the DSM-V defines the key features of autism spectrum disorder as persistent impairments in reciprocal social interaction and communication, and repetitive, restricted patterns of behavior, activities, or interests (APA, 2013). It is important to note the DSM-V also includes the idea the stage at which functional impairment becomes apparent varies according to an individual's characteristics and their environment (APA, 2013). In the latest edition of the DSM, the most obvious change is the deletion of Asperger's disorder and pervasive developmental disorders (PDD); both are subsumed into the category of ASD (McGuinness & Johnson, 2013). These changes to the diagnosis of autism in the DSM-5 are intended to improve "specificity, validity, and reliability of diagnosis" (McGuinness & Johnson, 2013, p. 17). In addition, the DSM-V has a somewhat more flexible approach to the age at which symptoms would need to be present to make a diagnosis. The new criteria specify symptoms must be present in an individual's early development period but may not be evident until the demands of the social environment placed on the individual exceed their level of functioning (APA, 2013).

Autism According to the Different Models of Disability

As stated previously, there are primarily two distinct models for understanding disability: the medical model and the social model. Autism is defined and understood differently in each model. In the medical model, the term disability refers to an impairment or defect which is seen

as being located in the individual. Through the lens of the medical model a person is seen as "having" a disability (Walker, 2021). In this model, a person "has" autism. Autism is defined as a diverse group of conditions characterized by social and communication deficits, and repetitive or restrictive behaviors (World Health Organization, 2022; APA, 2013).

The medical model establishes autism, to be "an experience and identity belonging to the individual as a reflection of an abnormally disordered body, mind, or affect" (Baglieri, 2017, p. 5). It locates disability in impairments and deficits of the individual and seeks cures and remedies rather than social change. Furthermore, it emphasizes perceived weaknesses to the exclusion of strengths and conceptualizes individuals in terms of their deficiencies (Armstrong, 2010). The DSM-V and most diagnostic instruments are designed to pinpoint deficits within an individual and to view disability as a disorder and a personal deficiency (Walker, 2021). Therefore, an individual who "has" autism is diagnosed as having deficiencies and deficits due to having a "disorder" and is characterized as being "abnormal."

Baglieri (2017) argues that characterizing children as "normal" or "abnormal," "general" or "special" stigmatizes differences. When terms such as "normal" and "abnormal" are applied, the terms are never neutral descriptions. Rather, "they form a hierarchy in which the aspect deemed 'abnormal' is nearly always perceived negatively and less desirable" (Baglieri, 2017, p. 103). Therefore, this model of disability has damaging implications for autistic individuals who are only viewed through the lens of their deficits and who are stigmatized for being different. In essence, the medical model's goal is to prevent an individual "with" autism from living a life "that deviates from a supposedly ideal state and to ameliorate those difficulties that arise from living in a society that is constructed according to assumptions of the ideal neurological state" (Rosqvist et al., 2020, p. 4). Therefore, there is an urgent need to expose the myth and privilege

of the "normal" child against which the experiences of children with disabilities are construed (Baglieri, 2017). Normalcy must be thrown into question because it perpetuates ableism and the disenfranchisement of neurodivergent individuals.

In opposition to the medical model, there is the social model perspective on autism. In the social model of disability, "disabled is understood as the opposite of enabled. Society is set up to meet the needs of people with a specific set of traits, needs, and abilities. Those with privilege are abled, or enabled—in other words, society is set up to enable their participation" (Walker, 2021, p. 61). In this model, autistic and neurodivergent individuals are understood to be disabled by a society that fails to enable their participation by removing barriers. In this model an individual is "disabled" when society is not properly set up to enable their participation, and instead is often set up in a way that creates barriers to their participation (Walker, 2021). Therefore, individuals whose needs differ from the dominant majority, such as neurodivergent individuals, become disabled by society, not because of any inherent flaws or deficits within themselves. Disability is understood as being contingent upon the person's context and environment. In other words, disability "is not a static condition located within the individual (as per the medical model) but instead is a phenomenon that manifests in varying ways and in varying degrees" (p. 62). Disablement occurs when there is a mismatch between a person's individual needs and their context or environment. Disability is "what happens when those whose needs aren't sufficiently accommodated. You're disabled to whatever degree your participation isn't properly enabled within a given setting" (p. 62). In this model, there is a clear mismatch between neurodivergent needs and neurotypical environments. Therefore, the social model demands that society remove the barriers preventing neurodivergent individuals from full participation in society by providing access, support, and accommodations.

The Neurodiversity Paradigm

In addition to the medical model and the social model perspectives on autism, the neurodiversity paradigm provides additional insights into the nature of neurodiversity. Moving away from the negative terminology of "disorder," the term "neurodiversity" was coined by Judy Singer to represent the neurological diversity of all human beings. Neurodiversity is commonly described as a reaction and challenge to the medical model of disability that views autism as a neurological defect or disorder (Rosqvist et al., 2020). From the neurodiversity perspective, neurodivergence simply represents the wide variety of differences among human beings (Rosqvist et al., 2020). The term neurodiversity describes variability in brain structure and function, and resulting cognitive processes, accounting for differences in individuals (Fletcher-Watson & Happe, 2019). Neurodiversity is the diversity and variation among minds and is an intrinsic characteristic of human beings (Walker, 2021). More specifically, in Neuroqueer Heresies (2021), Nick Walker maintains each human being differs from every other human being with respect to "their neurocognitive functioning—how they think, perceive, know, and develop, how their minds process information and interact with the world. Neurodiversity is the name for this phenomenon" (p. 53). Therefore, the concept of neurodiversity refers to variations in cognitive, affectual, and sensory functioning (Rosqvist et al., 2020). All humans are neurodiverse because they all differ in how they function neurologically.

The neurodiversity paradigm reframes the conversation about disabilities and neurological differences such as autism by emphasizing the diversity of human minds as a naturally occurring form of human diversity. It acknowledges the differences in how individuals learn, perceive, and experience the world (Hamilton & Petty, 2023). The essence of neurodiversity is empowerment and the need for neurodivergent individuals to be involved in all

aspects of decision-making about their health and well-being (Fletcher-Watson & Happe, 2019). The neurodiversity paradigm rejects the concept of a "normal brain" perpetuated by the pathology paradigm of the medical model of disability. It rejects the dominant culture's construction and idealization of normativity and neuronormativity (Walker, 2021). Therefore, within the neurodiversity paradigm, a neurodivergent person does not diverge from any objective concept of normality, but rather, from "the prevailing culturally constructed standards and culturally mandated performance of neuronormativity" (Walker, 2021, p. 59). The neurodiversity paradigm applied in conjunction with the social model of disability, "suggests an approach to autistic well-being based in de-pathologizing autism, accepting autistic people, and actively working to enable the full societal inclusion of autistic people by finding better ways to accommodate their access needs. Enablement is the solution to disablement" (Walker, 2021, p. 68). The goal of neurodiversity is to question the social construction of normalcy, and to move towards a more neurological pluralistic society.

To summarize, the medical model views autism as a disability and a deficit located within the individual. The goal is to remedy or cure individuals to make them less autistic and more "normal" in order to improve their well-being. The social model views autistic individuals as a marginalized group whose access and support needs are not being met. This lack of support and access is what disables, rather than enables, autistic people's participation in society. Therefore, the goal is to advocate for support and accommodations in various contexts and environments. The neurodiversity paradigm defines autism as a natural variation in brain structure and function. It emphasizes the diversity of human minds as a naturally occurring form of human diversity and should be celebrated rather than cured. The goal is to advocate for

awareness, acceptance, and inclusion. The next section addresses the context of disability in special education, and its implications.

The Context of Disability in Special Education

Throughout the contemporary era of education, "children considered at risk educationally, or those identified as being disabled, were considered enigmatic to the system" (Jubala et al., 1993, p. 178). As a result, educators looked to psychology, science, and technology for a solution. Special education was created as an alternative structure based on a diagnostic/prescriptive model of teaching that follows a regimen of testing and systematic instruction to remediate deficiencies. The positivistic doctrine of science came to be dominant in American society, and this impacted the field of education. Inevitably, the outcome for educators was to approach knowledge through a testable theory of human behavior (Jubala et al., 1993). Behaviorism became the model for education because of its focus on the observable and the objective. One outcome of this approach that had a profound effect on education was the psychology of deviance. The psychology of deviance "refers to the categorization of groups of children and adults as deviants whose behavior needs to be remediated in order to bring it into line with a more 'normal' conception of behavior" (Jubala et al., 1993, p. 176). In a special education model, the student is deemed to be deviant and in need of remediation to normalize their behavior to become more socially acceptable.

Disability and the Power of the Norm

Disabled individuals often face normalization as a technology of power. Normal stands indifferently for what is considered typical or the so-called objective average. However, it also stands for "what has been, good health, and what shall be, our chosen destiny. That is why the benign and sterile sounding word 'normal' has become one of the most powerful ideological

terms of the twentieth century" (Hacking, 1990, p. 169). In its most basic conceptualization, abnormality is that which deviates from the norm. Even before the concepts of the norm and the abnormal were established by Quetelet and Galton, there were notions of difference and otherness associated with physiological characteristics. In literature, we have all read stories about "wild children" that have been raised in the wild by wolves, such as *The Jungle Book*.

Lewis and Kahn (2010), in *Education Out of Bounds*, argue for a Foucauldian genealogy of special education as problematically reproducing the historically normed concept of *anthropos*. In the chapter "Victor, the Wild Child: Humanist Pedagogy and the Anthropological Machine," Lewis and Kahn (2010) share the story of a wild, feral child, and argue that feral children are linked to the question of humanist education. In January of 1800, a strange young boy was found in the South of France. The young boy could not speak and was considered feral by French society. He was sent to the Institute for Deaf-Mutes in Paris where a panel of experts deemed him an idiot incapable of learning. A young doctor named Jean Marc Gaspard Itard, considered the founder of special education and lineage teacher of Maria Montessori (New World Encyclopedia, 2018), took it upon himself to civilize the wild, mute child. They named him Victor. According to Lewis and Kahn (2010), this story offers unique insights into the history of special education and the nature of humanist education.

Lewis and Kahn (2010) argue that "the trials and tribulations Itard undertook to educate homo ferus (re) enact the primal scene of a superstitious and anthropocentric educational practice, which is predicated on the ban of the proverbial if not mythical figure of the wolf-child" (p. 42). Lewis and Kahn (2010) link this case history with the broader political discourse on the feral human and recognize that education, like society, operates through the exclusion of the homo ferus as a dangerous other to be feared. This case reveals how education functions as an

"anthropological machine" (Agamben, 2004) to replace the image of the feral with the less dangerous image of the abnormal (Lewis & Kahn, 2010). Therefore, the abnormal "becomes the medical attempt to gentrify the disruptive power of the monster and thus transform the exceptional into the exemplary" (p. 43). In short, Victor, the wild boy, was labeled an idiot, and this strange monster was explained away as a natural deformity of the mind and became contained within a medical diagnosis.

Itard aimed to train the body to eventually train the mind with a utilitarian notion of fitness and bourgeois behavior. To regulate this body, "medical and pedagogical discourses invented the figure of the 'abnormal'—the clinical object of scientific experimentation and observation that replaced the uncontrollable and unobservable life of the monster" (Lewis & Kahn, 2010, p. 45). The experiment on Victor was to mold his body "into a properly functioning social mechanism predicated on an instrumental and medical understanding of utility" (Lewis & Kahn, 2010, p. 50). For Itard, Victor was an experiment to test the power of a modern scientific educational methodology where the wild child's humanization must be fully actualized through scientific pedagogy. The ultimate goal is to exorcise the wolf from the human, and maintain the superiority of the human, by gaining mastery over the divide between the human and the animal. The issue that arises is a certain way of thinking when "nature's order is characterized hierarchically in terms of moral or political worth against a biologically defined other" (Lewis & Kahn, 2010, p. 48). Therefore, society comes to function by banning the wolf child, and education comes to serve as a social machine to produce the human as the negation of the animal through a medical model. Victor's education consisted of trying to universalize the body of the White, male, bourgeois tutor. Furthermore, Itard's pedagogy desired to make Victor's body "speak the normalistic language of the burgeoning bourgeoisie and thus to supplant the

inarticulate and savage body of violent gesticulations with the codified and orderly body of middle-class society" (Lewis & Kahn, 2010, p. 50).

According to Foucault (2003), in his lectures at the College de France 1974-75, the concept of the "norm" is a political concept where processes of power emerge and are legitimized. Foucault understands that power can be enabled through normalization, which is where ideas, practices or values come to be seen as "normal." The expectation is that people conform to them otherwise they are viewed as "abnormal" and are excluded. In *Discipline and Punish: The Birth of the Prison* (1977), Foucault argues that normalization becomes one of the great instruments of power, and that "the marks that once indicated status, privilege and affiliation were increasingly replaced-or at least supplemented-by whole range of degrees of normality indicating membership of a homogeneous social body but also playing a part in classification, hierarchization and the distribution of rank" (p. 184).

Foucault's later work addresses how social institutions act on the body and implications these actions have on how a person is constituted as a subject (Sullivan, 2018). He approaches this through an "analysis [of] power relations" (Foucault, 1982, p. 219), which focuses on the deployment of "disciplinary techniques, normalizing judgment, biopower, and the carceral network" (Sullivan, 2018). Central to Foucault's approach is an analysis of the operation and relations of power "in terms of various techniques and technologies of discipline, surveillance, and punishment" (Sullivan, 2018). Every aspect of life is subject to a series of procedures designed to enforce "normality." In short, biopower consists of various institutions, various apparatuses of the state—educational, industrial, medical, military, psychiatric, the police and prisons—which constitute what Foucault calls a "carceral archipelago" (Foucault, 1977, p. 297). The carceral operates by adhering to a common standard of "normalizing judgment," which

penetrates all levels of society and all areas of life. In short, the carceral's many institutions and organizations are "the sites in which bodies are compared, differentiated, hierarchized, diagnosed; in which judgments of normality and abnormality are made; and in which appropriate methods of correction and rehabilitation are ascertained in order to restore deviant bodies to the norm" (Sullivan, 2018, p. 29).

Implications for Special Education

As mentioned previously, the medical model of disability, also known as the pathology paradigm or the deficit view, is the dominant perspective on disability in the field of special education. Due to the underlying assumptions of this model, the goal of special education is to minimize "abnormal" behaviors by addressing students' deficits rather than addressing the social processes that create the barriers and challenges students face daily in the classroom environment. This model is based on the view that "all learning problems are the result of some organic disorder or disease" (Massoumeh & Leila, 2012, p. 5802). This model also focuses on "the child's condition, seeing the problem within the child, trying to find a way of treating the child to fit in with his environment" (Massoumeh & Leila, 2012, p. 5803). It follows, then, the focus of treatment within the medical model of special education must be on either rehabilitating difficulties that are "caused" by the disability or "curing" the individual of that disabling condition to attain, or approach, "normality" (Areheart, 2008). Special education, then, is where "abnormal" students go to receive support to minimize their differences, and to "normalize" their behavior. Special education's current focus on labeling students as defective and focusing on how to remediate their impairments inequitably constrains their school experience (Baglieri, 2017). When we label and define students by their deficits, we only see what they cannot do, rather than what they can do. Education is "the process by which we become a part of society. It

is through education that we learn what is expected of us and what we can expect of others, what we can achieve and to what we may aspire" (Greenstein, 2016, p. 6). Based on the pathology paradigm of special education, students with disabilities learn that they are not part of regular society, but rather, are abnormal and inferior due to their deficits. They are not shown their strengths, how to develop them, or what positive contributions they can make to their classroom and to society.

In addition, the pathology paradigm in special education is harmful as it reflects the deficit view of disability where failure at school is blamed on a deficiency located within the student. Greenstein (2016) notes that by locating school failure as "an individual biological pathology and relegating failing individuals into separate disciplinary practices and discourses, prevailing notions of instruction, school structure and learning go unchallenged" (p. 45). In addition, poor educational achievement, unemployment, and underemployment "are assumed to be the natural consequences of impairment, rather than the result of institutional deficits or social inequalities" (Greenstein, 2016, p. 45). This is problematic. Special education is currently set up to blame students for their own failure and take no responsibility for their contribution to the disabling of students due to the deficits within the pathology paradigm. Therefore, there needs to be a move away from the pathology paradigm toward "a critical consciousness of how children with disabilities are disabled in school, how children become disabled by school, and how we may work together to seek emancipatory experiences in education" (Baglieri, 2017, p. 16). One way to measure the success of current special education programs is to examine graduation rates to see if the pathology paradigm is working for students with disabilities. Kirby (2017) argues that "if special education services are designed to provide efficacious instruction, then the graduation rates of students with services and those without services should be similar" (p. 181).

According to the National School Boards Association (NSBA, 2019), the national graduation rate in 2019 was 84.6%. The graduation rate for students with disabilities was lower with a rate of 67.1% (NSBA, 2019). There is a 17.5% difference between the graduation rates of students with disabilities and those without disabilities. In some states, the gap is much larger. For instance, in Mississippi, the gap in graduation rates between students with disabilities and those without disabilities is 46.6% (Advocacy Institute, 2019). Not only are students with disabilities graduating at lower rates, they are leaving school before completion at higher rates than their peers in general education (Kirby, 2017). The sum of "the determined risk factors and student reported reasons for leaving school before completion can be divided between two categories: environmental impact and academic achievement" (Kirby, 2017, p. 181). Both categories affect students with disabilities disproportionately and affect a student's ability to graduate. The graduation rates for students with disabilities prove "that the current implicit assumptions, created from a manifestation of the medical model, are not benefiting students with disabilities" (Kirby, 2017, p. 182). Therefore, the efficacy of the current model of special education must be examined and reformed.

The Power of Language and Labels

Language reflects the social arrangement and the structure of power. Therefore, it is important to bring to light the language used in the medical model of disability. The term disability is a linchpin in a complex web "of social ideals, institutional structures, and government policies" (Linton, 1998, p. 10). Even after 78 years, the clinical and scientific understanding of autism largely remains disorder-focused as reflected in the name of the diagnostic category in the DSM-5: autism spectrum disorder (Baron-Cohen, 2017). Baron-Cohen (2017) questions the language used to define autism and examines whether autism is properly

characterized as a disorder. He notes the word "disorder" refers to the lack of order, or to randomness, and neither of these are appropriate to describe autism (Baron-Cohen, 2017). The term 'disorder' implies the natural order has gone awry and the individual's neurobiology is dysfunctional in some way. However, the cognition and biology of autism does not show evidence of dysfunction but rather evidence of difference (Baron-Cohen, 2017). The examples of cognitive talent within individuals with autism are incompatible with the idea of autism being a "disorder." For Baron-Cohen (2019), neurodiversity is comparable to the concept of biodiversity where our language and our thinking about communities is respectful of the spectrum of diversity found in nature. Similarly, Armstrong (2010) argues it is essential we begin using more positive language when discussing the brain in its many variations, and that the term "neurodiversity" gives us the means to do this. Also, we need a framework that does not pathologize and emphasize a person's struggles, but one takes a more balanced view of what a person is capable of doing. Neurodiversity is the foundation of an understanding of identity that fosters a more inclusive citizenship and has the potential to transform how differences are valued in society and in our schools (Bumiller, 2008).

Implications and Conclusions

Shifting Paradigms for Equity and Inclusion

The disability rights movement has paved the way for an examination of the concept of disability as a social construct rooted in cultural norms, prejudices, and social power inequalities, rather than being rooted in the individual (Linton, 1998; Walker, 2021). Similarly, the neurodiversity movement has provided an alternate view of neurodivergence as a natural and valuable form of human diversity. This shift in perspective is necessary in the field of special education due to the negative and harmful implications of the deficit-based view of the pathology

paradigm for students with disabilities. Armstrong (2017) argues for the field of special education to rid itself of its negative baggage and "embrace a more progressive way of educating students who learn differently. The concept of neurodiversity provides the catalyst for such a change" (p. 10). The neurodiversity paradigm reframes the conversation about disabilities and neurological differences such as autism by emphasizing the diversity of human minds as a naturally occurring form of human diversity. The neurodiversity paradigm offers a more comprehensive view of society and of human experience, and attributes significance to human variation (Linton, 1998).

There are many benefits to moving towards a neurodiversity paradigm in special education. Changes in language, attitudes, and expectations will transform the current system by changing its focus and its direction. Positive language, attitudes, and expectations will improve academic outcomes and promote social inclusion in schools (Armstrong, 2017). The support for students with special needs would increase and be provided in ways that leverage the various strengths all students bring to the classroom. Support would also include designing a learning environment that is enabling rather than disabling (Armstrong, 2012). Another practical outcome of the neurodiversity paradigm in Special Education is the role of the educator will actively involve creating environments within which neurodivergent students can thrive and flourish rather than merely focusing on correcting errors and remediating deficits (Armstrong, 2017).

An education system that views students primarily in terms of their assets, strengths, and contributions "is more in tune with 21st century views of respecting diversity and giving all students a chance to contribute to something of value to society" (Armstrong, 2017, p. 13). Education must change to address the inequity for autistic and neurodivergent students (Wehmeyer & Kurth, 2021) and must address the needs of all learners, not just "typical"

learners. This is a matter of equity. All students should be given the same opportunities to succeed, contribute, thrive, and grow.

References

- Advocacy Institute. (2019). *State-by-state graduation rates for students with disabilities 2016-2017*. https://www.advocacyinstitute.org/blog/?p=837
- Agamben, G. (2004). The open: Man and animal. Stanford University Press.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.).
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.).
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596
- Areheart, B.A. (2008). When disability isn't just right: The entrenchment of the medical model and the goldilocks dilemma. *Indiana Law Journal*, 83(1), 181–232.
- Armstrong, T. (2010). The power of neurodiversity: Unleashing the advantages of your differently wired brain. Da Capo Press.
- Armstrong, T. (2012). *Neurodiversity in the classroom*. ASCD.
- Armstrong, T. (2017, April). Neurodiversity: The future of special education? *Educational Leadership*, 74(7), 10–16.
- Baglieri, S. (with A. Shapiro). (2017). Disability studies and the inclusive classroom: Critical perspectives for embracing diversity in education (2nd ed.). Taylor & Francis.
- Baron-Cohen, S, (2017). Neurodiversity: A revolutionary concept for autism and psychiatry. *Journal of Child Psychology and Psychiatry*, 58(6), 744–747. https://doi.org/10.1111/jcpp.12703
- Baron-Cohen, S. (2019, July/August). The concept of neurodiversity is dividing the autism community. *Scientific American Mind*, *30*(4), 30–32.
- Bumiller, K. (2008). Quirky citizens: Autism, gender, and reimagining disability. *Signs: Journal of Women in Culture and Society*, 33(4), 967–991. https://doi.org/10.1086/528848
- Burchardt, T. (2004). Capabilities and disability: The capabilities framework and the social model of disability. *Disability & Society*, 19(7), 735–751.
- Carey, B. (2008, December 18). Psychiatrists revise the book of human troubles. *New York Times*. http://www.nytimes.com/2008/12/18/health/18psych.html?pagewanted=print

- Centers for Disease Control and Prevention. (2022). Autism spectrum disorder (ASD): Data & statistics. https://www.cdc.gov/ncbddd/autism/data.html
- Couser, G. T. (1997). *Recovering bodies: Illness, disability, and life writing*. University of Wisconsin Press.
- Dubois, J.-L. & Trani, J.-F. (2009). Extending the capability paradigm to address the complexity of disability. *ALTER European Journal of Disability Research*, *3*(3), 192–218. https://doi.org/10.1016/j.alter.2009.04.003
- Finkelstein, V. (1980). Attitudes and disabled people: Issues for discussion. World Rehabilitation Fund.
- Fletcher-Watson, S., & Happe, F. (2019). *Autism: A new introduction to psychological theory and current debate*. Routledge.
- Foucault, M. (1977). Discipline and punish: The birth of the prison. Allan Lane.
- Foucault, M. (1982). The subject and power. Appended to *Michel Foucault: Beyond* structuralism and hermeneutics by H. L. Dreyfus and P. Rabinow. University of Chicago Press.
- Foucault, M. (2003). Abnormal: Lectures at the College de France, 1974-1975. Picador.
- Gabel, S. (Ed.). (2009). *Disability studies in education: Readings in theory and method*. Peter Lang.
- Greenstein, A. (2016). Radical inclusive education: Disability, teaching and struggles for liberation. Routledge.
- Grinker, R. R. (2007). Unstrange minds: Remapping the world of autism. Basic Books.
- Hacking, I. (1990). The normal state. In *The taming of chance* (pp. 160–169). Cambridge University Press.
- Hahn, H. (1986). Public support for rehabilitation in programs: The analysis of US disability policy. *Disability, Handicap & Society, 1*(2), 121–138.
- Hamilton, L. G. & Petty, S. (2023). Compassionate pedagogy for neurodiversity in higher education: A conceptual analysis. *Frontiers in Psychology*, *14*, Article 1093290. https://doi.org/10.3389/fpsyg.2023.1093290
- Jubala, K. A., Foster, W. & Bishop, K. D. (1993). The social construction of disability in education: Organizational considerations. In C. A. Capper (Ed.), *Educational administration in a pluralistic society*. SUNY.

- Kirby, M. (2017). Implicit assumptions in special education policy: Promoting full inclusion for students with learning disabilities. *Child & Youth Care Forum*, 46(2), 175–191. https://doi.org/10.1007/s10566-016-9382-x
- Kulage, K., Smaldone, A., & Cohn, E. (2014). How will DSM-5 affect autism diagnosis? A systematic literature review and meta-analysis. *Journal of Autism & Developmental Disorders*, 41(9), 1918–1932.
- Lewis, T. E., & Kahn, R. V. (2010). Education out of bounds: Reimagining cultural studies for a posthuman age. Palgrave Macmillan.
- Linton, S. (1998). Claiming disability: Knowledge and identity. New York University Press.
- Massoumeh, Z., & Leila, J. (2012). An investigation of medical model and special education methods. *Procedia Social and Behavioral Sciences*, *46*, 5802–5804. https://doi.org/10.1016/j.sbspro.2012.06.518
- Matson, J. L. (Ed.). (2016). *Handbook of assessment and diagnosis of autism spectrum disorder*. Springer Science and Business Media. https://doi.org/10.1007/978-3-319-27171-2
- McGuinness, T. M, & Johnson, K. (2013). DSM-5 changes in the diagnosis of autism spectrum disorder. *Journal of Psychosocial Nursing & Mental Health Services*, *51*(4), 17–19. https://doi.org/10.3928/02793695-20130220-01
- National School Boards Association. (2019). *Data on disabilities*. https://nsba.org/ASBJ/2019/April/Graduation-Rates-Students-Disabilities
- Navarro, V. (1976). *Medicine under capitalism*. Croom Helm.
- New World Encyclopedia. (2018, May 1). Jean Marc Gaspard Itard. Retrieved January 28, 2024, from https://www.newworldencyclopedia.org/p/index.php?title=Jean_Marc_Gaspard_Itard&oldid=1011224
- Oliver, M. (1983). Social work with disabled people. Macmillan.
- Oliver, M. (1992). Changing the social relations of research production? *Disability, Handicap & Society*, 7, 101–114.
- Oliver, M. (1996). Understanding disability: From theory to practice. Macmillan.
- Oliver, M. & Barnes, C. (1998). Disabled people and social policy: From exclusion to inclusion. Longman.
- Oliver, M., & Barnes, C. (2012). The new politics of disablement. Palgrave MacMillan.

- Rimland, B. (1964). *Infantile autism: The syndrome and its implications for a neural theory of behavior.* Appleton.
- Rimland, B. (1968). On the objective diagnosis of infantile autism. *Acta Paedopsychiatrica*, 35(4), 146–161.
- Rosen, N. E., Lord, C., & Volkmar, F. R. (2021). The diagnosis of autism: From Kanner to DSM-III to DSM-5 and beyond. *Journal of Autism and Developmental Disorders*, 51(12), 4253–4270. https://doi.org/10.1007/s10803-021-04904-1
- Rutter, M. (1978). Diagnosis and definition of childhood autism. *Journal of autism and childhood schizophrenia*, 8, 139–161.
- Schneider Jamner, M., & Stokols, D. (2000). *Promoting human wellness: New frontiers for research, practice, and policy*. University of California Press.
- Shakespeare, T. (2017). The social model of disability. In L. Davis (Ed.). *The disability studies reader*. Routledge.
- Shyman, E. (2016). The reinforcement of ableism: Normality, the medical model of disability, and humanism in applied behavior analysis and ASD. *Intellectual and Developmental Disabilities*, *54*(5), 366–376. https://doi.org/10.1352/1934-9556-54.5.366
- Sullivan, M. (2018). Subjected bodies. In S. Tremaine (Ed.), Foucault and the government of disability. University of Michigan Press.
- Swarbrick, M. (2006). A wellness approach. *Psychiatric Rehabilitation Journal*, 29(4), 311–314.
- Treffert D. A. (1970). Epidemiology of infantile autism. *Archives of General Psychiatry*, 22(5), 431–438. https://doi.org/10.1001/archpsyc.1970.01740290047006
- Thurman, W. A., Harrison, T. C., Garcia, A. A., & Sage, W. M. (2019). The social construction of disability and the capabilities approach: Implications for nursing. *Nursing Forum*, 54(4), 642–649. https://doi.org/10.1111/nuf.12389
- Walker, N. (2021). Neuroqueer heresies: Notes on the neurodiversity paradigm, autistic empowerment, and postnormal possibilities. Autonomous Press.
- Wehmeyer, M. L., & Kurth, J. (2021). *Inclusive education in a strengths-based era: Mapping the future of the field*. W. W. Norton & Company.
- Wing, L., Gould, J., & Gillberg, C. (2011). Autism spectrum disorders in the DSM-V: Better or worse than the DSM-IV? *Research in Developmental Disabilities*, *32*(2), 768–773. https://doi.org/10.1016/j.ridd.2010.11.003

World Health Organization. (2022). Autism. https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders

CHAPTER III:

RESISTING HEGEMONIC REPRESENTATIONS OF DISABILITY AND NEURO-NORMATIVITY IN CULTURE AND MEDIA

Hollywood and the American media are some of the most pervasive forms of cultural dissemination in our society. While there have been several famous arguably neurodivergent characters in Hollywood such as Forrest Gump, Raymond Babbit in *Rain Main* (Levinson, 1988) is the most well-known identified autistic character in a major Hollywood film. Before this film, there was no popular conception of autism onscreen or among the public. Autism was a mere abstraction understood by specialized doctors and dedicated parents. Through the success of *Rain Man*, autism became visible to the public, and Raymond Babbitt quickly became a cultural shorthand for autism. *Rain Man*'s influence "on how autism is thought of culturally is incalculable. But an influence, however benign or well-intentioned, can become suffocating if allowed to flourish for too long. What was once liberating can become irritating and constricting" (Knights, 2018, para. 2). Media is immensely powerful and has the ability to influence our cultural consciousness.

Media images and stories have the power to deeply influence public perceptions, establish societal norms, and reinforce cultural values (Mittmann et al., 2023). Media is perceived by most Americans as a common and reliable means of obtaining information (Mittmann et al., 2023). However, media is not merely a neutral dispenser of information, but rather, it is also a producer of knowledge, a socialization device, and one of "the most important tools for creating public consent" (Çoban, 2018, p. 2). As such, media is not neutral, but rather, is complicit in the diffusion of ideological hegemony. As Raymond Babbitt, or perhaps Forrest Gump, came to popularly represent through the hit films that centered their characters and what

an autistic person can be, so too does mass media deeply influence the public perception of disability. The representation of disability in the media can also directly influence the public perception of disability, as well as influence how people with disabilities are viewed and treated in society. Most Americans learn perspectives on disability more from films and television than from policies, research, or personal interactions (Murray, 2008a). When an audience has no direct experience with a disability, narrative representations of that disability provide powerful and memorable definitions (Baker, 2008). Rain Man brought autism onto the big screen and into the limelight. Many people's conception of autism came from this film. Rather than being seen as representing a single iteration of autism, Raymond Babbitt became autism (Knights, 2018). Media is responsible for how it defines disability and for its representations of disability. These definitions and representations affect the public perception of disability as well as directly impacting the lives of the disabled. Representation matters for many reasons, "not the least of which is because representation is a powerful way marginalized groups can gain access to our media-saturated society. For many of us, media representations are the only we have into many aspects of the world and the different groups and cultures of people who live in it" (Jeffress, 2021, p. 4). Furthermore, if marginalized groups are not sufficiently represented, they remain invisible. However, if they are "not accurately and genuinely represented, the masses will continue to misunderstand them, be unaware of their rights, promote harmful stereotypes, and act in discriminatory ways" (Jeffress, 2021, p. 4).

How we define disability matters because this definition affects people's self-identity (Wendell, 1996). In our contemporary media saturated culture, media has become central to the construction of one's social and self-identity. We identify and construct ourselves through the mediation of images. When the media depicts a character with a disability, that character's

representation works to exemplify people with that disability. To the audience, these characters demonstrate how individuals with that disability behave, feel, communicate, and experience life. In short, "a character with a disability serves as a lens through which an audience can view and define that disability" (Baker, 2008, p. 230). Media has the power to shape a culture's understanding of differences and disabilities. To understand how disability is represented in the media is to come to a closer examination of how normalcy operates in all of our lives (DeWelles, 2021). To understand disability in the media, we need to examine how disability is communicated, and if the communication of this disability maintains or disrupts normative expectations (DeWelles, 2021).

In what way is the media shaping our understanding of disability and neurodivergence? How is the media contributing to cultural representations of disability and neurodivergence? Is it stabilizing dominant ways of understanding and contributing to the negative stereotypes and misrepresentations of disability and neurodivergence? To answer these questions, we need to look further into the relationship between culture, disability, and media, what creates disability, and what cultural representations of disability are typically seen in American media.

Culture and the Social Construction of Disability

In *The Rejected Body: Feminist Philosophical Reflections on Disability*, Susan Wendell (1996) argues that defining disability and identifying individuals as disabled are "social practices that involve the unequal exercise of power and have major economic, social, and psychological consequences in some people's lives" (p. 23). To understand the power of definitions, we must ask who does the defining, for what purposes, and with what consequences. Wendell (1996) defines disability as any lack of ability to perform activities "to an extent or in a way that is either necessary for survival in an environment or necessary to participate in some major aspect

of life in a given society" (p. 23). Disability has biological, social, and experiential components. Wendell argues that both the biological and the social are interactive in creating disability. The disabled body is "not a discrete object but rather a set of social relations" (Davis, 1995, p. 11). Neither impairment nor disability can be defined purely in biomedical terms, "because social arrangements and expectations make essential contributions to impairment and disability, and to their absence" (Wendell, 1996, p. 35). This interaction between the biological and the social to create or prevent disability is called the social construction of disability (Wendell, 1996).

There are a few key social factors in the social construction of disability. According to Wendell (1996) the two main factors are the pace of life, and the physical and social organization of society. The pace of life in a society has a direct impact on a person's ability to contribute and perform. When the pace of life in a society increases, more people become disabled, not only because of physically damaging consequences of efforts to go faster, "but also because fewer people can meet expectations of 'normal' performance; the physical (and mental) limitations of those who cannot meet the new pace become conspicuous and disabling" (Wendell, 1996, p. 37). Pace is a major aspect of expectations of performance; non-disabled people often take pace for granted that they express impatience with the slower pace at which some people with disabilities need to operate. Accommodations of pace "are often crucial to making activities accessible to people with a wide range of physical and mental abilities" (Wendell, 1996, p. 38). It is these expectations of pace and performance in a society that contribute to the creation of disability. In addition to the pace of life, a great deal of disability is caused by the physical structure and the social organization of society. For instance, poor architectural planning creates physical obstacles for people who use wheelchairs, but also "for people who can walk but cannot walk far or cannot climb stairs, for people who cannot open doors, and for people who can do all of these

things but only at the cost of pain or an expenditure of energy they can ill afford" (Wendell, 1996, p. 40). Disability is caused by failing to provide the kind of help individuals need "to fully participate fully in all major aspects of life in the society, including making a significant contribution in the form of work" (Wendell, 1996, p. 40). As soon as we use the term "disabled" we add a political element: "suddenly there is a disabler and a disabled" (Davis, 1995, p. 10). The term disability is "a linchpin in a complex web of social ideals, institutional structures, and government policies" (Linton, 1998, p. 10). Thus, disability is socially constructed through the failure or unwillingness to create ability among people who do not fit the physical and mental profile of "normal" citizens. Many of the struggles of people with disabilities and much of what is disabling, "are the consequences of having those physical conditions under social arrangements" (Wendell, 1996, p. 42). According to the social model of disability, the experience of having a disability is socially constructed by society's barriers, negative attitudes, and exclusionary practices (Singer, 2016). These socially constructed barriers include the pace of life, the social and physical arrangement of society, and stigma and stereotyping.

Cultural Construction of Disability

In addition to the pace of life, and the social and physical arrangement of society, culture also makes major contributions to disability. These contributions include "not only the omission of experiences of disability from cultural representations of life in a society, but also the cultural stereotyping of people with disabilities, the selective stigmatization of physical and mental limitations and other differences" (Wendell, 1996, p. 43). Stereotypes and stigma get in the way of full participation in work and social life. Anthropologist Roy Richard Grinker (2007) notes in *Unstrange Minds: Remapping the World of Autism* that stigma is not in our biology, it is in our culture. Some form of stigma exists everywhere in the world, but what is stigmatized varies

according to time and place. Therefore, culture plays a central role in constructing disability through the dissemination of stigma, stereotypes, values, and norms. The power of culture alone to construct a disability is revealed "when we consider bodily differences—deviations from a society's conception of a 'normal' or acceptable body" (Wendell, 1996, p. 44). A society's conception of normal is rooted in the hegemony of normalcy.

Disability, Normalcy, and Capitalism

Judy Singer (2016), in *Neurodiversity: The Birth of an Idea*, argues that not only is "disability" a crystallization of many social processes, so too is the concept of "normalcy." The concept of a norm has not always existed. Rather, it is a function of a certain kind of society. The social process of disabling occurred with industrialization. To understand the disabled body, one must examine the concept of the norm and the normal body.

The concept of the norm emerged with the development of statistics. Singer (2016) notes that a 19th century French statistician named Adolphe Quetelet came up with the idea "of averaging human features such as height and weight, and by corollary the concept of the 'average man'" (p. 37). Lennard Davis (1995) in *Enforcing Normalcy* draws attention to the fact that the notion of the norm arises as part of "a notion of progress, of industrialization and of ideological consolidation of the power of the bourgeoisie" (p. 48). The concept of disability is a function of the concept of normalcy. The concept of normalcy within a society is also a direct reflection of power relations. Foucault (2003) argues that the concept of the "norm" is a political concept where processes of power emerge and are legitimized through normalization, which is where practices or ideas are viewed as "normal."

According to Davis (1995), disability is part of "a historically constructed discourse, an ideology of thinking about the body under certain historical circumstances. Disability is not an

object—a woman with a cane—but a social process" (Davis, 1995, p. 2). For this reason, Davis focuses on the problem of the construction of normalcy rather than on the construction of disability. The problem is not the person with the disability. Rather, the problem is "the way that normalcy is constructed to create the 'problem' of the disabled person" (Davis, 1995, p. 24). It was the coming of capitalism that created disability as an individual problem. With the advent of capitalism, people were no longer tied to the land, and they had to find work—or starve. As production became industrialized, "people's bodies were increasingly valued for their ability to function like machines" (Rosenthal, 2019, p. 3).

The relationship between disability and industrialization is a complex one. The demands of a factory system demanded a particular version of the body. The contemporary concept of disability is linked to the rise of industrial capitalism and the development of wage labor requiring "a specific kind of individual, namely, one able to operate dangerous machinery in competition with his peers" (Oliver & Barnes, 2012, p. 82). Previously, individuals with impairments worked co-operatively within the family or community. The transition from feudal production to capitalism had a drastic impact on the lives of people with disabilities. This development saw a change from the integration of people with disabilities into the daily life of domestic production, "to their exclusion from the industrial workforce with its demand for speed, efficiency, and productivity" (Singer, 2016, p. 35). As work became more rationalized and required precise mechanical movements of the body, repeated in quicker succession, "impaired persons—the deaf, blind, mentally impaired, and those with mobility difficulties—were seen as—and, without job accommodations to meet their impairments, were—less 'fit' to do the tasks required of factory workers, and were increasingly excluded from paid employment" (Rosenthal, 2019, p. 3). As a result, the disabled came to be seen as a social problem. The ideology of

individualism gave rise to the ideological construction of the "disabled" individual as the antithesis of able-bodiedness and able-mindedness (Oliver & Barnes, 2012).

Disability is a socially created category derived from labor relations, a product of the exploitative economic structure of capitalist society: "one which creates (and then oppresses) the so-called disabled body as one of the conditions that allow the capitalist class to accumulate wealth" (Rosenthal, 2019, p. 2). Under industrial capitalism, "disability became individual pathology; people with impairments could not meet the demands of wage labor and so became controlled through exclusion" (Oliver & Barnes, 2012, p. 82). Institutions emerged as a means of warehousing those who were no longer able to contribute to the productivity of the community and served as a means of social control. In effect, "the imperatives of industrialism and capitalism redefined the body. 'Able-bodied workers' were those who could operate machines, and the human body came to be seen as an extension of the factory machinery" (Davis, 1995, p. 87). The body is political. An able body is the body of a citizen; "deformed, deafened, amputated, maimed, and blinded bodies do not make up the body politic" (Davis, 1995). In a society that idealizes independence, speed, and economic productivity, those that cannot meet those demands are devalued, marginalized, and excluded. Disability is less of an object and more of a social process. As social process, it is part of "a hegemonic way of thinking about the body and about the insertion of the body into the body politic" (Davis, 1995, p. 73). The implications of the hegemony of normalcy are profound and extend to the very heart of cultural production. Our construction of the normal world is based on a radical repression of disability (Davis, 1995).

The Hegemony of Normalcy

Central to the understanding of the social construction of disability is Gramsci's concept of hegemony (Bates, 1975). Gramsci explored the links between social structures and ideologies.

He addressed the issue of power in capitalist society and focused on ways in which the dominant group's world view becomes accepted by subordinate groups even when it may not be in their best interests.

Hegemony originates from the Greek word "hegemonia." It indicates that an element in a system is dominant and superior to others (Çoban, 2018). Hegemony, "is mostly understood as a cultural and ideological method that operates based on bourgeois values" (Çoban, 2018, p. 90). Hegemony begins in language, and therefore it is important to understand the importance of discourse in our time. Hegemony has the means for determining the forms of thinking and behavior to be controlled and is best understood as the organization of consent (Çoban, 2018). Hegemony and ideology cannot be separated from each other. Hegemony is the process of transferring dominant ideology and the process of consciousness formation (Çoban, 2018). The hegemony of normalcy like all other hegemonic practices, is made effective by its invisibility and its seeming naturalness (Singer, 2016).

Grinker (2021) argues that normal is a damaging illusion, and that the concept of normal has been used to decide who is included and who is excluded in society. Labels, such as normal or abnormal, abled or disabled, serve to alienate and pathologize those that do not conform to a society's cultural construct of normal. Grinker (2021) also draws attention to the invisible values and perspectives that are taken for granted because they are so deeply embedded in economic and social systems. The concept of a norm implies that the majority should be part of that norm. With the concept of the norm comes the concept of deviations. When we think of bodies and minds, in a society where the concept of the norm is operative, then people with disabilities will be thought of as deviants. Similarly, Lennard Davis (1995) argues that this new ideal of ranked order "is powered by the imperative of the norm, and then is supplemented by the notion of

progress, human perfectibility, and the elimination of deviance, to create a dominating, hegemonic vision of what the human body should be" (Davis, 1995, p. 35).

For capitalists at the beginning of the industrial revolution, "there was a natural order of things in which humans existed; it was a hierarchical order that required some people and some communities to be subordinated to others, their bodies managed and organized" (Grinker, 2021, p. 30). Regulation and classification became vital to proper social functioning. The field of psychology is responsible for cementing the ideas of "normal," "deviant," "abnormal," and "pathology" in place. The fact that disability is inextricably linked to pathology is problematic, "but even more fundamental is psychology's endorsement of the idea of 'normalcy,' which centers and privileges certain types of behavior, functioning, and appearance" (Linton, 1998, p. 6).

Normalcy is the degree zero of modern society. The hegemony of normalcy is effective because it is invisible and seems natural. Therefore, the veil must be torn, and the hazardous environment designed to be the comfort zone of the normal must "be shown with all its pitfalls and traps that create disability—only then will we begin to face and feel each other in all the rich variety and difference of our bodies, our minds, and our outlooks" (Davis, 1995, p. 171). It follows that we cannot purposefully change our consciousness unless we unmask the historical processes that created it (Grinker, 2021). We must turn those processes inside out and reveal them to be "not inevitable reactions to human conditions labeled disabilities but devices used to sort human beings according to the social and economic needs of a society" (Linton, 1998, p. 7). We must reverse the hegemony of the normal to institute alternative more inclusive ways of thinking about the variability of the human body and the human mind. This shift affords a more

comprehensive view "of society and human experience, and the attribution of significance to human variation" (Linton, 1998, p. 145).

Cultural Representations of Disability in the Media

Capitalism shapes all relationships within it, and nothing can be isolated from this economic context, including culture. Capitalism views culture as an industrial material and tries to shape it accordingly. Mass media and relations of production are not exempt from the grip of capitalism. According to Ellis and Goggin (2015), media is a "vitally critical domain of culture, where disability is located" (p. 35). To reproduce its own existence capitalism makes use of the media to present itself as the best possible system and to preserve the hegemonic nature of this message (Çoban, 2018). Therefore, it is no surprise that media portrayals of disability are a production and a reflection of capitalist cultural and economic hegemony. Under capitalism, people's bodies and minds are commodities and are valued for their ability to function like machines (Rosenthal, 2019).

The American film industry finds disability most useful as a narrative vehicle for telling stories of the non-disabled and "displays little conscience when engaged in misrepresentation" (Murray, 2008a, p. 118). In 1988, *Rain Man* brought autism into the public consciousness and became the foundation for all contemporary representations of autism. In the wake of its commercial success, *Rain Man*, "the figure of the autistic savant became the emblem of the condition on which cultural interest came to focus" (Murray, 2008a, p. 89). As a beginning for autism on the big screen, *Rain Man* deserves some recognition because it gave autistic people visibility. However, as the dominant depiction of autism on screen, it becomes problematic.

One of the main problems with Raymond Babbitt as the symbol for autistic representation is that he is seen first and foremost as a human database. The cinematic

proposition that autistic individuals think like computers is not only inaccurate, but dangerous (Murray, 2008b). In a neoliberal political economy, savantism is the trait that is most valuable both to Hollywood and to the economy. This concentration on savant skills is clearly part of "the wider emphasis on individual worth operating in mainstream US cultural production" (Murray, 2008b, p. 250). The cultural message here is that savant abilities underscore a disabled person's worth and compensates for their impairments.

This type of narrative and representation of autism, however, lacks any exploration of the complexities of autistic agency or subjectivity (Murray, 2008b). In fact, they do not make room for a representation of autism within the terms of the person with autism. Rather, these narratives focus on the details and experiences of the non-autistic world and its concerns. These narratives speak to the degree to which autistic presence and experience is misunderstood within contemporary cultural practice (Murray, 2008b). Hollywood's fascination with the savant character signifies "a fundamental misapprehension of the true nature of autism. Rates of savantism in the autistic population are in the region of 10%, and only marginally higher than in the majority population" (p. 249). Hollywood's focus on savant skills actually exemplifies "a misguided understanding of cognitive difference and betrays the use of such difference for fictional ends" (p. 249). The savant figure in films becomes a narrative-driven phenomena that is used to modify the plot or character relations (Murray, 2008b).

In *The Cinema of Isolation* (1994), Martin F. Norden makes clear that the representation of disabilities in Hollywood bear little relation to the actual experiences of those living with those disabilities. We need to think about how cultural versions of disability influence their subject matter. It is as if "the use of disabled characters in novels or films or on television has somehow crept upon us by stealth, without the kinds of analysis of such use that we might

expect" (Murray, 2008a, p. 4). The most troubling aspect of this formulaic representation of autism is the spectacularization of autism (Baker, 2008). More specifically, plots rely on the way that neurotypical characters can use the autistic character's special powers. For Hollywood, autism is a plot device—and autistic characters are feasible characters—only if a spectacular skill or power is among the character's defining traits (Baker, 2008). Autistic characters are in films simply because they have spectacular powers, and these powers are useful to others. Remove the savant power, and "the film loses its plot, and the autistic character loses his or her raison d'être" (Baker, 2008, p. 234). The message this is sending is that the only desirable quality about autism is savantism. Audiences may conclude that savant skills are the only quality that marks autistic individuals as useful to the neurotypical world. The message is that "people with autism who are not savants are not acceptable or desirable in the neurotypical world" (Baker, 2008, p. 236). Furthermore, it is important to note that although Hollywood incorporates characters with savant skills, these characters are unable to deploy these skills for any benefit of their own. Villains and heroes from the neurotypical world "exploit these skills to destructive or productive ends. The savant skill—and the autistic character—is thus objectified and stripped of any agency" (Baker, 2008, p. 237). In their portrayal of autistic characters exclusively as "vulnerable savants incapable of agency or growth, these films offer a harmfully reductive definition of autism as a pitiful, exploitable, and inhuman condition" (Baker, 2008, p. 237). Despite Hollywood's fascination with the autistic figure, we are unlikely to find in these stories any sense of "a productive disabled agency" (Murray, 2008b, p. 253).

Films that produce and reproduce misrepresentations of autism and are complicit in the creation and diffusion of ableism and neurotypical superiority. For them, autism merely provides "the raw material for a seemingly endless range of complex fictions, yet any greater

understanding of the presence of autism in contemporary culture eludes the films' audiences" (Murray, 2008a, p. 253). The perpetuation of the representation of autism as vulnerable savantism without agency is a blatant misrepresentation of the autism spectrum and is harmful to autistic individuals. By allowing autism to be spectacularized and defined as savantism, this pushes the condition into the world of fantasy. It makes it easier "to ignore the social dimensions, the apparently mundane questions of schooling or respite care or employment options for adults with autism" (Murray, 2008a, p. 99). It keeps the social, political, economic, and psychological reality of autism at arm's length. The current definition and portrayal of autism fails to match the lived experiences of the autistic individuals.

Hollywood's representations speak to our society's aversion to understanding the realities of autism, neurodivergence, and disability. It depicts autism as "a monolithic disease, as something extrinsic to the self, like paraplegia or cancer, which can be turned into 'the enemy', fought and eradicated" (Schwartz, 2008, p. 257). However, this depiction ignores the pervasive nature of autism: a set of differences "in the architecture of the brain and central nervous system with a range of effects, some overt and intrinsically disabling, an some subtle, producing divergences from the norm that are often disabling only because they are devalued or not accommodated by mainstream society" (Schwartz, 2008, p. 257). Current representations of autism and neurodivergence stem from a neurotypical-gaze position. As a result, in the space of popular media, the neurodivergent and the disabled look at themselves through images, through the eyes that are unable to truly recognize them. They are not represented as themselves but seen through the lens of the oppressor (hooks, 1990).

We live in predominantly cognitive normative ideologies that center the experiences and perspectives of the neurotypical and that marginalize the experiences and perspectives of the

neurodivergent. Films 'produce' an idea of autism and are themselves part of the wider production "practiced by medical, social and cultural institutions, which offers a version of the condition for the consumption of a majority audience which has the interest to speculate on, but not the time to know about, the ontological questions that autism raises" (Murray, 2008b, p. 251).

In society, autistic individuals are disabled by the prejudice and othering that is "modeled, legitimated, and recirculated by media depictions" (Ellcessor & Kirkpatrick, 2017, p. 6). For most audiences, the definitions of autism offered by popular media are challenged or replaced only "when new public narratives or private experiences render them insufficient or inaccurate" (Baker, 2008, p. 239). We can and must unlearn the cognitive normative gaze and question hegemonic depictions of cognitive "normality." We must resist disabling representations of disability and neurodivergence. We must move beyond current stereotypical and neurotypical representations, and present nuanced portraits of the lives of people with disabilities that accurately reflect their lived experiences and that inform the public about autism from the perspectives and voices of the neurodivergent.

Raising Awareness About Autism and Neurodiversity

Neuro-normativity and able-bodiedness have become the hegemonically dominant form of embodiment. "Normality" is a social construct that harms everyone, but especially the neurodivergent. By unveiling the social origins of impairment and disability, we can confront the ways society brands and excludes those who do not conform to the hegemony of normalcy. (Grinker, 2021). There remains a stark division "between mainstream attitudes and responses to autism and those of people on the spectrum" (Schwartz, 2008, p. 257). Unfortunately, the two sides are not equal in power, resources, and media presence (Schwartz, 2008). The mainstream

sees autism as an affliction or disease, and as something to be cured or eradicated. It speaks about autism in the medical language of deficit. The medical model of disability defines disability as an experience and identity belonging to the individual "as a reflection of an abnormally disordered body, mind, or affect" (Baglieri, 2017, p. 5). This model locates disability in impairments and deficits of the individual, and seeks cures rather than social change (Singer, 2016). At the root of this paradigm is the assumption that there is only one "right" or "normal" way of human neurocognitive functioning, and that variations that diverge from this socially constructed norm are framed as pathologies, deficits, and disorders (Walker, 2016).

Autistic individuals internalize these deficit-based images of autism at the expense of their mental health, and self-esteem. The mainstream medical perspectives on autism fail to see "that once the right kinds of support, accommodation, and mitigation of specific handicaps are available, there are desirable aspects to autism that we would not want to live without" (Schwartz, 2008, p. 257). In contrast to the medical model of disability, the social model understands that bodies may have impairments, but those impairments only become disabling in the context of physical and social environments. In this sense, "disability is not (as in the medical model) a 'fact' about a person, but a status imposed by society: needing a wheelchair, for example, only becomes a 'disability' given the absence of ramps and elevators—or given the attitudes, beliefs, and power structures encountered in a discriminatory ableist society" (Ellcessor & Kirkpatrick, 2017, p. 6). In addition to the social model of disability, the neurodiversity paradigm also provides a more affirming and positive view of autism and neurodivergence.

The term "neurodiversity" was coined in 1998 by sociologist Judy Singer calling for a politics of neurological diversity or "neurodiversity." Neurodiversity is the notion that conditions such as autism should be regarded as "naturally occurring cognitive variations with distinctive

strengths that have contributed to the evolution of technology and culture rather than a mere checklist of deficits and dysfunctions" (Silberman, 2016, p. 16). Neurodiversity affirms the natural variations in the human brain regarding sociability, learning, attention, mood, and other mental functions, and affirms the identity of neurodivergent individuals as having differences rather than disabilities.

The neurodiversity paradigm is a perspective that recognizes neurodiversity as a naturally occurring form of human diversity (Walker, 2014a). This paradigm is based on the social model of disability that views the experience of disability as socially constructed by social barriers, negative attitudes, and exclusionary practices (Singer, 2016). Neurodiversity places greater emphasis "on the social and ecological dimensions of diagnostic labels by examining how a person may be disabled in certain contexts but not in others" (Armstrong, 2017, p. 2).

Neurodiversity preserves the identity and dignity of the person unlike the medical model of disability that blames the individual for not fitting into society's construction of normal.

Autism Redefined

Seen through the lens of the neurodiversity paradigm, autism is defined as a genetically based human neurological variant that is simply part of the natural spectrum of human biodiversity (Walker, 2014b). Autism affects how individuals experience the world around them, particularly, how they process sensory information and social situations (Bumiller, 2008). New research in neuroscience shows that autistic brains are characterized by high levels of synaptic connectivity and responsiveness which can make the autistic person's subjective experience more intense and chaotic (Walker, 2014b). Autism produces distinctive ways of thinking, behaving, and cognitive processing (Walker, 2014b). Despite neurological similarities, individuals with autism are vastly different from one another.

When individuals reject the fundamental premises of the pathology paradigm and accept the premises of the neurodiversity paradigm, they come to see individuals with autism function as they should, and that society is the disabling agent (Walker, 2016). In the context of a society designed for the sensory, cognitive, and social needs of non-autistic persons, autistic individuals are almost always disabled to some degree (Walker, 2016). Therefore, to accept the neurodiversity paradigm is to acknowledge that there is no inherent wrongness or deficit in the autistic individual, but rather, in the environments that disable individuals who learn, function, and process differently. This paradigm reframes the conversation about autism away from pathologizing differences towards emphasizing the diversity of human minds and the natural strengths they possess.

From Neuro-Normativity to Neuro-Inclusivity and Neurocosmopolitanism

This paradigm shift towards neurodiversity in popular media would provide a more inclusive, humanizing, and empowering view of autism. What is needed is the production of a discourse that interrogates ableism and that stands in opposition to dominant perspectives on disability by trying to correct false proclamations of the superiority of being neurotypical and nondisabled.

Can we learn to make room for human cognitive diversity and affirm neurodivergent lived experiences? Can Hollywood produce films that promote positive autistic identity and self-esteem? We need films that teach about "constructing identity and self-awareness in positive ways, without sensationalizing, romanticizing, or demonizing autism" (Schwartz, 2008, p. 268). If awareness, empowerment, education, and inclusion is the goal, and it should be, then neurodivergent stories should be told by neurodivergent individuals. Neurodivergent

representation in the media will help end stigma, stereotypes, and misrepresentations. This means "surrendering center stage, or privilege" (hooks, 1990, p. 158).

In considering how we can redress these conceptual errors about autism, "a critical element is attending to the active voice of the artist, writer, and theorist with a personal disability perspective" (Linton, 1998, p. 113). Poetry, film, and other creative products "can also be used to introduce disability perspectives into the applied fields" (Linton, 1998, p. 147). The more society takes seriously what people on the spectrum have to say about the reasons behind the divergences "in behavior, sensory needs, cognitive styles, aesthetic sensibilities, and intuitive social and emotional responses, the more understanding will improve" (Schwartz, 2008, p. 257). Nick Walker (2021) in *Neuroqueer Heresies* introduces the concept of neurocosmopolitanism. Walker (2021) explains that neurocosmopolitanism consists of "approaching neurodiversity in the same spirit in which the cosmopolite approaches cultural diversity" (p. 74). Cosmopolitanism is about embracing human diversity with an open mind (Walker, 2021). The term is typically used in relation to the diversity of cultures, ethnicities, and nationalities, and translates as *citizen of the world* (Walker, 2021). Therefore, to be a cosmopolite, one would regard all humanity as part of a global community, and view differences as enriching.

Walker argues for the cultivation of a neurocosmopolitan attitude about human diversity and the natural variation of human minds. A society that fully comprehends and integrates the neurodiversity paradigm, and that has been transformed by it, would be considered a neurocosmopolitan society (Walker, 2021). Furthermore, a neurocosmopolitan mindset does not privilege any "body-mind as the 'natural' default way of being, nor as more 'normal' or instrinsically correct than any other, just as a hallmark of cosmopolitanism is the recognition that no one culture is more intrinsically correct, natural, or 'normal' than any other" (Walker, 2021,

p. 74). Finally, true neurocosmopolitanism is more than mere acceptance. It is about actively embracing and engaging with those differences "as potential sources of growth, enrichment, and creative synergy" (Walker, 2021, p. 76). In a neurocosmopolitan society, current misrepresentations of autism and neurodivergence would be challenged and resisted, and the neurodiversity paradigm would break down stereotypes about disability and move towards authentic and affirming representations of lived experience. The challenge is to become a neurocosmopolitan society that creates media that reflects passionate engagement with culture. This may be "the central future location of resistance struggle, a meeting place where new and radical happenings can occur" (hooks, 1990, p. 31).

The Margin as a Space of Radical Openness and Resistance

In an essay on counter-hegemonic cultural practice, feminist bell hooks (1990) names marginality as a site of transformation where liberatory subjectivity can emerge. She emphasizes the difference between marginality which is imposed by oppressive structures, and marginality one chooses as site of resistance, as a location of radical openness and possibility (hooks, 1990). She asks, "how do we create an oppositional worldview, a consciousness, an identity, a standpoint that exists not only as the struggle which also opposes dehumanizaton but as that movement which enables creative, expansive self-actualization?" (p. 15). This process, this consciousness, emerges as one comes to understand how structures of domination work in one's own life, "as one develops critical thinking and critical consciousness, as one invents new, alternative habits of being, and resists from that marginal space of difference inwardly defined" (p. 15). In popular culture and media, the disabled remain in the shadows, and in the margins. They remain an absent presence without a voice (hooks, 1990). The disabled are being talked about, written about, and represented by non-disabled actors, directors, and writers. They are

silenced. In the words of bell hooks, "We fear those who speak about us, who do not speak to us and with us. We know what it is like to be silenced. We know that the forces that silence us, because they never want us to speak, differ from the forces that say speak, tell me your story" (p. 152).

In a neurocosmopolitan society, all members of society would have equal access to sites of cultural production and their voices would be heard and valued for their contribution. In society, depiction of disability in the media directly influences the public perception of disability, as well how individuals with disabilities are viewed, treated, valued, and included in society. Media has the power to shape a culture's understanding of differences and disabilities, and to impact how individuals form their social worth and identity. The question remains—is popular media willing to see its complicity in producing and reproducing hegemonic representations of neuronormativity that contribute to the harmful concept of normalcy? The challenge will be to surrender center stage, and to center the voices of the marginalized to create a more neurocosmopolitan and neuro-inclusive society.

Fortunately, marginality is much more than a site of deprivation; it is also the site of radical possibility, a space of resistance. This site of resistance is continually formed "in that segregated culture of opposition that is our critical response to domination" (hooks, 1990, p. 153). It is understandable that marginalized groups have lacked the inclination to engage in particular ways of thinking and writing because they learned from the dominant culture that their work and their words may not be valued. However, it is important to note that language is also a place of struggle. Language is where the oppressed, the marginalized, recover themselves and empower themselves. Words are not without meaning, "they are an action, a resistance" (hooks, 1990, p. 146). As we make radical creative space which affirms neurodivergent subjectivity, we

will be transformed, individually and collectively into a more neurocosmopolitan society that truly embraces and affirms human diversity, and sees differences as sources of enrichment and growth.

Autistic Representations in the Media Since Rain Man

As stated previously, media is a central way we encounter disability, and a way in which disability is represented in society. Media powerfully influences society, and the reverse is true as well—social forces and social movements influence media. The question remains: How far have we come since Dustin Hoffman's representation of autism in *Rain Man* in 1988? Have media representations of autism changed at all?

Over the years, there has clearly been an increase in the different types of characters with autism in films and television. The most common way of representing autism in the media is through socially awkward White, male characters with savant-like qualities such as Sheldon from *The Big Bang Theory* (Lorre et al., 2007–2019) and Dr Shaun Murphy on *The Good Doctor* (Moran et al., 2017–2024). The autistic genius only represents 10 percent of autistic people and is an unrealistic portrayal of autistic people. Fortunately, there are more varied representations of autism in the media today. A second type of autistic representation that is common in the media is the autistic White, male child, such as Max on *Parenthood* (Howard, et al., 2010–2015) and Sam on *Atypical* (Rashid et al., 2017–2021). In the first season of *Parenthood*, Max is a young boy who is diagnosed with Asperger's, and shows signs of being socially awkward, struggling with communication, and lacking empathy toward others. These traits create complications in his personal relationships and his family interactions. Sam on *Atypical* is a teenager with Autism and is also the main protagonist of the TV series. His character is portrayed as smart, eccentric, awkward, anxious, and interested in girls and sex. These two storylines feature White, male,

middle class autistic characters that focus on the difficulties that neurotypical family members have with accepting their neurodivergent children or siblings and some of the challenges they face.

It is important to also note that there are also more autistic women represented in the media. Movies like *Mozart and the Whale* (Naess, 2005), *Snowcake* (Evans, 2006), and *Temple Grandin* (Jackson, 2010) follow the lives of White, high-functioning autistic women. *Mozart and the Whale* is a film adapted from Jerry Newport and Mary Newport's autobiography. It is the love story of two high functioning autistics that fall in love, fall apart, and struggle to build a life together. It is based on a true story. Similarly, *Temple Grandin* (Jackson, 2010) is a biographical film about the life of Temple Grandin, a White, autistic woman who thinks in pictures and whose creative innovations revolutionized practices for the handling of livestock on cattle ranches. *Snowcake* (Evans, 2006) is an independent film about a White, high functioning autistic woman named Linda, and her relationship with a man named Alex, who is traumatized after a fatal car accident that kills her daughter, Vivienne. Alex visits Linda to provide support, and he comes to find that she behaves in unusual ways and is obsessed with keeping her home clean and following specific routines.

What all these films and TV shows have in common is that all autistic characters are played by neurotypical actors, and all autistic characters are White. There is, however, more diversity in the documentary *Neurotypical* (Larsen, 2013) which is an exploration of autism from the perspective of autistic people themselves. These include both male and female perspectives on autism as well as people of color. The documentary also shows autistic people at various places on the autism spectrum and explores what it means to be normal and what it means to be human from an autistic perspective.

In addition, there are two reality shows that explore the personal lives of autistic individuals from their perspectives. *Love on the Spectrum* (O'Clery, 2019–2021) is a reality show that follows a group of autistic singles on their journey to find love as they explore the unpredictable world of dating and relationships. This show has become an international phenomenon. Before *Love on The Spectrum*, *The Undateables* (Hahn & Spencer, 2012) was another reality dating show in the UK that followed the dating lives of autistic and physically disabled individuals. Reality shows like *Love on the Spectrum* and *The Undateables* help to increase the visibility of neurodivergent people, to give voice to the neurodivergent and disabled, and to destigmatize neurodivergence on TV.

There are several more media representations of autism that are empowering and that give voice to the neurodivergent. One such representation is the character of Matilda in *Everything's Gonna Be Okay* (Thomas et al., 2020–2021). Not only is the character of Matilda autistic, so is the actress, Kayla Cromer, who plays the character. Kayla Cromer is the first autistic actor to play an autistic character in a TV series. Cromer is an activist actively working to end the stigma associated with being autistic and neurodivergent. In addition, there is the show *As We See It* (Katims, 2022), which is an original drama that offers audiences a look into the lives of three autistic young adults as they live together on their own for the first time. The show shares insights into the challenges that some neurodivergent adults face as they navigate independence and the world around them. All three main actors in this series are autistic, and they all play autistic characters.

Lastly, there is a bold and compelling documentary about an autistic activist making waves around the world. *I Am Greta* (Grossman, 2020) is a documentary film about Greta Thunberg, a young Swedish autistic environmental activist who challenges world leaders to take

immediate action to mitigate climate change. It is the story of a girl, who at the age of 15, began skipping school to protest, give speeches, and provide education right outside the Swedish Parliament where she urged for stronger action on climate change. Shortly after her first protest, other students engaged in similar protests and united to organize the school strike under the movement *Fridays for Future*. This is now a youth-led and youth-organized social movement that protests against the lack of action on the climate crisis. It is a powerful movement of young activists fighting for the future of the planet with the goal of overcoming the climate crisis in order to protect the beauty of the earth, the diversity of species, and the lives of all beings (Fridays for Future, 2024). Thunberg's rise to world fame has made her a leader in the climate activism community (Wallace-Wells, 2019). When Thunberg began posting on social media, others began sharing her posts, which attracted local reporters whose stories earned international coverage (Tait, 2019). Her activism evolved from solitary protests, to taking part in demonstrations throughout Europe, making several high-profile speeches, and mobilizing many followers on her social media platforms.

Greta Thunberg: A Year to Change the World (Lidell, 2021) is a follow up three-part documentary series following Thunberg at the age of 16 and 17 traveling across North America and Europe to speak to experts about the damaging effects of climate change. Her motivation behind this documentary series was to give science a voice, and to explore methods to combat climate change. She currently has 14.5 million followers on Instagram and 3.5 million followers on Facebook. On one of her Facebook posts from 2023, where Greta Thunberg is pictured speaking at a Stockholm climate strike, she writes, "For five years now we have been striking from school every Friday to protest and demand climate justice. We were born into a crisis that we did not create. It is shameful that the responsibility to act falls so disproportionately on

children and youth, because the people in power and adults fail to step up." She argues that there is too much at stake and we have no choice but to take real action: "That is why we keep showing up every Friday and will continue to do so. We are the change we want to see in the world. Join us and get organized because we need you in this fight." Greta recently graduated from high school in June of 2023 and continues to be known as a climate change activist, as well as an autism activist.

While surveying several of the films, television series, reality shows, and documentaries with autistic characters and individuals over the years, it can be said that some progress has been made in how autism is represented in the media. There are still some stereotypes about autism or autistic traits currently being represented in the media, such as autism being a White, middle class, male diagnosis, or that autistics are primarily savants and geniuses. It is important to be more diverse and to acknowledge that the autism community has a spectrum of people of all genders, races, ages, sexual orientations, classes, or ethnicities. There is still work to be done in representing more people on the spectrum, not just White, male, middle-class ones.

The neurodivergent community has been advocating for more accurate and authentic representation of themselves for quite some time. While the community has more positive and diverse representation in the media than in the past, many autistic characters are still caricatures of autistic people being portrayed through a neurotypical lens and portrayed by neurotypicals. There is a need for more neurodivergent actors, writers, and directors to take part in the creation of more authentic autistic characters to offer a more accurate depiction of the authentic lived experiences of autistic individuals. The field of disability studies insists upon lived experiences as a basis for knowledge, critique, and analysis. This is an epistemology that "refutes the medical model of disability by treating the voices and marginalized perspectives of people with

disabilities as valid sources of knowledge" (Ellcessor & Kirkpatrick, 2017, p. 8). This epistemological stance values subjective forms of knowledge. This valuation of lived experience means that people with disabilities are welcomed creators of knowledge.

While there is still work to be done regarding autistic representation, diversity, and inclusivity in popular media, some positive progress has been made. Accurate and authentic representations of disability, autism and neurodivergence are vital to overcoming stigma and stereotypes (Johnson & Olson, 2021). There has been an increase in the centering of autistic voices and lived experiences. Media that centers neurodiversity helps to break down stereotypes about autism and neurodivergence and allows audiences to learn about what it means to be autistic and neurodivergent from the perspective and experience of those that are actually autistic and neurodivergent. Since media is a site of meaning-making, ideological contestation, and a resource for social and individual identity formation and expression (Ellcessor & Kirkpatrick, 2017), it is important to continue to challenge and examine how autism and neurodivergence are communicated and represented in film and television and by whom.

Future research should focus more on newer forms of media and how autistic and neurodivergent individuals are becoming actively involved in the content creation process to provide more authentic and accurate representations of autism and neurodivergence, thus promoting a better understanding, acceptance, and inclusion of autism and neurodivergence in the media and in society.

References

- Armstrong, T. (2017, April). Neurodiversity: The future of special education? *Educational Leadership*, 74(7), 10–16.
- Baglieri, S. (with A. Shapiro). (2017). Disability studies and the inclusive classroom: Critical perspectives for embracing diversity in education (2nd ed.). Taylor & Francis.
- Baker, A. D. (2008). Recognizing Jake: Contending with formulaic and spectacularized representations of autism in film. In M. Osteen (Ed.), *Autism and representation* (pp. 229–243). Routledge.
- Bates, T. R. (1975). Gramsci and the Theory of Hegemony. *Journal of the History of Ideas*, 36(2), 351–366.
- Bumiller, K. (2008). Quirky citizens: Autism, gender, and reimagining disability. *Signs: Journal of Women in Culture and Society*, 33(4), 967–991. https://doi.org/10.1086/528848
- Çoban, S. (Ed.). (2018). Media, ideology and hegemony. Brill.
- Davis, L. J. (1995). Enforcing normalcy: Disability, deafness, and the body. Verso.
- DeWelles, M. (2021). The communication of disability through children's media: Potential, problems, and potential problems. In M. S. Jeffress (Ed.), *Disability representation in film, TV, and print media* (pp. 162–179). Routledge.
- Ellcessor, E., & Kirkpatrick, B. (Eds.). (2017). *Disability media studies*. New York University Press.
- Ellis, K., & Goggin, G. (2015). Disability & the media. Palgrave.
- Evans, M. (Director). (2006). *Snowcake*. [Film]. Revolution Films.
- Foucault, M. (2003). Abnormal: Lectures at the College de France, 1974–1975. Picador.
- Fridays for Future [Website]. (2024). What we do. https://fridaysforfuture.org/
- Grinker, R. R. (2007). Unstrange minds: Remapping the world of autism. Basic Books.
- Grinker, R. R. (2021). *Nobody's normal: How culture created the stigma of mental illness*. W. W. Norton.
- Grossman, N. (Director). (2020). I Am Greta [Documentary]. B-Reel Films.

- Hahn, A., & Spencer, S. (Executive Producers). (2012). *The undateables*. [Reality TV Series]. Betty.
- hooks, b. (1990). Yearning: Race, gender, and cultural politics. South End Press.
- Howard, R., Grazer, B., Katims, J., Trilling, L., Watson, S., & Nevins, D. (Executive Producers). (2010–2015). *Parenthood* [TV Series]. True Jack Productions.
- Jackson, M. (Director). (2010). Temple Grandin [Film]. HBO Films.
- Jeffress, M. S. (Ed.). (2021). Disability representation in film, TV, and print media. Routledge.
- Johnson, M., & Olson, C. J. (Eds.). (2021). Normalizing mental illness and neurodiversity in entertainment media: Quieting the madness. Taylor & Francis.
- Katims, J. (Creator). (2022). As we see it. [TV Series]. True Jack Productions.
- Knights, K. (2018, Dec. 17). *Rain Man* made autistic people visible. But it also entrenched a myth. *The Guardian*. https://www.theguardian.com/commentisfree/2018/dec/17/rain-man-myth-autistic-people-dustin-hoffman-savant
- Larsen, A. (Director). (2013). Neurotypical [Documentary]. American Documentary, Inc.
- Levinson, B. (Director). (1988). Rain man [Film]. United Artists/MGM.
- Lidell, R. (Executive Producer). (2021). *Greta Thunberg: A year to change the world.* [Documentary]. BBC Studios.
- Linton, S. (1998). Claiming disability: Knowledge and identity. New York University Press.
- Lorre, C., Prady, B., Aronsohn, L., Molaro, S., Kaplan, E., Ferrari, M., Goetsch, D., & Holland, S. (Executive Producers). (2007–2019). *The big bang theory* [TV Series]. Warner Bros. Television.
- Mittmann, G., Schrank, B., & Steiner-Hofbauer, V. (2023). Portrayal of autism in mainstream media—A scoping review about representation, stigmatisation and effects on consumers in non-fiction and fiction media. *Current Psychology*, 43, 8008–8017.
- Moran, T. L., Listo, M., Lee, S., Kim, D. Gordon, S., Kim, D. D., & Shore, D. (Executive Producers). (2017–2024). *The good doctor* [TV series]. Sony Pictures Television and ABC Signature.
- Murray, S. (2008a). *Representing autism: Culture, narrative, fascination*. Liverpool University Press.

- Murray, S. (2008b). Hollywood and the fascination with autism. In M. Osteen (Ed.). *Autism and representation* (pp. 244–255). Routledge.
- Naess, P. (Director). (2005). Mozart and the whale [Film]. Mozart Productions.
- Norden, Martin F. (1994). *The cinema of isolation: A history of physical disability in the movies.* Rutgers.
- O'Clery, C. (Creator). (2019–2021). *Love on the spectrum* [Documentary Series]. Northern Pictures.
- Oliver, M., & Barnes, C. (2012). The new politics of disablement. Palgrave MacMillan.
- Osteen, M. (Ed). (2008). Autism and representation. Routledge.
- Rashid, R., Gordon, S., & Rohlich, M. (Executive Producers). (2017–2021). *Atypical* [TV Series]. Exhibit A Weird Brain, Inc. Sony Pictures Television.
- Rosenthal, K. (Ed). (2019). Capitalism and disabiltiy: Selected writings by Marta Russell. Haymarket Books.
- Rosqvist, H. B., Chown, N., & Stenning, A. (Eds.). (2020). *Neurodiversity studies: A new critical paradigm*. Routledge.
- Schwartz, P. (2008). Film as a vehicle for raising consciousness among autistic peers. In M. Osteen (Ed.) *Autism and representation* (pp. 256–270). Routledge.
- Silberman, S. (2016). *NeuroTribes: The legacy of autism and the future of neurodiversity*. Penguin Random House.
- Singer, J. (2016). Neurodiversity: The birth of an idea. Kindle eBook.
- Tait, Amelia. (2019). Greta Thunberg: How one teenager became the voice of the planet. *Wired*. https://www.wired.co.uk/article/greta-thunberg-climate-crisis
- Thomas, J., Swedlove, S., Whyt, K., Allen-Turner, R., Martin, D., & Thoday, J. (Executive Producers). (2020–2021). *Everything's gonna be okay* [TV Series]. Freeform Studios.
- Walker, N. (2014a). Neurodiversity: Some basic terms and definitions. https://neuroqueer.com/neurodiversity-terms-and-definitions/
- Walker, N. (2014b). What is autism? https://neuroqueer.com/what-is-autism/
- Walker, N. (2016). Autism and the pathology paradigm. https://neuroqueer.com/autism-and-the-pathology-paradigm/

- Walker, N. (2021). Neuroqueer heresies: Notes on the neurodiversity paradigm, autistic empowerment, and postnormal possibilities. Autonomous Press.
- Wallace-Wells, D. (2019). It's Greta's world. *Intelligencer*. https://nymag.com/intelligencer/2019/09/greta-thunberg-climate-change-movement.html
- Wendell, S. (1996). *The rejected body: Feminist philosophical reflections on disability*. Routledge.

CHAPTER IV:

NEURODIVERSITY IN EDUCATION: FROM DEFICIT-BASED APPROACHES TO STRENGTHS-BASED APPROACHES

Over the last half-century in the United States, due to an increased legal mandate that disabled students be included equitably within compulsory education programs, how we as society understand disability has a direct impact on how educationists design pedagogical and curricular interventions, physical classroom spaces, and even the entire institutional structure of schools themselves. Yet, our understanding of disability has changed significantly in recent years due to the influence of the disability rights movement, the neurodiversity movement, and related advances in neuroscience. These have paved the way for a re-examination of the concept of disability as a social construct rooted in cultural norms, prejudices, and power inequities, rather than being rooted in the individual as a biological given (Linton, 1998; Walker, 2021). As a result, society is seeing a paradigm shift away from the deficit-based medical model of disability towards asset-based neurodiversity approaches (Dwyer, 2022; Pellicano & den Houting, 2022). Such recent progress made in understanding disability and neurodiversity must be reflected in our educational approaches as well. A core issue remains, however, that special education programs are still very often rooted in the deficit-imaginary of disability, despite the shifting perspectives about disability and neurodiversity taking place across society. A shift in paradigm thus becomes immediately necessary in the field of special education, which despite its ostensible origins towards inclusion needs to: include a broader understanding of forms of human diversity still, foster more holistic and positive ways of thinking about human differences within spaces of teaching and learning, and to promote more equitable and more inclusive educational practices accordingly.

From the Medical Model to the Social Model of Disability for Neurodiverse Students

From the beginning of the 20th century, disability has been conceptualized almost entirely within the medical model and this has been the dominant paradigm of disability in America (Shyman, 2016). The medical model of disability has always dominated the field of special education. In this model, school failure is blamed on a defect or deficiency located biologically within the individual. Little consideration is given to how a person's environment may create barriers for them. In this deficit-based approach, individuals are viewed solely in terms of their deficits, while their interests, skills, abilities, and potential are overlooked (Swarbrick, 2006). In the medical model, for example, autism is defined by a set of cognitive and social deficits and restricted or repetitive physical behaviors. This model locates disability and alleged deficits in the individual's embodied being and seeks redressive cures focused upon the autistic individual rather than addressing the larger ecology of autism through demands for wider social change (Singer, 2017). At the root of this paradigm is the assumption that there is a standard "right" or "normal" way of human neurocognitive functioning, and that variations that diverge from this socially constructed norm are justly framed as representative individuals' pathologies, deficits, and disorders (Walker, 2021). The current predominant paradigm in conceptualizing and professionalizing disability thus emphasizes perceived weaknesses to the exclusion of strengths and has negative implications for students with disabilities (Armstrong, 2012). Furthermore, the medical model's deficit-focused approach within research on autism more specifically fails to recognize and utilize the many strengths that autistic individuals possess, likely contributing to poor education and employment outcomes (Black et al., 2019; Scott et al., 2019). Past autism research has mainly focused on autistic individuals' deficits, and these studies have shown relatively poor social, vocational, educational, and quality of life

outcomes for autistic youth compared to the general population (Roux et al., 2013). In addition, interventions for autistic individuals have largely targeted deficits and impairments, with the idea that remediating core autistic characteristics will improve functioning (McDonald & Machalicek, 2013). These interventions utilized deficit-based approaches that focused on the student and their diagnosis alone to understand the causes of their challenges (Burnham Riosa et al., 2017). Yet additional research shows that these types of deficit-based interventions may have negative impacts on autistic students' mental health, self-esteem, and school outcomes (White et al., 2023). This could be due to their exclusive focus upon such students' alleged weaknesses and deficits and ignoring of their positive characteristics and different available strengths.

A key limitation of the medical paradigm in disability is its proclivity to narrowly focus diagnostically upon the disabled individual with the aim of identifying and ameliorating socioeducational deficits resulting from their disability. The medical model does not take a person's strengths or abilities into consideration when considering the nature of their being defined as disabled, nor does it consider their environment, their level of access to support, or the social and economic factors that may impact them. The medical paradigm is in fact quite limited in its view of individuals with disabilities and defines them solely in how they are lacking in comparison to the socially constructed norm. When individuals see themselves defined in terms of what they cannot do, however, it can have a negative long-term impact on their sense of self (Ellis et al., 2023). Thus, it is not surprising that research has shown that these approaches may inadvertently devalue and stigmatize autistic individuals (Pellicano & Stears, 2011), as well as create feelings of disempowerment and low-self-esteem (Urbanowicz et al., 2019). Research by Sanford et al. (2011) additionally shows that deficit-based approaches to support students with disabilities have

very real consequences including lower graduation rates, lower income potential, higher rates of unemployment, and increased rates of incarceration.

The most recent report to Congress on the implementation of the Individuals with Disabilities Education Act (IDEA) found that among students with disabilities between the ages of 14 and 21, approximately 15% dropped out of school, only 45% graduated, and only 2% received a certificate of completion (Office of Special Education and Rehabilitation Services, 2019). Among 18- to 24-year-olds, the dropout rate for students with disabilities is 15.2%, compared to 6.4% for students without disabilities (National Center for Educational Statistics, 2020). The fact is that people with disabilities are more likely to drop out of school than any other group (National Center for Educational Statistics, 2020). In addition to dropping out of school, students with disabilities are at risk for absenteeism and grade retention, which have numerous consequences, including poor economic outcomes (Yoder & Cantrell, 2019). These findings show a systemic failure of the current model of teaching students with disabilities. Clearly, a paradigm shift from a deficit-focused approach to a strengths-based approach is needed to develop more inclusive and equitable school environments for disabled students.

In contrast to the medical model, the social model of disability considers the person in their context. In this model, impairment is seen not as an essential biological characteristic but as a relative function of the interaction between the individual and their environment (Chapman, 2021; Singer, 2017). In the social model of disability, when we say an individual is disabled, "we mean that society isn't properly set up to enable their participation, and instead is often set up in a way that creates barriers to their participation (Walker, 2021, p. 61). The social model considers the individual with an impairment to be disabled due to the larger social, physical, and institutional environment in which they are enmeshed (Areheart, 2008). This model looks at

barriers within a social context which prevents individuals with disabilities from achieving the same level of functioning as a non-disabled person (Dubois & Trani, 2009). Therefore, from the social model perspective, society itself needs to be redesigned to improve the way it supports and meets the needs of people with disabilities (Oliver, 1996). The experience of disability is not inherent in the individual, but rather, it depends upon one's environment and social context (Areheart, 2008). Therefore, solutions often focus on changing environments, removing barriers, and providing accommodations.

The social environment is central to every educational setting, and learning occurs through the social interactions that take place between students, peers, and teachers (Hamilton & Petty, 2023). Currently, the responsibility is too often placed on neurodivergent students to meet neuro-normative expectations. Furthermore, the social, physical, and pedagogical aspects of the learning environment often place neurodivergent students at a disadvantage. Therefore, to truly transform classrooms, learning and teaching "must be designed for a neurodiverse student body, and learning contexts created in which neurodivergent students are seen, understood, and enabled to thrive" (Hamilton & Petty, 2023). Learning environments where differences are accepted and valued help to reduce student stress and anxiety and serve to promote equity.

The Neurodiversity Paradigm and Education

In addition to the medical model and the social model perspectives, the neurodiversity paradigm provides additional insight on the neurodiversity of human beings. The neurodiversity paradigm challenges pathologizing accounts of neurodevelopmental differences (Hamilton & Petty, 2023). The central premise of neurodiversity is that neurological differences based on genetics should be considered as variations in human functioning and be viewed as a constitutive part of human nature (Ocampo Gonzalez, 2018). Neurodiversity, as an approach to disability,

describes "the different ways that we all think, move, hear, see, understand, process information, and communicate with each other. We are all neurodiverse" (Ellis et al., 2023, p. 5). From this perspective, neurodivergence simply represents the wide variety of differences among human beings (Rosqvist et al., 2020). Neurodiversity is the diversity and variation among minds and is an intrinsic characteristic of human beings (Walker, 2021). The neurodiversity paradigm provides a way of reframing the conversation about disabilities and neurological differences by emphasizing the diversity of human minds as a naturally occurring and positive form of human diversity. Differences in how individuals learn, perceive, and interact with the world are cognitive differences that should be acknowledged, welcomed, and accepted (Hamilton & Petty, 2023).

The essence of the movement for neurodiversity is empowerment-through-disability. This paradigm helps neurodivergent individuals value themselves, and helps to promote inclusion, acceptance, and equity for neurodivergent individuals. Thomas Armstrong, director of the American Institute for Learning and Human Development, compares the brain to a rain forest rather than a computer and argues for a positive niche construction and the creation of a nurturing classroom environment. Armstrong (2023) argues that nurturing classroom environments must consider each student and tailor the environment to their own unique way of learning, being, and thriving in the world. An ecosystem is an environment that contains a unique collection of species, including human beings interacting and thriving in that setting. Ellis et al. (2023) argue that the current education ecosystem does not fit all students and may even discourage those with certain traits. For instance, students are grouped by age, and the content is often delivered in the same way and at the same pace for everyone. Our current education system

has mainly been designed for what is imagined to be an "average student" and then mainly for efficiency (Ellis et al., 2023). This approach favors some students and leaves out many others.

To remedy this inequity, the neurodiversity paradigm is helpful in supporting inclusion by acknowledging that all students are diverse and have differences in how they learn, behave, think, and feel (Ocampo Gonzalez, 2018). The key is having teachers learn to recognize and focus upon the strengths of neurodivergent students and to work to accommodate them in ways that support their learning and growth in classroom environments. Furthermore, Ellis et al. (2023) argue that special educational needs labels can limit and even skew our understanding of students and their lived experience of being neurodivergent. Shifting our focus from diagnosis and labeling to lived experience and impact on learning can help us to reframe our understanding of special educational needs (Ellis et al., 2023). Rather than continuing to place emphasis on labels, we should instead reframe our thinking around neurodiversity.

Shifting Paradigms in Special Education From Deficits to Strengths

The field of special education has limited ability to achieve the educational outcomes desired if we continue to understand disability within a deficit model. Rather than limit our understanding of students through the lens of impairment or deficit, we need to begin with a holistic understanding of what students' strengths, passions, values, and abilities are. We need to build educational interventions based on those factors rather than factors pertaining to deficits. There are clear indicators as to how education, as an enterprise, must change to address inequity for students with disabilities (Wehmeyer & Kurth, 2021). The issue with special education is not the student but the system that has lost its relevance in a cultural moment dedicated to diversity, equity, and inclusion, and so that system needs to transform in accordance with evolving perspectives of disability and best practices related to neurodiversity.

Special education, as defined by IDEA, is specially designed instruction to address the unique needs that result from a child's disability, and to ensure access to the general curriculum. According to this definition, special education refers to instruction that meaningfully adapts "content, methodology, or delivery of instruction to address the unique learning needs that result from a child's disability and that ensures access to the general education curriculum" (Wehmeyer & Kurth, 2021, p. 3). IDEA maintains a preference for educating children with disabilities in regular education environments compelled by the Least Restrictive Environment doctrine (Wehmeyer & Kurth, 2021).

A recent Supreme Court decision strengthens the legal imperative for providing a comprehensive and high quality free and appropriate public education for students with disabilities. This court decision also sheds light on the current expectations of special education and what constitutes an appropriate and beneficial educational program as required by IDEA. The petitioner, Endrew F., was an autistic student who attended school in the Douglas County School District from preschool to fourth grade. Every year, his Individualized Education Plan (IEP) team drafted an IEP to address his educational and functional needs. However, by the end of Endrew's fourth grade year, his parents became dissatisfied with his progress. They noticed that Endrew's progress had stalled and that his IEP had the same basic goals and objectives from year to year that were simply carried over into the new school year. The parents believed that Endrew could benefit from a different approach. They also contended that his IEP proposed by the school district was not reasonably calculated to enable Endrew to receive educational benefits and therefore Endrew was denied a free and appropriate public education.

In *Endrew F. v. Douglas County School District* (2017), the U.S. Supreme Court held that an appropriate public education, as guaranteed by federal law, is one in which each student

"has an appropriately ambitious educational program that gives them the chance to meet challenging objectives, and that the student's educational program must be determined only after careful consideration of the child's individual potential for growth" (Wehmeyer & Kurth, 2021, p. xi). The Supreme Court justices concluded that, "a student offered an educational program providing merely more than de minimis progress from year to year can hardly be said to have been offered an education at all" (Endrew F. v. Douglas County School District, 2017, p. 14). An IEP must aim to enable the student to make progress and is specially designed to meet a child's unique needs. Therefore, the Endrew F. ruling established new standards for what is an appropriate education for students with disabilities. As a result, a child's educational program must be appropriately ambitious, provide opportunities for students to meet challenging objectives, and take into consideration the child's potential for growth. The IEP is not a form document. Rather, the IEP is carefully constructed to consider a child's present level of achievement, disability, unique circumstances, and potential for growth. It requires an educational program reasonably calculated to enable a student to make progress appropriately in light of their circumstances (Endrew F. v. Douglas County School District, 2017). Endrew's parents argue that a free and appropriate public education, in their view, is an education that aims to provide a child with a disability "to achieve academic success, attain self-sufficiency, and contribute to society that substantially equal to the opportunities afforded children without disabilities" (Endrew F. v. Douglas County School District, 2017, p. 15).

The context in which disability is understood is changing drastically. Wehmeyer and Kurth (2021) argue that, for the first time in history, we are "poised to approach the design of educational supports within a strengths-based paradigm" (p. xii). Adopting strengths-based approaches to disability "empowers educators to abandon long-held presumptions about

limitations and deficits, and to design supports that enable all learners to succeed" (Wehmeyer & Kurth, 2021, p. xii). Inevitably, the role of educators will change in an educational context which adopts strengths-based approaches that emphasize self-determined learning, and that provide supports that enable students to succeed in typical contexts with their non-disabled peers. The implications for special education arise from the *Endrew F*. Supreme Court decision. We cannot "achieve the appropriately ambitious education that is based on a student's potential for growth unless we jettison deficit-focused educational practices and embrace strengths-based approaches" (Wehmeyer & Kurth, 2021, p. 25). The ultimate goal is to improve educational outcomes for disabled and neurodivergent students. Research shows that improved outcomes can be achieved by adopting culturally relevant pedagogies and inclusive compassionate pedagogies, including universal design for learning, and focusing upon strengths-based approaches (Hamilton & Petty, 2023; Gibbs, 2017; Elsherif et al., 2022; Shmulsky et al., 2022).

Neurodiversity and Culturally Relevant Pedagogy

If neurodiversity is understood as diversity, "then the insight of multicultural education is pertinent. Yet this perspective does not show up in the learning disabilities literature, which is organized around needs and services for people who learn differently" (Shmulsky et al., 2022, p. 681). A recent article by Shmulsky et al. (2022) applies the insight of culturally relevant pedagogy to neurodiversity and explores the applicability of culturally relevant pedagogy as a novel approach to reduce educational barriers for neurodivergent students. Culturally relevant pedagogy (CRP) is a practice based on valuing diversity in education and corresponds with antiracist practice because the role of educator is to actively deconstruct the hegemony of White culture in education (Shmulsky et al., 2022). This approach includes teaching about the diverse cultures present in the school community and teaching in modalities that are most effective for

students based on their cultural backgrounds. This framework originated to make education more inclusive of students with diverse backgrounds and is broad enough to be extended to other marginalized groups (Shmulsky et al., 2022). They suggest teaching approaches for neurodiversity based on the insight of culturally responsive pedagogy to increase inclusion for neurodivergent students. Recommended teaching approaches include the demonstration of acceptance of neurodiversity, the inclusion of neurodivergent authors and creators, the maintenance of high standards, and the use of Universal Design for Learning (Smulsky et al., 2022). Other recommendations include displaying a diversity statement in the syllabus that includes neurodiversity to show acceptance, include perspectives and work of neurodivergent individuals in the curriculum, maintain high expectations and provide support, use Universal Design for Learning to make education maximally accessible, and encourage students to think critically about race, gender, class, and ability in society and the forces that reinforce power dynamics. Shmulsky et al. (2022) note that although educational institutions continue to advance diversity, equity and inclusion, there is still work to be done in considering neurodiversity, and how to achieve more equitable outcomes for neurodivergent students. The same principles that underlie culturally relevant pedagogy could improve the learning experience and outcomes for diverse and neurodiverse students.

Compassionate Pedagogy for Neurodivergent Students

Hamilton and Petty (2023) explore how drawing upon the foundational principles of compassion-focused psychological therapies can show us how compassion can be enacted in education through interactions, curriculum design, and leadership culture. A compassionate pedagogy for neurodivergent students includes providing services based on need, rather than a disability diagnosis. One reason for this is because neurodivergence can be hidden due to stigma,

and this may be detrimental to students who expend energy masking their difference. Another reason is that many qualifying students will not have a diagnosis due to issues of access and cost, and yet they still require support. This includes neurodiversity affirming mental health support (Hamilton & Petty, 2023). In addition to services and mental health support, a compassion-informed approach includes noticing distress, listening to neurodivergent students, being mindful of implicit bias, and being aware that neurodivergent students might be masking differences or difficulties (Hamilton & Petty, 2023). Finally, when designing learning to reduce anxiety and distress, it must involve minimizing ambiguity for neurodivergent students. This involves ensuring that student expectations are clear and explicit, that course materials are available in advance, that exemplars are used when appropriate, and that teachers respond compassionately and empathetically when students ask for clarification (Hamilton & Petty, 2023). To help neurodivergent students, teachers can also reflect on the clarity of their communication style, provide enough time for students to process information, and regularly highlight the relevance of course content while linking the same to course outcomes (Biggs, 1996; Hamilton & Petty, 2023). A compassionate pedagogy for neurodivergent students not only notices students' distress, however, but also recognizes their strengths, and then harnesses these "to scaffold students' engagement and learning" (Hamilton & Petty, 2023). Strengths-based approaches leveraging the strengths and interests of autistic students are increasingly recognized as necessary to meeting their school-related needs (White et al., 2023).

Strengths-Based Approaches

Strengths-based approaches are based on the social model of disability that understands disability as being rooted in environments, attitudes, and structures in society, as well as the restrictions inherent in these contexts (Wehmeyer & Kurth, 2021). Strengths-based approaches

take the assumptions of the social model of disability and translate them into approaches to support and enable students with disabilities to function successfully in typical contexts (Wehmeyer & Kurth, 2021). The social models and strengths-based approaches lead to a support focus in an inclusive education model. Originally used in social work, strength-based approaches are approaches based on the philosophical principles of social justice that emphasize self-determination and the empowerment of individuals to make changes in their own lives by drawing upon their unique strengths, interests, and preferences (White et al., 2023; McCashen, 2017; Lopez & Louis, 2009).

Contemporary approaches in autism are increasingly embracing strengths-based approaches (Huntley et al., 2019; Urbanowicz et al., 2019) by seeking to harness autistic students' strengths, interests, and abilities towards the development of their skills (Jones et al., 2021). Recent studies show that strengths-based programs that leverage autistic adolescents' abilities and interests can improve their skills, self-esteem, and social engagement (Lee et al., 2023). Generally, positive associations between identifying and utilizing individuals' strengths and their consequent overall well-being are well established in the research (Douglass & Duffy, 2015; Ghielen et al., 2018; Proctor et al., 2011; Wood et al., 2011). Following the success of strengths-based interventions in the general population, interest is now growing in utilizing similar approaches to support autistic individuals (Taylor et al., 2023).

Historically, autism has been understood in terms of perceived impairments in accordance with medical models and deficit-based diagnostic criteria (Kapp, 2019; Pellicano & den Houting, 2022). In recent years, we are seeing a shift away from deficit-based approaches toward strengths-based approaches. However, current research and literature are now beginning to include work exploring the use of strengths-based approaches in autism in a variety of

contexts (Taylor et al., 2023). Autistic individuals, clinicians and researchers are advocating for greater appreciation of autistic individuals' psychological strengths.

Strengths-based approaches do not ignore the challenges and difficulties that autistic students face. Rather, they empower students themselves to build their competency to address challenges and difficulties by helping them to focus on what they can do well, while providing them with a supportive environment in which to learn and practice (Clark & Adams, 2020). An important starting point of strengths-based approaches is the utilization of strengths assessments to identify strengths, abilities, knowledge, and interests. These strengths can then be leveraged in the school environment "to optimize their social, emotional, behavioral, academic, and transitional outcomes" (White et al., 2023, p. 21).

A study by Lee et al. (2023) implies that "strengths-based approaches to intervention and support for autistic adolescents in a supported environment are a social model solution that could potentially have positive participant outcomes" (p. 1). Lee et al. (2023) focus on the outcomes of strengths-based programs and their impact on autistic adolescents. Their findings indicated that parents perceived strengths-based programs as positively impacting their child's health, well-being, social relationships, confidence, self-esteem, and sense of belonging (Lee et al., 2023). These findings align with previous research that strengths-based programs had a positive impact on autistic adolescents' health and well-being (Ohrberg, 2013; Wright et al., 2019), confidence (Ashburner et al., 2018), and social interactions (Ashburner et al., 2018; Lee et al., 2020). Safe classroom environments where autistic adolescents were allowed to explore and harness skills of interest, gave them an increased sense of belonging and acceptance (Jones et al., 2018; Lee et al., 2020). Overall, parents noted their child's enthusiasm and motivation to attend the strengths-based programs (Lee et al., 2023) and they attributed this motivation to the

activities, sense of enjoyment, friendships, and sense of belonging their children felt being part of a peer group (Ashburner et al., 2018; Keen et al., 2016). Furthermore, parents of autistic adolescents who participated in the strengths-based programs noted that the programs positively impacted their perceptions of themselves and helped them to embrace their autism as a strength rather than a deficit (Lee et al., 2023).

Strengths-based programs for autistic adolescents fostered a greater understanding of their strengths, and consequently increased their own confidence in their abilities (Lee et al., 2023). Consistent with previous studies conducted by Donahoo and Steele (2013) and Jones et al. (2018), the success of these strengths-based programs were also linked with the learning environment. The learning environment for these strengths-based programs for autistic adolescents created a safe space where participants could talk about their passions and interests (Lee et al., 2020), and was a place that was tailored to their sensory needs. Findings from the study by Lee et al. (2023) provide a framework underpinning future strengths-based interventions for autistic individuals.

Inclusive Education for Neurodiverse Learners

Changing understandings of disability makes inclusive education even more urgent and necessary. In adopting strengths-based approaches and effective inclusive education practices, we can finally move closer to fulfilling IDEA's expectations for educating students with disabilities. There is a growing and substantial body of research supporting inclusive education. Wehmeyer and Kurth (2021) note that the past 40 years of research shows that when students with and without disabilities learn together, they both experience better outcomes. In addition, inclusive education has also been shown to improve the ability of educators to provide quality instruction to all students, including students with disabilities (Finke et al., 2009). Another

benefit of inclusive education for students with disabilities includes improvements to their quality of life as well as their educational experiences (Hunt et al., 2012). In addition, inclusive instruction is beneficial because of the possibility of using co-teaching arrangements to provide instruction to students as is proving very helpful for all (Wehmeyer & Kurth, 2021). Inclusive education not only provides quality education for all learners, it also fosters a culture of respect and belonging.

Why might inclusive education have a positive impact on students without disabilities in addition to students with disabilities? One reason might be that inclusive educators adapt how they teach to benefit all students by including the use of strategies and techniques that meet the needs of diverse learners (Dessemontet & Bless, 2013). Another reason might be that educators in inclusive settings collaborate more, gathering strategies and supports from other colleagues in order to benefit all learners (Sharma et al., 2008). A third reason might be that schoolwide approaches to positive behavior support and multi-tiered supports equip teachers with strategies to meet the learning needs of all students through a collaborative, interdisciplinary problemsolving approach (Giangreco et al., 1993). Inclusive education is also beneficial to all students because it values diversity and the unique contributions students bring to the classroom. In summary, research shows that students with disabilities have better educational outcomes when taught in inclusive classrooms. They are more likely to achieve better academic, social, behavioral, and relationship outcomes when taught with their peers without disabilities (Wehmeyer & Kurth, 2021).

Wehmeyer and Zhao (2020) recommend incorporating these elements make education inclusive: teaching from and to a student's passion and strengths; reimagining teachers as coaches who help students achieve personal learning goals; and having teachers work

collaboratively in community. In addition, effective inclusive instructional practices are essential to promoting positive student outcomes for all learners. To improve instruction for students with disabilities in inclusive settings, "educators must identify and use effective teaching practices that both raise expectations and promote positive outcomes" (Wehmeyer & Kurth, 2021, p. 27). Inclusive instruction should be "effective, ambitious, strengths-based, and designed to maximize student learning outcomes" (Wehmeyer & Kurth, 2021, p. 31). Educators must make sure that instructional strategies are personalized to meet the unique learning needs of particular students plan for instructional content, supports, and assessment "and be prepared to plan and implement a variety of strategies to ensure the progress and participation of each student" (Wehmeyer & Kurth, 2021, p. 37). Inclusive education recognizes that variance across individuals is the norm, not the exception. Therefore, one effective way to teach a classroom of diverse learners is to incorporate Universal Design for Learning as a framework for designing instruction.

Neurodiversity and Universal Design for Learning

Universal Design for Learning (UDL) is an anticipatory approach to teaching and learning that gives all students the opportunity to succeed by working to remove access to barriers at the point of instruction. UDL provides a pedagogical philosophy along with strategic design processes and tools for implementation. The overarching framework of UDL stresses flexibility in learning across three key domains: multiple means of engagement; multiple means of representation; and multiple means of expression (Jarman et al., 2023).

The goal of UDL is not about finding one way to teach all students. Rather, the goal is to use a variety of teaching methods and tools to remove any barriers to learning (Ellis et al., 2023, p. 77). A UDL approach to curriculum design embeds flexibility and choice in order to make learning accessible to a wide range of students. Within this framework, information is presented

in multiple modalities (verbal, visual, and written), students are enabled to express their knowledge in alternative ways (written or oral), and student engagement is scaffolded (Hamilton & Petty, 2023; Boothe et al., 2018). From a design perspective, this means educators might supplement academic readings with podcasts, videos, visual timelines, interviews, and active learning activities (Jarman et al., 2023). When it comes to expressing knowledge, UDL encourages flexibility with assignments and how students are able to show their knowledge.

A recent study by Jarman et al. (2023) on inclusive pedagogy and universal design for learning addresses how UDL implementation and inclusive pedagogy can be done in a wide range of classes using a variety of learning strategies including writing and research assignments, exams and project-based learning, multiple choice assessments, and creative, oral, and digital presentations of student work. This study was a year-long faculty pilot group that applied disability studies scholarship to collaborative implementation of universal design for learning (UDL) and inclusive practices in teaching. One of the themes that emerged from this study was the importance of student access, accommodations, and engagement. The faculty in the pilot study agreed that being intentional in their course design and including student participation in the development of their classes increased student engagement and access to learning. The faculty also learned how to be more intentional about personalizing the learning space, reimagining student participation, and asking for student input. The faculty also mentioned that offering a wider menu of assignment choices, presentation formats, and deadlines helped to increase student learning. Another theme that emerged from this study was faculty requesting institutional support through key resources such as sample modules on UDL, workshops, weekly meetings and training sessions, and increased collaboration. Faculty participants in this pilot group found that increasing flexibility for students resulted in greater student engagement, as

well as more innovative work. In addition, they gained a greater understanding of historic disability exclusions, and reported that it fueled a commitment to remove barriers and promote accessible, inclusive learning environments (Jarman et al., 2023).

Moving away from a one-size-fits-all approach to education towards a more inclusive universal design approach is needed to remove barriers to learning for students with disabilities and neurodivergences. This alignment with the neurodiversity paradigm offers "an antidote to bolt-on provisions for students who differ from the neuro-normative and might enable neurodivergent thinkers to flourish" (Hamilton & Petty, 2023, p. 1). UDL acknowledges that all human brains are unique, and that each student learns differently, and therefore it requires planning for diversity from the beginning of the design process to increase accessibility for all students. UDL works well for diverse learners because it provides multiple means of representation, expression, and engagement. The idea is to provide access to many types of sources of information and use a wide variety of media sources to reach a diverse group of learners. For example, a UDL-approach to a history lesson is very different from a traditional history lesson where only traditional materials are used and where teachers do the bulk of the talking. The predominant textbook-oriented approach to teaching history presents learning barriers for many and is too inflexible to provide all types of learners with genuine opportunities for learning and engagement. If students have reading challenges, lack the vocabulary necessary for the lesson, have challenges focusing or sitting sit, or struggle with reading comprehension, this traditional textbook approach would create barriers for them. They may not receive or retain the information given through simply reading or listening to a lecture. The diversity of learners in a given classroom—"with differences in preparedness, language, cultural background, ability, and interests—also presents a challenge" (Hall et al., 2012, p. 90). Using UDL in a history

classroom can help educators rethink curricular goals, methods, materials, and assessments (Hall et al., 2012). By reshaping the curriculum, the teaching methods, and the assessments, educators can create new teaching and learning opportunities for their diverse classrooms. This is because UDL encourages diverse, flexible approaches to acquiring information, performing learning tasks, and staying engaged in learning. Many primary sources in history present their own barriers for many students due to their obsolete vocabulary and syntax. Rather than simply using the textbook for teaching history, an educator can also introduce digital multimedia to maximize opportunities for diverse learners to access the information differently. An educator can also provide support for learning vocabulary through interactive online texts where students can click on unfamiliar words and learn their meaning as they read. Other students may need visuals to understand historical concepts, vocabulary, and timelines. Therefore, using UDL, an educator presents the new information of a lesson in many ways: through text, multimedia, and visual representations to clarify meaning, vocabulary, background information, and comprehension. Rather than simply providing one way of learning the material, UDL provides a variety of means for students to access the curriculum.

In addition to providing multiple means of representation, UDL provides multiple means of expression. This means that in a history lesson using UDL, the educator provides various opportunities for physical action and expression. Traditional non-UDL curricula usually call for writing or oral responses, either by writing in a workbook or answering out loud. This may not be accessible to some student learners with weaknesses in motor skills, low vision, dyslexia, or who are nonverbal or who have social anxiety. To overcome these barriers, UDL is flexible enough to provide alternative options such as being able to make an audio recording, using voice recognition software, having alternative keyboards, and other forms of assistive technology (Hall

et al., 2012). In addition to removing these barriers, educators also provide options for executive functions by monitoring student progress and prompting students to stop and think about the work they are doing, and providing opportunities for setting goals, tracking progress, and self-regulation.

The final element of UDL involves providing multiple means of engagement. Therefore, in a history classroom this can look like providing choices and a variety of options for students to enhance engagement and learning. Students are most engaged when they can choose what to learn about, see the learning goals and know that they are relevant, and that activities are authentic and connected to their current knowledge (Hall et al., 2012). A UDL approach to teaching history shifts the educator's role from being an expert imparting information to a mentoring model where educators prompt, guide, and support students in their learning. Flexible digital materials enable educators to offer more options to students in terms of choosing documents, accessing background knowledge, and supporting vocabulary development and comprehension (Hall et al., 2012). In addition to providing learning options, educators also provide options for sustaining effort and persistence. If an activity is too difficult, the student may become frustrated, or if the activity is too easy, they may become bored. Therefore, the challenge-support balance can be found "by creating opportunities to collaborate with peers or by providing alternatives in the tools and scaffolds offered for a particular assignment" (Hall et al., 2012, p. 18).

UDL-based assessment should include the same options students received during their instruction. For instance, if the assessment is meant to measure their understanding of WWI, students can be given choices in how to show and express that understanding. Some students may choose to write a report, while others may choose to perform a skit, create a visual display,

or create a website, to name a few. Effective assessment should be flexible enough for diverse learners to show their understanding of a topic in a way that is engaging, authentic, and accessible to them.

UDL based instruction provides students with choices, supports, and scaffolds, by designing a curriculum that is flexible enough to support the diversity of learners in the classroom. hile UDL is still in its infancy, existing research shows that UDL is effective for improving learning outcomes for all students; students report higher engagement and satisfaction, and reduced barriers to learning through it (Capp, 2017; Seok et al., 2018). Fully inclusive and neurodiverse classrooms require training for all educators about neurodiversity and UDL. When curricula are proactively designed for diverse learners, this enables neurodivergent students to thrive because learning is designed to be neuro-inclusive of all types of learners.

The Future of Neurodiversity: Where Do We Go From Here?

If we continue to offer only deficit-based supports for students with disabilities and educate them within an outdated special education system based on the medical model of disability, a system in which their differences are often viewed as deficits, education for neurodiverse learners will likely fail to meet the standards set by the U.S. Supreme Court in the *Endrew F*. decision.

Research clearly shows that students with disabilities have better outcomes in school when taught in inclusive classrooms, and that they are more likely to achieve important academic, social, emotional, behavioral, communicative, and relational outcomes when taught along with their peers without disabilities (Wehmeyer & Kurth, 2021). To be effective for all students, inclusive education must be built on the foundations of strengths-based approaches that are derived from the social model of disability and the neurodiversity paradigm. Strengths-based

approaches to education emphasize personalized supports that account for students' abilities, interests, and preferences. The neurodiversity paradigm acknowledges that all students are diverse and have differences in how they learn, behave, think, and feel. Together, strengths-based approaches in combination with learning designed for a neurodiverse student body can truly transform classrooms and create learning contexts in which neurodivergent students are valued and enabled to thrive.

The time has come to move away from a standardized one size fits all educational design towards an inclusive universal design for learning for a neurodiverse student body. This move must also include shifting away from a deficit-based view of disability and neurodivergence towards a strengths-based approach that centers neurodiversity and values each student's strengths and uniqueness. More research is needed to understand how inclusive education, strengths-based approaches, culturally relevant pedagogy, and Universal Design for Learning can work together to better serve neurodivergent students by removing their barriers to learning in the classroom. With these changes, the current education system can rise up to meet the standards set by the Supreme Court regarding the education of students with disabilities and the appropriately ambitious education they deserve.

References

- Areheart, B.A. (2008). When disability isn't just right: The entrenchment of the medical model and the goldilocks dilemma. *Indiana Law Journal*, 83(1), 181–232.
- Armstrong, T. (2012). *Neurodiversity in the classroom: Strength-based strategies to help students with special needs succeed in school and life.* ASCD.
- Armstrong, T. (2023). Neurodiversity and positive niche construction. Retrieved from https://www.institute4learning.com/?s=neurodiversity+and+niche+construction
- Ashburner, J. K., Bobir, N. I., & van Dooren, K. (2018). Evaluation of an innovative interest-based post-school transition programme for young people with autism spectrum disorder. *International Journal of Disability, Development and Education*, 65(3), 262–285.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, *32*, 347–364. https://doi.org/10.1007/BF00138871
- Black, M. H., Mahdi, S., Milbourn, B., Thompson, C., D'Angelo, A., Ström, E., & Bölte, S. (2019). Perspectives of key stakeholders on employment of autistic adults across the United States, Australia, and Sweden. *Autism Research*, *12*(11), 1648–1662.
- Boothe, K. A., Lohmann, M. J., Donnell, K. A., and Hall, D. D. (2018). Applying the principles of universal design for learning (UDL) in the college classroom. *The Journal of Special Education Apprenticeship*, 7(3), 1–13.
- Burnham Riosa, P., Chan, V., Maughan, A., Stables, V. Albaum, C., Weiss, J. A. (2017). Remediating deficits of increasing strengths in autism spectrum disorder research: A content analysis. *Advances in Neurodevelopmental Disorders*, 1, 113–221,
- Capp, M. J. (2017). The effectiveness of universal design for learning: A meta-analysis of literature between 2013 and 2016. *International Journal of Inclusive Education*, 21(8), 791–807. https://doi.org/10.1080/13603116.2017.1325074
- Chapman, R. (2021). Neurodiversity and the social ecology of mental functions. *Perspectives on Psychological Science*, *16*, 1360–1372. https://doi.org/10.1177/1745691620959833
- Clark, M., & Adams, D. (2020). Parent-reported barriers and enablers of strengths in their children with autism. *Journal of Child and Family Studies*, 29, 2402–2415.
- Dessemontet, R., & Bless, G. (2013). The impact of including children with intellectual disability in general education classrooms on the academic achievement of their low-average, and high achieving peers. *Journal of Intellectual and Developmental Disability*, 38(1), 23–30.

- Donahoo, D., & Steele, E. (2013). Evaluating the lab: A technology club for young people with Asperger's syndrome. Young and Well Cooperative Research Center.
- Douglass, R. P., & Duffy, R. D. (2015). Strengths use and life satisfaction: A moderated mediation approach. *Journal of Happiness Studies*, *16*(3), 619–632. https://doi.org/10.1007/s10902-014-9525-4
- Dubois, J.-L. & Trani, J.-F. (2009). Extending the capability paradigm to address the complexity of disability. *ALTER European Journal of Disability Research*, *3*(3), 192–218. https://doi.org/10.1016/j.alter.2009.04.003
- Dwyer, P. (2022). The neurodiversity approach(es): What are they and what do they mean for researchers? *Human Development*, 66(2), 73–92. https://doi.org/10.1159/000523723
- Ellis, P., Kirby, A., & Osborne, A. (2023). Neurodiversity and education (1st ed.). Corwin.
- Elsherif, M. M., Middleton, S. L., Phan, J. M., Azevedo, F., Iley, B., Grose-Hodge, M., Tyler, S. L., Kapp, S. K., Gourdon-Kanhukamwe, A., Grafton-Clarke, D., Yeung, S. K., Shaw, J. J., Hartmann, H. & Dokovova, M. (2022). *Bridging neurodiversity and open scholarship: How shared values can guide best practices for research, integrity, social justice, and principal education*. Preprint. https://doi.org/10.31222/osf.io/k7a9p
- Endrew F. v. Douglas County School District, 580 U.S. ___ (2017). https://www.supremecourt.gov/opinions/16pdf/15-827_0pm1.pdf
- Finke, E. H., McNaughton, D. B., & Drager, K. D. (2009). "All children can and should have the opportunity to learn": General education teachers' perspectives on including children with autism spectrum disorder who require AAC. *Augmentative and Alternative Communication*, 25(2), 110–122.
- Ghielen, S. T. S., van Woerkom, M., & Meyers, M. C. (2018). Promoting positive outcomes through strengths interventions: A literature review. *The Journal of Positive Psychology*, 13(6), 573–585. https://doi.org/10.1080/17439760.2017.1365164
- Giangreco, M., Dennis, R., Cloninger, C. J., Edelman, S., & Schattman, R. A., (1993). Transformational experiences of teachers educating students with disabilities. *Exceptional Children*, *59*(4), 359–372.
- Gibbs, P. (Ed.). (2017). *The pedagogy of compassion at the heart of higher education*. Springer. https://doi.org/10.1007/978-3-319-57783-8
- Hall, T. E., Meyer, A., & Rose, D. H. (Eds.). (2012). *Universal design for learning in the classroom: Practical applications*. Guilford Press.

- Hamilton, L. G. & Petty, S. (2023). Compassionate pedagogy for neurodiversity in higher education: A conceptual analysis. *Frontiers in Psychology*, *14*, Article 1093290. https://doi.org/10.3389/fpsyg.2023.1093290
- Hunt, P., McDonnell, J., & Crockett, M. A. (2012). Reconciling an ecological curricular framework focusing on quality-of-life outcomes with the development and instruction of standards-based academic goals. *Research and Practice for Persons With Severe Disabilities*, 37(3), 139–152.
- Huntley, M. K., Black, M. H., Jones, M., Falkmer, M., Lee, E. A. L., Tan, T., & Girdler, S. (2019). Action briefing: Strengths-based approaches. Curtin University, KIND and Autistica. https://www.autistica.org/uk/dowloads/files/FINAL-Strengths-Based-Approaches-ActionBriefing.pdf
- Jarman, M., Thompson-Ebanks, V., Singh, R., Boggs, C., Clement, K., & Peter, S. (2023). Disability studies, inclusive pedagogy, and universal design for learning: A faculty pilot experience. *Disability Studies Quarterly*, 42(3-4). https://doi.org/10.18061/dsq.v42i3-4
- Jones, M., Bolte, S., Faulkmer, M., Milbourne, B., Tan, T., Sheehy, L., & Girdler, S. (2018). *A strengths-based program for adolescents with autism*. Research Report No. 17/18. Bankwest Curtin Economics Centre.
- Jones, M., Falkmer, M., Milbourn, B., Tan, T., Bolte, S., & Girdler, S. (2021). Identifying the essential components of strengths-based technology clubs for adolescents with autism spectrum disorder. *Developmental Neurorehabilitation*, 24(5), 323–336. https://doi.org/10.1080/17518423.2021.1886192
- Kapp, S. (2019). How social deficit models exacerbate the medical model: Autism as case in point. *Autism Policy & Practice*, 2(1), 3–28. https://openaccessautism.org/index.php/app/article/view/16
- Keen, D., Webster, A., & Ridley, G. (2016). How well are children with autism spectrum disorder doing academically at school? An overview of the literature. *Autism*, 20(3), 276–294.
- Lee, E. A. L., Black, M. H., Falkmer, M., Tan, T., Sheehy, L., Bölte, S., & Girdler, S. (2020). "We can see a bright future": Parents' perceptions of the outcomes of participating in a strengths-based program for adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 50, 3179–3194.
- Lee, E. A. L., Scott, M., Black, M. H., D'Arcy, E., Tan, T., Sheehy, L., Bölte, S., & Girdler, S. (2023). "He sees his autism as a strength, not a deficit now": A repeated cross-sectional study investigating the impact of strengths-based programs on autistic adolescents. *Journal of Autism and Developmental Disorders*, 1–16. https://doi.org/10.1007/s10803-022-05881-9

- Linton, S. (1998). Claiming disability: Knowledge and identity. New York University Press.
- Lopez, S. J. & Louis, M. C. (2009). The principles of strengths-based education. *Journal of College and Character*, 10(4). https://doi.org/10.2202/1940-1639.1041
- McCashen, W. (2017). The strengths approach: A strengths-based resource for sharing power and creating change (2nd ed.). St Luke's Innovative Resources.
- McDonald, T. A., & Machalicek, W. (2013). Systematic review of intervention research with adolescents with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 7(11), 1439–1460. https://doi.org/10.1016/j.rasd.2013.07.015
- National Center for Education Statistics. (2020). Retrieved from https://nces.ed.gov/pubs2020/2020144.pdf
- Ocampo Gonzalez, A. (2018). Interview with Ph.D. Thomas Armstrong on neurodiversity and construction of a talent pedagogy: Critical axes for a new inclusive education, 2(1), 161–165.
- Office of Special Education and Rehabilitation Services (2019). Forty-first annual report to Congress on the implementation of the Individuals with Disabilities Education Act. https://sites.ed.gov/idea/files/41st-arc-for-idea.pdf
- Ohrberg, N. J. (2013). Autism spectrum disorder and youth sports: The role of the sports manager and coach. *Journal of Physical Education, Recreation & Dance*, 84(9), 52–56.
- Oliver, M. (1996). *Understanding disability: From theory to practice*. Macmillan.
- Pellicano, E., & den Houting, J. (2022). Annual research review: Shifting from "normal science" to neurodiversity in autism science. *Journal of Child Psychology and Psychiatry*, 63(4), 381–396. https://doi.org/10.1111/jcpp.13534
- Pellicano, E., & Stears, M. (2011). Bridging autism, science and society: Moving toward an ethically informed approach to autism research. *Autism Research*, 4(4), 271–282. https://doi.org/10.1002/aur/201
- Proctor, C., Malthy, J., & Linley, P. A. (2011). Strengths use as a predictor of well-being and health-related quality of life. *Journal of Happiness Studies*, *12*(1), 153–169. https://doi.org/10.1007/s10902-009-9181-2
- Rosqvist, H. B., Chown, N., & Stenning, A. (Eds.). (2020). *Neurodiversity studies: Anew critical paradigm*. Routledge.

- Roux, A. M., Shattuck, P. T., Cooper, B. P., Anderson, K. A., Wagner, M., & Narendorf, S. C. (2013). Postsecondary employment experiences among young adults with autism spectrum disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, *52*(9), 931–939.
- Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A. M., & Shaver, D. (2011). The post high school outcomes of young adults with disabilities up to 6 years after high school. Key findings from the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2011-3004). SRI International.
- Scott, M., Milbourn, B., Falkmer, M., Black, M., Bölte, S., Halladay, A., Lerner, M., Taylor, J. L., & Girdler, S. (2019). Factors impacting employment for people with autism spectrum disorder: A scoping review. *Autism*, *23*(4), 869–901. https://doi.org/10.1177/1362361318787789
- Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability and Society*, 23(7), 773–785. https://doi.org/10.1080/09687590802469271
- Shmulsky, S., Gobbo, K., & Vitt, S. (2022). Culturally relevant pedagogy for neurodiversity. *Community College Journal of Research and Practice*, 46(9), 681–685.
- Shyman, E. (2016). The reinforcement of ableism: Normality, the medical model of disability, and humanism in applied behavior analysis and ASD. *Intellectual and Developmental Disabilities*, *54*(5), 366–376. https://doi.org/10.1352/1934-9556-54.5.366
- Singer, J. (2017). Neurodiversity: The birth of an idea. Self-published.
- Seok, S., DaCosta, B., & Hodges, R. (2018). A systematic review of empirically based universal design for learning: Implementation and effectiveness of universal design for learning in education for students with and without disabilities at the postsecondary level. *Open Journal of Social Sciences*, 6(5), 171–189. https://doi.org/10.4236/jss.2018.65014
- Swarbrick, M. (2006). A wellness approach. Psychiatric Rehabilitation Journal, 29(4), 311–314.
- Taylor, E. C., Livingston, L. A., Clutterbuck, R. A., Callan, M. J., & Shah, P. (2023). Psychological strengths and well-being: Strengths use predicts quality of life, well-being and mental health in autism. *Autism*, *27*(6), 1826–1839. https://doi.org/10.1177/13623613221146440
- Urbanowicz, A., Nicolaidis, C., Houting, J., Shore, S. M., Gaudion, K., Girdler, S., & Savarese, R. J. (2019). An expert discussion on strengths-based approaches in autism. *Autism in Adulthood*, *1*(2), 82–89. https://doi.org/10.1089/aut.2019.29002.aju
- Walker, N. (2021). Neuroqueer heresies: Notes on the neurodiversity paradigm, autistic empowerment, and postnormal possibilities. Autonomous Press.

- Wehmeyer, M. L., & Zhao, Y. (2020). *Teaching students to become self-determined learners*. ASCD.
- Wehmeyer, M. L., & Kurth, J. (2021). *Inclusive education in a strengths-based era: Mapping the future of the field*. W. W. Norton & Company.
- White, J., McGarry, S., Falkmer, M., Scott, M., Williams, P. J., Black, M. H. (2023). Creating inclusive schools for autistic students: A scoping review on elements contributing to strengths-based approaches. *Education Sciences*, *13*(7), Article 709. https://doi.org/10.3390/educsci13070709
- Wood, A. M., Linley, P. A., Maltby, J., Kashdan, T. B., & Hurling, R. (2011). Using personal and psychological strengths leads to increases in well-being over time: A longitudinal study and the development of the strengths use questionnaire. *Personality and Individual Differences*, 50(1), 15–19. https://doi.org/10.1016/j.paid.2010.08.004
- Wright, C., Diener, M., Wright, S., Rafferty, D., & Taylor, C. (2019). Peer teachers with autism teaching 3D modeling. *International Journal of Disability, Development and Education*, 66(4), 438–453.
- Yoder, C. L. M., & Cantrell, M. A. (2019). Childhood disability and educational outcomes: A systematic review. *Journal of Pediatric Nursing*, *45*, 37–50. https://doi.org/10.1016/j.pedn.2019.01.003

CHAPTER V:

DISMANTLING THE SCHOOL-TO-PRISON PIPELINE THROUGH NEURODIVERSITY AND ANTIRACISM

Schools, like many other institutions across our society serving children and youth, are mired in historic and systemic challenges at the intersection of race, gender, and disability (Drame et al., 2020). Multiple scholars have found that the intersections of race, ability, and gender are essential ingredients "in how schooling has been constructed to adversely impact the educational and judicial systems in America" (Snydman, 2022, p. 23).

Education is a political and social process that can either serve as a form of disciplinary power to create governable individuals or it can serve as a transformative power that identifies mechanisms of exclusion and oppression that it seeks to change (Freire, 1972). There is a clear distinction to be made, then, between education as the practice of freedom and education that merely strives to reinforce oppression (hooks, 1994). We need to ask ourselves whether or not our current education system serves largely to reinforce exclusion and oppression or more so as a transformative power leading to greater inclusion and freedom. One approach towards answering this question centers arguments emerging from scholars in critical race theory and disability studies circles whose work explores the historical nature of the educational system's design and management (i.e., who is the current system is built for, who does it enable, and who is disabled by it in turn?). By looking at what sociocultural groups are centered, and which are marginalized, which groups thrive educationally and which struggle, we can begin to recognize the manner in which student success is inequitably differentiated systematically by design.

An increasing number of studies substantiate the presence of a prison pipeline for Black students with disabilities (Hines et al., 2021). A recent report by the National Center for Learning

Disabilities (Snydman, 2022) calls attention to the intersectional failure of the educational, justice, and disability systems to provide youth with disabilities the education they deserve. The fact that so many Black disabled children are funneled into the school-to-prison pipeline makes it evident that the fight for equity in education is still ongoing. Data compiled by the American Civil Liberties Union (ACLU) shows that in 2020, Black youth were 2.3 times more likely to be arrested than their White peers, and students with disabilities were 3 times more likely to be arrested than their nondisabled peers (ACLU, 2020). Research also shows that Black students with disabilities are more likely to be on the receiving end of exclusionary practices which include expulsions, suspensions, and other punitive measures that remove students from the classroom (Pottiger, 2022). Clearly, our current education system is not the practice of freedom for all learners, but rather a reproductive practice that teaches forms of group-based privilege that results in the disproportionate outcome of oppression and incarceration for some of our most vulnerable students. As Miller (2023) has rightfully concluded, the school-to-prison pipeline is a significant manifestation of the intersections of ableism, racism, and the carceral state.

This article explores the relationship between special education, disability, race, and the school-to-prison pipeline, and how the intersection of these statistics feeds the pipeline into the carceral system. Using an antiracist and neurodiversity lens, this article will address some of the systemic barriers in learning environments that unfairly positions Black disabled students on the path to prison and make recommendations for dismantling the pipeline to better support our most vulnerable youth.

The School-to-Prison Pipeline

In Disabling the School-to-Prison Pipeline: The Relationship Between Special Education and Arrest, Laura Vernikoff (2021) argues that "one current manifestation of the relationship

between special education and juvenile justice is the school-to-prison pipeline (STPP)" (p. 1). The links between schools and prisons are deeply embedded, "sending students careening between institutions of education and criminalization with various degrees of restrictiveness" (Annamma, 2018, p. 2). There is an urgent need to understand "how multiply-marginalized children of color are channeled out of schools and into prisons" (Annamma, 2018, p. 3) so that these mechanisms can be named and disrupted.

In her book The Pedagogy of Pathologization, Subini Annamma (2018) brings to light "the policies, processes, and practices that target our most marginalized children for punishment instead of education" (p. 3). The school-to-prison pipeline is a phenomenon that is commonly thought of as "the policies, processes, and practices that push students out of schools and into prisons" (Annamma, 2018, p. 4). The pipeline metaphor describes the ways in which schools apply punitive disciplinary practices to funnel students out of school and into juvenile incarceration. These practices include: (1) installing environmental security (metal detectors, barbed wire fences, bars on windows); (2) employing police officers or school security; and (3) enacting disciplinary removal (suspensions and expulsions; Annamma, 2018). Although the relationship between schools and the criminal justice system "is complex and multidirectional, the pipeline metaphor focuses on school policies and practices that move kids in one particular direction: from schools to prison" (Vernikoff, 2021, p. 1). This pipeline cannot exist in a vacuum: "it is deeply connected to our current political and social climate which is increasingly harsh and interested in punitive punishment rather than understanding" (Miguel & Gargano, 2017, p. 2). Disciplinary exclusion is at the core of the STPP, and disproportionately affects Black students and students with disabilities (Elias, 2013) and often manifests itself in the form of suspensions and expulsions (Keyes, 2022). In order to demolish the pipeline schools must

address the root causes of this phenomenon. Who we value and who we discard are linked to the structure of our schools and the methods of punishment we use to shuffle students deemed expendable into the penal system (Miguel & Gargano, 2017). This is the crisis we find ourselves in. The school-to-prison pipeline robs disabled students of the right to an uninterrupted education and of the opportunity to create a life unrestrained by a criminal record (Miguel & Gargano, 2017).

Eugenics, Common Schooling, and Special Education

The introduction of common schooling during the nineteenth century was instituted at the same time the American eugenics movement was gaining momentum (Vernikoff, 2021). The idea that undergirds the eugenics movement is that biology can explain all social problems (Vernikoff, 2021). Eugenicists blamed individuals' bodies for their failure to behave in ways considered normal. The strategy they employed for fixing social problems was isolating individuals who were affected by the problem "in order to keep the problem from spreading. Individuals who were considered 'defective' were placed into institutions such as hospitals or special schools, where the rest of the population could be protected from them" (p. 17). Children whose bodies and behaviors differed from the idealized norm were moved to parallel, segregated classrooms "that frequently had less academically oriented curricula, less qualified teachers, and fewer resources" (p. 16). Educators and policy makers made assumptions that disabled children were not capable or not worthy of learning. These assumptions led to unequal educational opportunities which in turn led to unequal outcomes for students with disabilities.

Still today, special education policy directly impacts the schooling experiences of students with disabilities. Studies show that enrollment in special education is associated with lower academic achievement, higher rates of school discipline and drop out, lower employment

prospects, and incarceration (Losen & Gillespie, 2012; Sanford et al., 2011). Researchers have estimated that up to 85 percent of incarcerated youth in this country have received or would be eligible to receive special education services (National Council on Disability, 2015). Studies also report that students with a special education disability are almost three times more likely to receive an out-of-school suspension (20%) compared with students without a disability (7%), with the most common disability types being learning disabilities and severe emotional disturbances (Fabelo et al., 2011; Kang-Brown et al., 2013). This is significant because out of school suspensions more than doubles the possibility of arrest (H. Morgan, 2021). The National Council on Disability (2015) reports that students with disabilities represent a quarter of students subjected to school-related arrest, even though they are only 12% of the overall student population. Disability increases the chance of arrest by age 28 by 13% (McCauley, 2017). When disability intersects with race, statistics show that more than half of disabled African Americans have been arrested by the time they turn 28, which is double the risk in comparison to their White disabled counterparts (Thompson, 2021). Based on the above statistics, special education and juvenile justice have complex, interrelated histories. Rather than being a haven of support and protection for students with disabilities, special education in the United States has become a playground for the school-to-prison pipeline (Wald & Losen, 2003).

Race, Disability, and the Criminalization of Students

A multitude of factors can contribute to a student's academic success or lack thereof. Students who live in poverty, have limited English proficiency, have parents with low reading levels, or have certain disabilities are more likely to enter school at-risk for reading failure (Lyon, 1998). Research shows that students who cannot read at grade level by the third grade are four times more likely to drop out of high school (Hernandez, 2012). Some researchers suggest

that this gap between students from marginalized populations and from dominant groups widens as they move from first to fourth grade (Shippen et al., 2006). This achievement gap is further widened by disciplinary exclusion which increases their likelihood of being retained (Townsend, 2000). Many children growing up at the intersection of poverty and race are more likely to grow up poor, receive a lower quality education, and face stricter discipline in school due to their family's socioeconomic status and race (Mar-Shall, 2021).

Research shows that students of color, particularly Black boys with disabilities, are disproportionately tracked into special education (Blanchett, 2009). The disproportionate representation of students of color in special education is deeply influenced by the social construction of "normal." In education, like in society, being White and nondisabled are the unnamed norm that students are measured against. Historically, Black students with disabilities typically have been perceived as incapable, troublesome, disadvantaged, and lacking (Boroson, 2017). Therefore, their place in the margins of schools is reinforced by deficit views that locate deficiency within the student and justify their removal.

According to Annamma (2018) race and disability are linked to the criminalization of students in schools. Students at the intersections of race and disability "are particularly vulnerable to segregation and poorer outcomes" (Annamma, 2018, p. 10). Racially biased views of student behavior often color perceptions of behaviors and influence subconscious reactions that can lead to discipline disparities in schools for Black children with disabilities (Drame et al., 2020). Studies document that Black boys and girls are three and six times more likely to be suspended than their White counterparts respectively (Nowicki, 2018; U.S. Department of Education Office for Civil Rights, 2018). Data also reveals Black children who are diagnosed with cognitive or emotional impairments are suspended from school at higher rates than their

nondisabled counterparts (Losen & Gillespie, 2012). In fact, studies show that Black children were more likely to be suspended or expelled than any other group of students (Hines & Wilmot, 2018; National Center for Education Statistics, 2019).

Recent studies also show that Black children in special education in grades 1–8 were 55% more likely to be incarcerated than children not placed in special education. Furthermore, each additional year a child spent in special education was associated with a 12% increase in the likelihood of future incarceration (Chesmore et al., 2016). These studies shed light on how school practices harm Black students with disabilities and place them on pathways to higher levels of school dropout, arrest, incarceration, and poor education and employment outcomes.

Harmful School Practices and Policies

One school practice that harms Black disabled students are zero tolerance policies and the presence of school resource officers on school campuses. Research shows the presence of police officers on school grounds has increased student arrests since the establishment of zero tolerance policies, most of which are for non-serious offenses such as unruly behavior or disobedience (Advancement Project, 2005; National Association for the Advancement of Colored People, 2006; Thurau & Wald, 2010). In schools, particularly in overburdened and underfinanced schools, many students have been suspended or expelled due to the criminalization of typical adolescent developmental behaviors and low-level-type misdemeanors such as acting out in class, truancy, fighting, disobedience, and other similar offenses (Robers et al., 2014). The presence of police officers in schools has disproportionately ensnared already vulnerable and disadvantaged students (Carter et al., 2014; Justice Policy Institute, 2011). The students caught in the pipeline include students of color, victims of abuse and neglect, disabled students in special education, and youth with mental health struggles (Mallett, 2016).

Some researchers found that the presence of police officers in schools does more harm than good for students due to the increase in the criminalization of minor school-based problems (Brown, 2006; Dahlberg, 2012). A first step into the pipeline can cause significant difficulties for many students. It has been established that contact with the juvenile justice system harms student education progress and school outcomes (Aizer & Doyle, 2013) with only 3 in 10 released youth engaged in school or work 12 months after re-entry (Zajac et al., 2013). A single suspension or expulsion from school doubles the risk for a student repeating a grade, which is a strong risk factor for students dropping out of school (Kang-Brown et al., 2013; Rich-Shae & Fox, 2014).

Suspensions or expulsions impact students in many ways, including missing instructional time, falling behind academically, forming negative views of school, or risking repeating a grade (Skiba, 2000). This often exacerbates the disadvantages faced by students of color and students with disabilities. Part of the reason for students falling behind is because education within incarceration facilities is often ineffective for youth (Mallett, 2016). The educational programs are less rigorous than traditional schools, not aligned with grade-level standards, and have no pre-release planning to address re-entry and enrollment barriers, or the loss of academic credit (E. Morgan et al., 2014). Statistics show that nearly 40% of youth offenders have been identified as needing special education services (Holman & Ziedenberg, 2014; Robers et al., 2014). In addition, research shows that more than one-third of incarcerated youth who receive special education services do not have their educational needs met (Musgrove & Yudin, 2014). While incarcerated, many of these adolescents do not receive services that help in mitigating the prior offending behavior; thus, they are not provided with rehabilitation programs for mental health, education, or trauma (Holman & Ziedenberg, 2014). Most incarceration facilities are not equipped to meet even the minimal rehabilitative needs of the youth placed within the institution, let alone those with serious comorbid mental health problems, trauma-related disabilities, and/or special education disabilities (Hernandez, 2012).

Twenty years ago, many leaders in the education system believed that zero tolerance policies would improve students' behavior, however, the opposite proved to be true. An overall increase in school suspensions has led to increased student misbehavior and thus has increased the likelihood of delayed graduation or school dropout (Justice Policy Institute, 2011). Harsh discipline policies directly increased school failure, isolated students socially, and restricted their future economic options (Kupchik & Monahan, 2006). One particular group of students affected by zero tolerance policies and the presence of police officers in schools are Black youth with disabilities. The over-policing and harsh disciplinary measures that Black youth face in schools is rooted in racist and ableist attitudes that have permeated our institutions. In order to dismantle the school to prison pipeline for Black disabled boys, and improve their educational outcomes, we need to address the barriers they face at school. One barrier to be addressed is the higher rate of exclusionary discipline for students of color with disabilities.

Racism, Ableism, and School Discipline

Race and ability are key factors that impact discipline disparities of Black students. The disproportionate representation of Black students in school discipline has received national attention. Data shows Black students in grades K-12 are 3.8 times more likely to receive one or more out-of-school suspensions than White students (Hines et al., 2021). Similar statistics of disproportionate disciplinary practices are seen for students with disabilities. Overall, students of color with disabilities are suspended at alarming rates nationally, nearly twice their proportion in the overall population (U.S. Department of Education Office for Civil Rights, 2018). More specifically, Black students with disabilities are overrepresented in out-of-school suspension, in-

school suspensions, and truancy referrals (U.S. Department of Education Office for Civil Rights, 2018). In addition, research also shows that Black students with disabilities are also substantially overrepresented in removals to alternate education, as well as in seclusion and restraint cases which further exacerbates the school-to-prison pipeline (Hines et al., 2021). Specific disability categories for Black students that have a higher likelihood of exclusionary practices include students with emotional behavioral disturbance (EBD), attention deficit hyperactivity disorder (ADHD) and learning disabilities (LD) (Sullivan et al., 2014). Exclusionary practices place students at a disadvantage academically due to lost instructional time. According to the U.S. Department of Education Office for Civil Rights (2018), Black students with disabilities lose approximately 77 more days of instruction compared to White students with disabilities.

Being removed from the classroom has detrimental academic, social, and emotional impacts that cause Black students with disabilities to fall further behind and disengage from the school community. The data and research are clear on this point: children of color with disabilities face high, disparate rates of exclusionary discipline. It must be understood that these discipline disparities seen among Black children with disabilities stem from factors within our education system. We need to invest in practices that break the cycle of carcerality of Black students with disabilities and examine how our education system responds when disabled children of color display behavioral challenges at school.

Behavior and Neurodiversity in Schools

One way to break the cycle of carcerality for Black disabled students is to clarify the relationship between how we perceive the behavior of Black children with disabilities and how we respond to them. Many Black students with disabilities such as attention deficit hyperactivity disorder (ADHD) or Autism (ASD) are deeply impacted by the environmental conditions of their

classroom due to their neurodivergence. For instance, the environment can set up a student for success, or possibly set them off due to sensory issues, distractions, rigid expectations, or unpredictability. An overstimulating environment with loud noises, bright lights, unclear expectations, or even a change in routine can cause dysregulation in neurodivergent students with ADHD or ASD. Unfortunately, when teachers and administrators do not consider the context of a student's behavior such as the classroom environment, they punish the students and remove them from the classroom as the source of the problem, rather than understand how environments impact neurodivergent students. One way to reduce misunderstandings regarding student behavior for disabled and neurodivergent students is to have a greater understanding of what neurodiversity is and how students think, respond, and behave differently. Understanding their needs and their behaviors would help to reduce misunderstandings and to increase support.

The politics of neurodiversity remain under-recognized in the United States (Baker et al., 2021) and presumptions of neurotypical superiority pervade society and its institutions. Ableism powerfully shapes our understanding of best practices (Baker et al., 2021). Practicing neurodiversity and avoiding neurotypical ethnocentrism both require insight into neurological differences (Baker et al., 2021). Neurodiversity is the diversity and variation among minds and is an intrinsic characteristic of human beings (Walker, 2021). Neurodiversity describes "the different ways that we all think, move, hear, see, understand, process information, and communicate with each other. We are all neurodiverse" (Ellis et al., 2023, p. 5). The diversity of human minds is a naturally occurring form of human diversity. Differences in how individuals learn, perceive, and interact with the world are cognitive differences that should be acknowledged, welcomed, and accepted (Hamilton & Petty, 2023). Knowledge of neurodiversity is key in creating appropriate classroom environments for diverse learners who process

information, experience spaces, and communicate differently. Understanding the neurodiversity of the students in the classroom impacts how a teacher designs lessons, how they design the classroom environment, and how they interpret student behaviors.

Challenges associated with neurodivergence can include attentional capacity, impulse control, memory and learning, functional skills, psychomotor skills, executive functions, social competence, emotion regulation, and academic achievement (Morie et al., 2019). Therefore, neurodiversity training should be a necessary component of teacher training programs and the topic of ongoing professional development for all school staff. The key is to remove barriers for disabled and neurodivergent learners and to address their unique learning needs to set them up for success rather than for failure.

Removing Barriers for Diverse Learners

Systemic barriers to learning occur when environments do not intentionally create opportunities for diverse learners to access and participate in learning (Griggs & Moore, 2023). Learning environments have traditionally marginalized diverse students who needed additional support due to physical, cognitive, or psychological differences. Educational systems that do not actively work to remove barriers in their environments are not truly inclusive or equitable. In classrooms, Universal Design for Learning (UDL) can be used to provide equal access to learning opportunities by providing flexibility for diverse learners. UDL is a framework that advocates for accessible curriculum and the removal of barriers to learning by accounting for physical and sociocultural human variability (Griggs & Moore, 2023). A UDL approach can be used to create more inclusive classrooms and address the learning needs of students with disabilities and neurodivergences by designing lessons, activities, and assessments with diversity in mind. Research also shows that anti-racist frameworks in education increase UDL's potential

"by explicitly recognizing Black and Brown learners in UDL's 'all learners' rhetoric" (Griggs & Moore, 2023, p. 15). Fritzgerald (2020) promotes Antiracism and UDL (A + UDL) as an approach to recognizing and removing barriers for students of color and constructing a safe and flexible environment for them. Future research should focus on creating classroom environments that are actively antiracist, anti-ableist and neurodiverse, by removing barriers unique to Black learners with disabilities and neurodivergences.

Intersectionality and the Neurodiversity Paradigm

Being aware of the intersections between race and disability and understanding how these diverse identities serve to marginalize youth, helps to facilitate new angles of vision on how and why Black disabled and neurodivergent boys are particularly vulnerable to the school-to-prison pipeline. While some scholars include disability and/or ability as an identity category of analysis within their intersectional frameworks, existing literature shows that disability has been largely under-explored compared to other identity categories (Strand, 2017). Critically engaging with disability as an identity category of analysis "has the potential to transform the conventional ways of understanding what intersectionality does as a theoretical method, methodology, paradigm, and/or analytical framework" (Strand, 2017, p. 4).

The social dynamics that manifest in regard to neurodiversity are similar to the social dynamics that manifest in regard to other forms of human diversity such as race or gender. In working with youth, "a baseline expectation of intersectionality serves to improve practice" (Baker et al., 2021, p. 179). Theories rooted in intersectionality provide conceptual frameworks for understanding how to better serve Black disabled and neurodivergent youth (Baker et al., 2021). There is a need for neurodiversity-and-intersectionality-informed strategies to improve

our education system and our juvenile justice system to make them more equitable and inclusive of multiple diversities (Baker et al., 2021).

The Intersection of Anti-Racism and Neurodiversity: What's Next?

There is an urgent need to address the root causes of racially inequitable practices in school discipline towards Black students with disabilities and address their systematic rejection when they do not behave in normative ways (Drame et al., 2020). One way to transform this rejection into acceptance is to normalize neurodiversity. To move towards a liberatory and inclusive education system, we need to turn the lens away from students and towards school policies and practices that work disciplinarily to enable or disable those students in turn. Hines et al. (2021) argue that when we see Black and disabled children through the lens of inferiority and deficit rather than seeing their true humanity and potential, then we cannot say that we actively support equity and justice for all students. Data has clearly shown that Black children with disabilities are unsupported, racialized, and misunderstood within the education system. The implication for educators cannot be understated. The data provided in this article should be a call to action for educators and parents to critically examine the ways that Black disabled and neurodivergent children are seen, heard, and treated in schools so that we can dismantle the school-to-prison pipeline. The system in its current state is preparing these children for the nation's prison systems rather than for the nation's opportunities (Hines et al., 2021).

We need then to continue to explore how special education serves to promote the status quo by privileging a socially constructed norm that pathologizes learning differences. We also need to move towards an education system that values diversity of all kinds, including neurodiversity, and which seeks to build a more equitable and liberatory education system for all students. In order to achieve such large aims, we must accomplish leverage on more specific

pressure points. As I have argued here, one such point of transformative demand is that we need to teach for the freedom of Black students with disabilities and neurodivergences rather than for their continued oppression and incarceration. The path to freedom can be opened only when we become aware of alternative possibilities (Greene, 1988). Since the school-to-prison pipeline begins in schools, to dismantle it requires drastic changes in the school environment by addressing and removing barriers for diverse learners.

One of the barriers that needs to be addressed for Black students with disabilities is school discipline. We need to address practices that harm Black students with disabilities and neurodivergences. Therefore, part of the solution to dismantling the school-to-prison pipeline for Black students with disabilities and neurodivergences involves limiting or eliminating the use of school resource officers. The rise of school resource officers has led to increased referrals of students to the juvenile justice system. These school resources officers are not behavior specialists. School behavior should be addressed by educators, counselors, school social workers, and behavior specialists. We must move away from zero-tolerance policies in schools and move towards restorative justice practices. Restorative justice is the opposite of the punitive measures found in zero-tolerance policies and can serve as an alternative to suspensions. When restorative justice is implemented, research shows there is a natural reduction in suspensions (McNeill et al., 2016). The main issue is the link between race, ability, and discipline. Addressing the discipline disparities of Black students with disabilities and neurodivergences requires more than the removal of school resources officers and zero tolerance policies. It requires addressing the racism and ableism that unfairly targets these vulnerable students and sets them up for failure.

A second barrier that needs to be examined and addressed is the school environment which includes the classroom, the curriculum, and teachers. Part of the solution involves

providing antiracist and neurodiversity training for teachers and school personnel. Presumptions of White superiority and neurotypical superiority pervade our society and our institutions, and this directly impacts our most vulnerable youth and contributes to the school-to-prison pipeline. For a more neuroinclusive and antiracist classroom environment, using an antiracist, inclusive, strengths-based, universal design for learning approach is needed to systematically challenge racism and ableism in the curriculum, classroom, and school environment. Creating the right supportive environment for diverse learners will decrease unwanted student behaviors that are typically caused by a student not having their learning needs met. Knowledge of neurodiversity is key in creating engaging inclusive and flexible learning environments for diverse learners who learn, think, feel, communicate, and contribute differently. The key is to design equitable, inclusive, flexible, and universal approaches to learning that remove barriers for Black disabled and neurodivergent youth by accommodating their learning needs and by using teaching approaches to address how they learn best.

Directions for Future Research

The question of what kind of education we should have is directly connected to the question of what kind of society we would like to live in (Greenstein, 2016). Ultimately, a society should be judged not by the success of its most prominent, but by how it treats its most disadvantaged and most vulnerable (Mallett, 2016). Directions for future research should address the following questions. How can community organizers, critical educators, parents, students, and activists collaborate on creating antiracist and neurodiverse liberation-based learning environments? How can we continue to critically engage the neurodiversity paradigm and intersectionality theory to generate new insights about special education and the school-to-prison pipeline in order to protect our most vulnerable students from incarceration? Eliminating the

links between education and incarceration is the debt we owe to children of color at the intersections of interlocking forms of oppression (Annamma, 2018). Now is the time for reimagining what an equitable, inclusive, just, and humanizing education system could look like, and to educate our most vulnerable students for freedom rather than for incarceration.

References

- Advancement Project. (2005). Education on lockdown; The schoolhouse to jailhouse track.
- Aizer, A., & Doyle, J. (2013). Juvenile incarceration, human capital and future crime: Evidence from randomly-assigned judges (NBER Working Paper 19102). National Bureau of Economic Research.
- American Civil Liberties Union. (2020). Cops and No Counselors. https://www.aclu.org/wp-content/uploads/legal-documents/030419-acluschooldisciplinereport.pdf
- Annamma, S. A. (2018). The pedagogy of pathologization: Dis/abled girls of color in the school-prison nexus. Routledge.
- Annie E. Casey Foundation. (2009). A roadmap for juvenile justice reform.
- Baker, D. L., Drapela, L. A., & Littlefield, W. (2021). Law and neurodiversity: Youth with autism and the juvenile justice systems in Canada and the United States. University of British Columbia Press.
- Blanchett, W. J. (2009). A retrospective examination of urban education: From Brown to the resegregation of African Americans in special education—It is time to "go for broke". *Urban Education*, 44(4), 370–388.
- Boroson, B. (2017). Inclusive education: Lessons from history. *Educational Leadership*, 74(7), 18–23.
- Brown, B. (2006). Understanding and assessing school police officers: A conceptual and methodological comment. *Journal of Criminal Justice*, *34*(6), 591–604.
- Carter, P. L., Fine, M., & Russell, S. (2014, March). *Discipline disparities overview*. Discipline disparities series: New Research. The Equity Project at Indiana University.
- Dahlberg, T. L. (2012). Arrested futures: The criminalization of school discipline in Massachusetts' three largest school districts. American Civil Liberties Union.
- Drame, E. R., Adams, T., Nolden, V. R., & Nardi, J. M. (2020). The resistance, persistence and resilience of Black families raising children with autism. Peter Lang.
- Elias, M. (2013). The school-to-prison pipeline: Policies and practices that favor incarceration over education do us all a grave injustice. *Teaching Tolerance*, 43, 39–40.
- Ellis, P., Kirby, A., & Osborne, A. (2023). Neurodiversity and education (1st ed.). Corwin.

- Fabelo, T., Thompson, M. D., Plotkin, M., Carmichael, D., Marchbanks, M. P., & Booth, E. A. (2011). *Breaking school's rules: A statewide study of how school discipline relates to students' success and juvenile justice involvement*. Council of State Governments Justice Center. https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=266653.
- Freire, P. (1972). Pedagogy of the oppressed. Penguin Books.
- Fritzgerald, A. (2020). Antiracism and universal design for learning. Cast, Inc.
- Greene, M. (1988). The dialectic of freedom. Teachers College Press.
- Greenstein, A. (2016). Radical inclusive education: Disability, teaching and struggles for liberation. Routledge.
- Griggs, N., & Moore, R. (2023). Removing systemic barriers for learners with diverse identities: Antiracism, universal design for learning, and Edpuzzle. *Journal of Special Education Technology*, 38(1), 15–22. https://doi.org/10.1177/01626434221143501
- Hamilton, L. G., & Petty, S. (2023). Compassionate pedagogy for neurodiversity in higher education: A conceptual analysis. *Frontiers in Psychology*, *14*, Article 1093290. https://doi.org/10.3389/fpsyg.2023.1093290
- Hernandez, D. (2012). *How third-grade skills and poverty influence high school graduation*. The Annie E. Casey Foundation.
- Hines, D. E., Boveda, M., & Lindo, E. J. (Eds.). (2021). *Racism by another name: Black students, overrepresentation, and the carceral state of special education*. Information Age Publishing.
- Hines, D. E. & Wilmot, J. M. (2018). From spirit-murdering to spirit-healing: Addressing anti-black aggressions and the inhumane discipline of Black children. *Multicultural Perspectives*, 20(2), 62–69.
- Holman, B., & Ziedenberg, J. (2014). The dangers of detention: The impact of incarcerating youth in detention and other secure facilities. Justice Policy Institute.
- hooks, b. (1994). Teaching to transgress: Education as the practice of freedom. Routledge.
- Justice Policy Institute. (2011). *Education under arrest: The case against police in schools*.
- Kang-Brown, J., Trone, J., Fratello, J., & Daftary-Kapur, T. (2013). *A generation later: What we've learned about zero tolerance in schools*. Vera Institute of Justice, Center on Youth Justice.

- Keyes, S. E. (2022). Addressing educational inequity of black students by demolishing the school-to-prison pipeline. *Multicultural Learning and Teaching*, *17*(2), 123–141. https://doi.org/10.1515/mlt-2022-0016
- Kupchik, A., & Monahan, T. (2006). The new American school: Preparation for post-industrial discipline. *British Journal of Sociology of Education*, 27, 617–632.
- Losen, D. J., & Gillespie, J. (2012). *Opportunities suspended: The disparate impact of disciplinary exclusion from school.* The Civil Rights Project. https://civilrightsproject.ucla.edu/resources/projects/center-for-civil-rights-remedies/school-to-prison-folder/federal-reports/upcoming-ccrr-research
- Lyon, G. R. (1998). Why reading is not a natural process. Educational Leadership, 55(6), 14–18.
- Mallett, C. A. (2016). The school-to-prison pipeline: A comprehensive assessment. Springer.
- Mar-Shall, T. (2021, March 29). The poverty to prison pipeline. *Law Journal for Social Justice*. https://lawjournalforsocialjustice.com/2021/03/29/the-poverty-to-prison-pipeline/
- McCauley, E. J. (2017). The cumulative probability of arrest by age 28 years in the United States by disability status, race/ethnicity, and gender. *American Journal of Public Health*, 107(12), 1977–1981.
- McNeill, K. F., Friedman, B. D., & Chavez, C. (2016). Keep them so you can teach them. In B. D. Friedman & J. Merrick (Eds.), *Public Health, Social Work and Health Inequities*. Nova Science.
- Miguel, C. & Gargano, J. (2017). Moving beyond retribution: Alternatives to punishment in a society dominated by the school-to-prison pipeline, *Humanities*, 6(2), Article 15. https://doi.org/10.3390/h6020015
- Miller, A. (2023). Against productivity & liberal pity: A case study in prison abolition & disability justice. *Disability Studies Quarterly*, 42(3-4). https://doi.org/10.18061/dsq.v42i3-4.9192
- Morgan, E., Salomon, N., Plotkin, M., & Cohen, R. (2014). The school discipline consensus report: Strategies from the field to keep students engaged in school and out of the juvenile justice system. The Council of State Governments Justice Center.
- Morgan, H. (2021). Restorative justice and the school-to-prison pipeline: A review of existing literature. *Education Sciences*, 11(4), Article 159. https://doi.org/10.3390/educsci11040159
- Morie, K. P., Jackson S., Potenza, M. N., Dritschel, B. (2019). Mood disorders in high-functioning autism: The importance of alexithymia and emotional regulation. *Journal of Autism and Developmental Disorders*, 49(7), 2935–2945.

- Musgrove, M., & Yudin, M. K. (2014). *An open letter to juvenile justice correctional facilities*. Office of Special Education and Rehabilitative Services, U.S. Department of Education.
- National Association for the Advancement of Colored People. (2006). *Arresting development: Addressing the school discipline crisis in Florida*. Florida State Conference NAACP, Advancement Project, and NAACP Legal Defense and Educational Fund.
- National Center for Education Statistics. (2019). Status trends in the education of racial and ethnic groups 2018. U.S. Department of Education.
- National Council on Disability. (2015). *Breaking the school-to-prison pipeline for students with disabilities*. https://www.ncd.gov/report/breaking-the-school-to-prison-pipeline-for-students-with-disabilities/
- Nowicki, J. M. (2018, March). *K-12 education: Discipline disparities for Black students, boys, and students with disabilities.* United States Government Accountability Office.
- Pottiger, M. (2022, October 13). Black students with disabilities deserve better school experiences. *Word in Black*. https://wordinblack.com/2022/10/black-students-disabilities-school-experiences/
- Rich-Shae, A. M., & Fox, J. A. (2014). Zero-tolerance policies. In G. Muschert, S. Henry, N. L. Bracy, & A. A. Pegero (Eds.), *Responding to school violence: Confronting the Columbine effect* (pp. 89–104). Lynne Rienner.
- Robers, S., Zhang, A., Morgan, R. E., & Musu-Gillette, L. (2014). *Indicators of school crime and safety, 2014*. National Center for Education Statistics, Institute of Education Services.
- Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A. M., & Shaver, D. (2011). *The post-high school outcomes of young adults with disabilities up to 6 years after high school: Key findings from the National Longitudinal Transition Study-2* (NLTS-2) (NCSER 2011-3004). Institute of Education Sciences, National Center for Special Education Research. https://ies.ed.gov/ncser/pubs/20113004/pdf/20113004.pdf
- Shippen, M. E., Houchins, D. E., Calhoon, M. B., Furlow, C. F., & Sartor, D. L. (2006). The effects of comprehensive school reform models in reading for urban middle school students with disabilities. *Remedial and Special Education*, 27(6), 322–328.
- Skiba, R. J. (2000). Zero tolerance, zero evidence: An analysis of school disciplinary practice (Policy Research Report #SRS2). Indiana Education Policy Center, Indiana University.
- Snydman, J. (2022). *Unlocking futures: Youth with learning disabilities and the juvenile justice system*. National Center for Learning Disabilities.

- Strand, L. R. (2017). Charting relations between intersectionality theory and the neurodiversity paradigm, *37*(2). https://doi.org/10.18061/dsq.v37i2.5374
- Sullivan, A. L., Van Norman, E. R., & Klingbeil, D. A. (2014). Exclusionary discipline of students with disabilities: Student and school characteristics predicting suspension. *Remedial and Special Education*, *35*(4), 199–210.
- Thompson, V. (2021, Feb. 10). Understanding the policing of black, disabled bodies. Center for American Progress. https://www.americanprogress.org/article/understanding-policing-black-disabled-bodies/
- Thurau, L., & Wald, J. (2010). Controlling partners: When law enforcement meets discipline in public schools. *New York Law School Law Review*, *54*, 977–1020.
- Townsend, B. L. (2000). The disproportionate discipline of African American learners: Reducing school suspensions and expulsions. *Exceptional Children*, 66(3), 381–391.
- U.S. Department of Education Office for Civil Rights. (2018). *School climate and safety*. https://www2.ed.gov/about/offices/list/ocr/docs/school-climate-and-safety.pdf
- Vernikoff, L. (2021). Disabling the school-to-prison pipeline: The relationship between special education and arrest. Lexington Books.
- Wald, J., & Losen, D. J. (2003). Defining and redefining the school-to-prison pipeline. *New Directions for Youth Development*, 99, 9–15.
- Walker, N. (2021). Neuroqueer heresies: Notes on the neurodiversity paradigm, autistic empowerment, and postnormal possibilities. Autonomous Press.
- Zajac, K., Sheidow, A. J., & Davis, M. (2013). *Transition age youth with mental health challenges in the juvenile justice system*. Technical Assistance Partnership for Child and Family Mental Health, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

CHAPTER VI: CONCLUSION

This theoretical multi-article dissertation is a broad examination of education, including trends in our school system, juvenile justice system, and cultural/media system to address the disproportionate targeted failure of students with disabilities from a neurodiversity standpoint. As I have learned in the education of my own neurodivergent child, the struggle for justice and emancipation in and through education requires that we learn to challenge the hegemonic discourse that pathologizes learning differences and marginalizes the neurodivergent for being educationally atypical. This dissertation emerged out of a desire to envision what an emancipatory critical pedagogy that centers neurodiversity looks like in practice in the hopes of practically imagining and creating alternative forms of neurodiverse learning communities. How we as a society understand disability and neurodiversity directly impacts how we teach disability in the media and in schools. The research in this dissertation shows how our education system is not currently the practice of freedom for all learners, but rather a reproductive practice that teaches forms of group-based privilege that results in the disproportionate outcome of school failure, oppression, and incarceration for students with disabilities.

One of the aims of this dissertation is to challenge schools' habitual pathologization of "deviant" student behavior as a complex systemic issue that has more to do with school policies, environment, culture, values, and ideology relating to the understanding of student differences and needs. Another aim is to reconceptualize disability and neurodivergence in education as a positive form of diversity and should be considered a type of cultural asset that demands full inclusion. My hope is to contribute to the articulation of a wider critical "neurodiversity standpoint" on key areas of education today through the application of insights from critical pedagogy, critical disability studies, and the field of neurodiversity.

The time has come to change the lens and the language through which we view neurodiversity and disability in teaching and learning spaces such as the classroom and the media. This entails countering the hegemonic discourse that pathologizes difference and works to oppress disabled and neurodivergent people, not only in education, but in society at large. Our society excludes many under the guise of natural ability and meritocracy, and constructs school failure as an individual pathology. Therefore, it is imperative to question "normative" assumptions and resist ways in which cultural and educational institutions create and perpetuate inequalities for neurodivergent and disabled students.

The classroom is both the physical and imaginary space for our pedagogy. It is where we should seek to remove systemic barriers for students with diverse identities, and work to create space for more inclusive ways of being in the world. The classroom is a space where we can create neuro-inclusive spaces, normalize neurodiversity, and institute alternative ways of thinking about human differences. It is possible to create neurodiversity affirming learning spaces. Such spaces require a paradigm shift from seeing disability and neurodivergence through the lens of the medical model of disability to seeing human differences through the lens of neurodiversity. Creating neurodiversity affirming spaces requires professional development, self-inquiry, critical reflection, and activism. In addition to understanding neurodiversity, it requires training in inclusive teaching practices such as Universal Design for Learning, culturally relevant pedagogy, and strengths-based approaches. How educators view disability and neurodiversity directly influences how they plan lessons and design curriculum, how they arrange classroom spaces, how they interpret student behaviors, and how they support students with diverse identities.

Creating liberatory learning spaces for neurodiverse students of all races must also include challenging both White supremacy and neurotypical supremacy. The role of the educator is to think critically about race and disability, and to challenge institutional and systemic oppression. Achieving liberatory learning spaces for all learners involves deconstructing the hegemony of White culture and the hegemony of neurotypicality in education and in society. In order for this to happen, a shift in paradigm becomes immediately necessary to include a broader understanding of forms of human diversity and to foster more positive ways of thinking about human differences within spaces of learning and teaching. This move includes shifting from a deficit-based view of disability and neurodivergence towards an asset-based approach that centers neurodiversity and values each student's strengths. It involves creating inclusive learning environments that give all students opportunities to thrive and embrace their own identities. To achieve this requires moving away from a standardized one size fits all educational design towards a more inclusive universal design for learning better suited to teach a neurodiverse student body.

Future research should consider how neurodiversity, inclusive education, strengths-based approaches, culturally relevant pedagogy, and Universal Design for Learning can work together to serve a neurodiverse student body and to create an emancipatory pedagogy for neurodivergent and disabled students regardless of race, culture, gender, or socioeconomic status. The ultimate goal is to keep expanding our notion of diversity and humanity to accommodate and support a wider range of human differences and to create educational communities that seek to understand inequity and strive to dismantle it.

Recent decolonial turns in critical pedagogy demand that researchers and activists working to further instantiate the neurodiversity paradigm begin dialogical engagement with what can be identified as a critical neurophilosophy for Indigenous wisdom.

In Critical Neurophilosophy and Indigenous Wisdom (2010) Four Arrows et al. begin a dialogue between Western neuropsychology and Indigenous wisdom. This book argues that without incorporating Indigenous wisdom into theories relating to brain research and scientific assumptions about human nature, humanity may never learn how to avoid the problem of disrupting the balance of life on Earth (Four Arrows, et al., 2010). They argue for the application of Indigenous wisdom into matters of human behavior, and for a continuation of a dialogue. Such a dialogue, with its radically different views, may help engage a neurophilosophy that will lead toward a healthier balance in human affairs (Four Arrows, et al., 2010). As Held (2019) has declared, the work for decolonization today means that "All Indigenous methodologies and epistemologies are forms of critical pedagogy" (p. 6). But all critical pedagogy has not yet committed to a paradigm of decoloniality, even as the neurodiversity paradigm requires to be better advanced and understood by critical and transformative educators. Therefore, future work that seeks to advance neurodiversity will likely blend elements of critique and emancipatory neurophilosophy along with robust concerns for the centrality of Indigenous perspectives upon the same.

To sum up, I argue for an emancipatory critical pedagogy that centers neurodiversity. Critical pedagogy is about system change and learning to name, resist, and transform the system in one's situation. It's about engaging the realities of ableist normed culture and medical models of disability and learning to resist and transform them into more inclusive, equitable, and democratic spaces for all. Do we see evidence of this in our society?

There is progress on some fronts in education, where some inclusive spaces are being created for neurodivergent students through the use of Universal Design for Learning, strengths-based learning, and culturally relevant pedagogy. There are also many scholars advocating for strengths-based IEPs for students with disabilities in inclusive classrooms to promote more personalized, contextualized, and holistic IEPs. In academic circles, we see examples of participatory action research exploring the well-being of autistic youth and adults, identifying effective practices for neurodivergent learners, and examining the use of technology in supporting neurodivergent learners, to name a few. Participatory action research helps to shape autism research through the participation and partnership with autistic individuals as co-creators of knowledge. There are also organizations such as the Autistic Girls Network that are campaigning for better recognition, diagnosis, and support of autistic girls. They run workshops, support groups, training for schools, sessions for parents, and mentoring for autistic youth. Their website also provides links to resources about reasonable adjustments that can be established in schools. Furthermore, there is evidence in the media of an increase in neurodiverse TV shows, films, and documentaries about autism and neurodiversity from the perspective of the neurodivergent. These are empowering and authentic representations of the lived experiences of autistic and neurodivergent people.

While this is movement in the right direction, is it enough? Are there spaces where disabled and neurodivergent individuals come together to focus on examining the problematic aspects and reasons for being of ableist normed culture and medical models of disability? Where are the spaces of resistance and nonformal curricula working to champion the centering and normalizing of neurodiversity in society?

I have found that social media plays a powerful role in connecting autistic and neurodivergent individuals, and where nonformal learning and activism takes place. In social media spaces, we see an increase in autistic and neurodivergent activists educating others about autism and neurodiversity through various social media platforms. These trends reveal the meaningful ways that nonformal curricula work to educate others about the lived experiences of autistic and neurodivergent individuals as they share their experiences and perspectives on social media. At any given time, you can find autistic writers, activists, educators, speakers, and professionals on YouTube, Instagram, Twitter, Facebook, and LinkedIn sharing information and insights about neurodiversity that challenge normed ableist views of neurodivergence in society. Youth activists are also on rise, and they use social media as one of their main devices to spread their message around the globe. As mentioned previously, Greta Thunberg is a primary example of a young autistic activist using social media to educate others and to inspire change.

Personal Reflections

In closing, while reflecting on my own positionality as an educator and a mother of a neurodivergent child, I see how I have grown through my studies and my research over the last few years. Before completing my M.A. in Inclusive Education at Concordia University, and before beginning my EdD at Antioch University, I was an uninformed educator and mother of a newly diagnosed autistic child. I was told that my child was "not a fit" in several school settings, both in private and public schools, and I wanted to know why this was the case. At the same time, I also witnessed many other neurodivergent students leave the private schools where I taught. Those students received similar messages of not being the right fit for the school. This led me to be curious about whether the issue was with my son, with neurodivergent students in general, or with the school system itself.

When I first became a teacher, I believed the dominant ideology that some students were distractions in the classroom because of their behavior, because they learned differently, and because they needed extra support. After all, who has time for this when you are trying to get through the curriculum and make sure all 30 students in your class are "learning"? As a new teacher, I was operating under the banking model of education, and following the ableist values and ideology of schools that were not created with neurodivergent students in mind. Before my studies, I felt powerless to address issues in schools related to how teachers and administrators viewed, taught, and treated neurodivergent students. Upon first glance, it does seem that it could be the fault of some neurodivergent students for not fitting into the classroom culture or for not following typical classroom behavior expectations or the typical pacing and methods of learning. However, now as a critical educator, I see how many neurodivergent students get excluded from certain spaces and how they are blamed for not following the expected norms of current classroom cultures and environments. The truth is, the problem does not lie in the student, but in the classroom and school environments, expectations, values, curriculum, and teaching approaches that are not designed with neurodiversity in mind.

Through my studies and my experience as an educator, my goal is to continue growing as an advocate for creating spaces with neuro-inclusivity in mind, and to challenge ableist neuro-normative standards that only serve to exclude neurodivergent individuals and neglect their rights and their needs. My studies in neurodiversity and critical pedagogy have taught me how to be an inclusive, critical educator, activist, and standpoint intellectual who is taking up the work of advancing the neurodiversity standpoint in education, in the media, and in society. I find myself only at the beginning of my neurodiversity activism and look forward to becoming a better advocate for my son and my students, as well as become a better ally to the autistic and

neurodivergent communities in the struggle for greater inclusion and equity. There is still so much work to be done, and with the collaboration of other neurodiversity educators, writers, speakers, artists, activists, students, parents, and other allies, together, we can work together to create and sustain more equitable, inclusive, and neurodiversity-affirming spaces where all can belong, thrive, and be valued.

References

- Four Arrows, F., Cajete, G., & Lee, J. (2010). *Critical neurophilosophy and indigenous wisdom*. BRILL.
- Held, M. B. E. (2019). Decolonizing research paradigms in the context of settler colonialism: An unsettling, mutual, and collaborative effort. *International Journal of Qualitative Methods*, *18*. https://doi.org/10.1177/1609406918821574

APPENDIX:

LIST OF JOURNAL SUBMISSIONS

Article "Resisting Hegemonic Representations of Disability and Neuro-Normativity in Culture and Media" submitted to Peter Lang Publishing (due out in May 2024)

Article "Neurodiversity in Education: From Deficit-Based Approaches to Strengths-Based Approaches" submitted to *Disability & Society* on December 10, 2023 (rejected) and submitted to *Inclusive Practices* on December 28, 2023.

Article "Dismantling the School-to-Prison Pipeline Through Neurodiversity and Anti-Racism" submitted to the *Northwest Journal of Teacher Education* on December 8, 2023. Article was accepted for publication.