

INTRODUCING NEURODIVERSITY-AFFIRMING PRACTICES INTO  
EARLY ELEMENTARY SCHOOL CLASSROOMS

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## ABSTRACT

Neurodiversity refers to every individual having a unique neurological makeup. It is a concept that acknowledges and respects the profile of every person as an individual. A neurodiversity-affirming practice builds on every individual's strengths and adjusts environments to support the development of those strengths. Applying this concept to schools could mean educating teachers, students, and their families to consider the profiles of all children in a classroom in order to create productive learning environments that empower every child to learn with purpose and confidence. The vast majority of classrooms today are not neurodiversity-affirming. In this paper, I will explain why that is, why it matters, and how we can get there.

The research in this paper surfaces key topics that should be considered in the development of neurodiversity-affirming classroom practices. I interviewed neurodivergent (ND) young adults about their experiences in elementary school, including their learning styles, diagnoses as appropriate (e.g., Attention Deficit/Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD), Sensory Processing Disorder, Learning Disorders), academic performance, and relationships with peers, teachers, and family. I also interviewed educators who have worked in elementary schools about their perspectives on neurodiversity, both as a concept for children to understand and its influence on school policies and classroom practices.

The thematic analysis that follows surfaces common themes and responses to closed-ended questions. The discussion then breaks down the theoretical concept of neurodiversity-affirming practices into actionable and digestible topic areas that can be used to develop programming for elementary school students. This project is meant to be a first step in a

collaborative process with neurodivergent teachers and young adults. Together we will develop a turn-key program or curriculum that could be brought into elementary schools—and led by neurodivergent adults—to introduce neurodiversity-affirming classroom practices to students, teachers, administrators, clinicians, and families in a way that makes long-term adoption of these practices accessible and practical.

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## INTRODUCTION

Neurodiversity refers to every individual having a unique neurological makeup. It is a concept that acknowledges and respects the profile of every person as an individual (Lerner et al., 2023). A neurodiversity-affirming practice builds on every individual's strengths and adjusts environments to support the development of those strengths. Applying this to schools could mean educating teachers, students, and their families to consider the profiles of all children in a classroom in order to create productive learning environments that empower every child to learn with purpose and confidence. The vast majority of classrooms today are not neurodiversity-affirming. In this paper, I will explain why that is, why it matters, and how we can get there. This project is meant to be a first step in a collaborative process with neurodivergent (ND) teachers and young adults to introduce neurodiversity-affirming practices into elementary schools.

In this introduction I will define key terms and concepts related to neurodiversity and the neurodiversity movement, explore what neurodiversity-affirming means in the context of the elementary school classroom, review educational policies and classroom practices in the United States as they relate to neurodivergent individuals, and summarize background conversations I have had with school administrators prior to beginning this research. I will then review my methodology, including high-level approach, recruitment strategy, interview materials and procedures, and my approach to analysis. The research will include interviews with:

- Neurodivergent (ND) young adults about their experiences in elementary school, including their learning styles, diagnoses when appropriate, academic performance, and relationships with peers, teachers and family.

- Educators who have worked in elementary schools about their perspectives on neurodiversity, both as a concept for children to understand and its influence on school policies and classroom practices.

The thematic analysis to follow will look at high level themes and evaluate similarities and differences between responses to key questions. The discussion section will then break down the concept of neurodiversity-affirming practices into actionable and digestible topic areas that can be used to bring neurodiversity-affirming practices into elementary school classrooms.

I will conclude the paper with an overview of the next steps in my process. I am currently translating the results of this research into a self-contained program that will give elementary schools an opportunity to “test out” neurodiversity-affirming practices in their classrooms. I will be working with neurodivergent individuals, including young adults and teachers, to create and refine the program and then build out a pilot study to test out its impact.

Before I begin, I would like to acknowledge my positionality. I am a neurotypical parent of a neurodivergent child who currently attends a public elementary school in the United States. My experience has likely influenced my interest in this subject and, while outside of the scope of this project, my desire to use these findings to bring change to schools.

## Literature Review

### *Neurodiversity and Neurodivergence*

In 1996, Tony Langdon posted in ‘Independent Living’ (InLv)—the first self-run and self-hosted autistic<sup>1</sup> community on the Internet—that the “neurological diversity of people. i.e. the atypical among a society provide the different perspectives needed to generate new ideas and advances, whether they be technological, cultural, artistic or otherwise” (Botha et al., 2024, p. 2). Later in this discussion thread, in response to another autistic advocate, Phil Schwarz, Langdon posted that, “a lot of this ‘curing’ needs to be applied to society at large rather than to autistic individuals” (Botha et al., 2024, p. 2).

This is one of the earliest public exchanges related to the topic of neurological diversity (Botha et al., 2024). Today, the neurological diversity of people is more commonly referred to as “neurodiversity,” a term first used by Australian sociologist Judy Singer in her 1998 thesis at the University of Technology in Sydney, Australia (Corker & French, 1999, p. 64; Singer, 1998). Langdon’s post, the following discussion thread, and others like it amongst autistic advocates at the time started a movement that has slowly changed the way individuals with neurological differences were considered in research and supported in therapeutic, school, and professional settings (Botha et al., 2024).

Through the neurodiversity movement, the terms “neurodivergent” and “neurodivergence”—credited to American autism rights activist Kassiane Asasumasu—came to refer to the opposite of neurotypical (NT). They describe “a brain outside of what most of society considers normal, healthy, stable, sane, or intelligent” (Thompson, 2020, para. 6). In other words, neurodivergent individuals have “differences in neurology” as compared to neurotypical

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<sup>1</sup> “Autistic” is a descriptive term for individuals who are clinically diagnosed with—or identify with the label of—Autism Spectrum Disorder (Tan, 2018).

individuals (Dallman et al., 2022). In line with the concepts developed within the wider disability rights movement, neurodivergence is considered to be a disability that appears in the context of an environment that is not accommodating to their needs (Leadbitter et al., 2021).

In clinical terms, many of these differences align with specific “disorders.” For example, a neurodivergent individual may receive a diagnosis—or self-identify with the label—of a neurodevelopmental disorder such as autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), developmental coordination disorder (dyspraxia) or specific learning disorders (e.g., dyslexia, dyscalculia), as listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) (American Psychiatric Association, 2022; Dallman et al., 2022). In all cases though, this disorder is a difference in how they experience and process what is occurring around them (Dallman et al., 2022). The opposite of neurotypical has also been described as “neuroatypical” or having “mental health variations” (Smagorinsky, 2014), which further expands the concept of neurodiversity to include all areas of neurological differences, including anxiety, depression, mood, or personality disorders.

### ***In the Elementary School Classroom***

The neurodiversity movement seeks inclusivity in the form of: (1) recognizing and accepting neurological differences as a form of diversity (2) acknowledging positive contributions of neurodivergent individuals, and (3) ending discrimination against those individuals in policies and practices (Leadbitter et al., 2021). So, what does inclusivity look like in the context of the elementary school classroom?

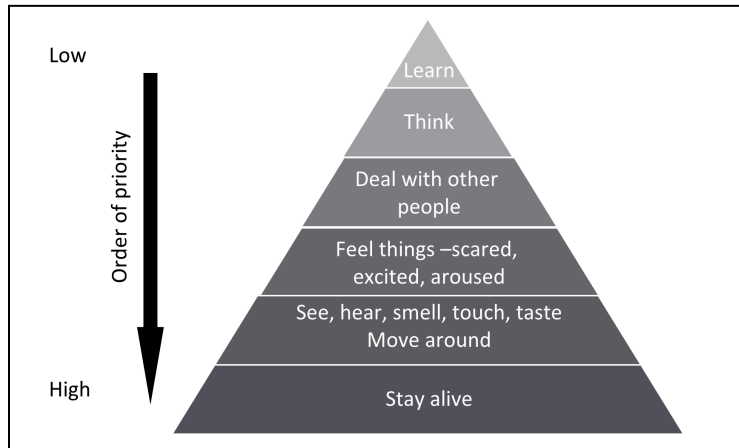
According to Jeff Smagorinky, a former research professor in the Department of Language & Literacy Education at the University of Georgia, and the parent of a neurodivergent child,

If fewer people are considered to be, and treated as, abnormal, deficient, and disordered, education will come closer to realizing its goals... accommodat[ing] a greater range of people in their quest to find fulfillment in their education and their lives. (Smagorinsky, 2014, pp. 22–23)

In order to naturally accommodate neurodivergent children side-by-side with neurotypical children, we can start by considering the ways in which neurological differences impact a child's classroom experience. Figure 1 below shows a theoretical framework that we can use to consider the hierarchy of the brain's priorities. This framework, in the style of Maslow's Hierarchy of Needs, is from Cathy Rogers and Michael S.C. Thomas, who published it in their book *Educational Neuroscience*<sup>2</sup> (2022). They suggest that learning can only be accessed once higher priority functions are possible. Those functions include (1) feeling both senses and then emotions, (2) interacting with others, and (3) thinking (see Figure 1. below) (Rogers & Thomas, 2022). Once the brain can function on those levels, it is then possible for a child to learn. The below sections use this theory as a framework to consider how classroom practices that may support neurotypical students can unknowingly turn differences into disabilities for neurodivergent students.

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<sup>2</sup> Educational neuroscience—as a scientific field—refers to the study of systems in the brain and connections between them that enable the many elements of learning (for example, short term and long term memory, focus, and rewards) (Rogers & Thomas, 2022).

**Figure 1***The Brain's Hierarchy of Priorities*

Reproduced from *Educational Neuroscience* (Rogers & Thomas, 2022, p. 10)

**Senses and Emotions**

Sensory processing is the way in which we absorb and apply the information our brains receive from our environment and our bodies (Kranowitz & Miller, 2006, p. 55). We have five external senses (visual, auditory, olfactory, gustatory, and tactile), an internal vestibular sense that helps with balance and movement, and an internal proprioceptive sense that makes us aware of where our body is in space.

Differences in sensory processing compared to neurotypical peers can make a learning environment (e.g., teaching strategies, peer interactions, physical layout and setup, or sensory input such as noise or smells) feel overwhelming, not stimulating enough, or otherwise hinder their learning. Differences in internal senses may also relate to a child's difficulty with coordination in writing or their movement around the classroom (Kranowitz & Miller, 2006).

Separately, early childhood is a time when children are learning to process and manage their emotions effectively—to notice and understand them and to know what to do and say when

feelings overwhelm them (Shanker & Barker, 2016, p. 75). Processing emotions involves interoception, which is how a person processes their internal body states, including physical information (e.g., heart rate, blood pressure and hunger or thirst) and mental state (e.g., their mood, nervousness and state of arousal (Kranowitz & Miller, 2006). A child with interoception differences may naturally be less aware of their emotions and have trouble identifying, naming, expressing and controlling them (Mahler et al., 2022). So, for a child with interoception differences, the classroom environment, activities, and interactions—along with changes within any of them—can bring up strong emotions and a seemingly small stressor (e.g., loud music) in a classroom environment could result in a big reaction (Kranowitz & Miller, 2006).

### **Interacting with Others**

Mind-reading—also referred to as theory of mind or mentalizing—is the ability of a person to take the perspective of others (Birch et al., 2017). It refers to an awareness and understanding of others' intentions, desires, knowledge, and beliefs. All people can mind-read—or reason about others' minds—, however there is variation in the frequency and accuracy of mind reading (Birch et al., 2017). In elementary school a child must continuously mind-read (Shanker & Barker, 2016, p. 174) as they collaborate and play with others in the classroom, on the playground, during lunch, and between classes. This can be challenging if their ability to mentalize is less developed than their peers.

Neuroception—another brain function—monitors a person's sense of safety or danger. When a child feels safe, they can socially explore and grow (Shanker & Barker, 2016, p. 173). A child with neuroception differences may feel less safe than others, which further delays their development of theory of mind.

A further challenge for children with a less developed theory of mind is that a bi-directional relationship exists between mental state understanding and peer rejection, which creates a cycle of misunderstanding and increasing levels of social rejection (Birch et al., 2017). An example would be that a child with a less developed theory of mind may not be regarded as highly as others by peers and thus involved in bullying behavior, either as the bully or the victim.

### **Thinking**

The mental processes that take place in the brain (Grant, 2017, p. 5) are referred to as neurocognitive functioning. Executive functioning is a subgroup of these processes, which includes inhibition and working memory. Inhibition or inhibitory control allows a child to control their attention, behavior, thoughts, and/or emotions in spite of temptation or predisposition to do otherwise. In a classroom setting, inhibition helps a child direct themselves to do what is needed or appropriate in a given situation (Diamond, 2013, p. 2).

Working memory, which is critical to reasoning, allows us to hold in mind something that is no longer in front of us or connect what has happened previously to what will happen in the future (Diamond, 2013). In a classroom, differences in working memory can impact how a child sifts through streams of information, decides what to pay attention to or focus on, and their ability to prioritize information and manage time (Grant, 2017). A child with differences in inhibition or working memory may find basic classroom tasks, such as paying attention to the teacher or focusing on individual work more difficult than a neurotypical child.

Another measure of neurocognitive functioning is processing speed, which refers to how fast a person transmits information from one part of their brain to another (e.g., hand-eye coordination) and how quickly they can scan and process information. In a classroom setting,

differences in processing speed can impact the time it takes to formulate an answer, scan text, or put ideas into writing.

Other areas of neurocognitive functioning are verbal reasoning—understanding and analyzing words and letters—and visual reasoning—understanding and analyzing visual information and making decisions without words. A child with dyslexia or dysgraphia may have differences in these areas. A child with differences in verbal or visual reasoning may find learning to read and write difficult when taught using strategies for neurotypical learners.

Through a different set of mental processes, Dyscalculia impacts a child’s ability to understand numbers, such as the concept of more than or less than (Grant, 2017). A child with differences in understanding number concepts may find it takes longer for them to learn math through strategies developed for neurotypical students.

In addition to creating barriers to learning, neurocognitive functioning differences have been found to relate to embarrassment or feelings of shame from peers, exhaustion, stress and anxiety later in childhood (Wilmot et al., 2023). In addition, it has been found that when a young person is not aware of their differences it can result in underachievement and internal suffering (Grant, 2017, p. 3).

### ***Policies, Practices, and Risks for Students in Classrooms Today***

With these differences in mind, we can then discuss another goal of the neurodiversity movement: to end discrimination against neurodivergent individuals in policies and practices (Leadbitter et al., 2021). In the context of the elementary schools this would translate to ensuring that educational policies and classroom practices do not—unknowingly or not—turn differences into disabilities. For the sake of this research, we will consider the case of public education in the United States (US). The classroom and teaching practices of today emerged from the field of

behaviorism in the 1930's (O'Mahony, 2021). "The rule, or measuring rod, which the behaviorist puts in front of him always is: Can I describe this bit of behavior I see in terms of 'stimulus and response?'" (Watson, 1930). In school, the "measuring rod" includes the learning and behavior expectations developed for a neurotypical child.

Policies have thus been put in place to help individual children successfully respond to our educational practices. In the US we have the Individuals with Disabilities Education Act (IDEA)<sup>3</sup>, "a policy that makes available a free appropriate public education (FAPE) to eligible children with disabilities throughout the nation and ensures special education and related services to those children" (Office of Special Education and Rehabilitative Services (OSERS), U.S. Department of Education, n.d.). The act also specifies that education should take place in the Least Restrictive Environment (LRE), meaning that children with disabilities as defined by the law must be educated with children who are not disabled unless a child's needs are not able to be met by services and accommodations in that classroom. At that point a special classroom or environment should be provided for that child (Office of Special Education and Rehabilitative Services, U.S. Department of Education, n.d.-b). In other words, classrooms must meet the needs of all children, including those with disabilities as defined by law (Office of Special Education and Rehabilitative Services, U.S. Department of Education, n.d.-a).

The IDEA act allows for a child to be evaluated and then, if found necessary, to receive services and accommodations in the form of an (Individualized Education Plans) IEP or 504 Plan (Office of Special Education and Rehabilitative Services, U.S. Department of Education, n.d.-c). Accommodations and services may include supports such as occupational therapy, physical therapy, Speech and Language Therapy. In the US, 16.65% of children aged 3 to 17 have

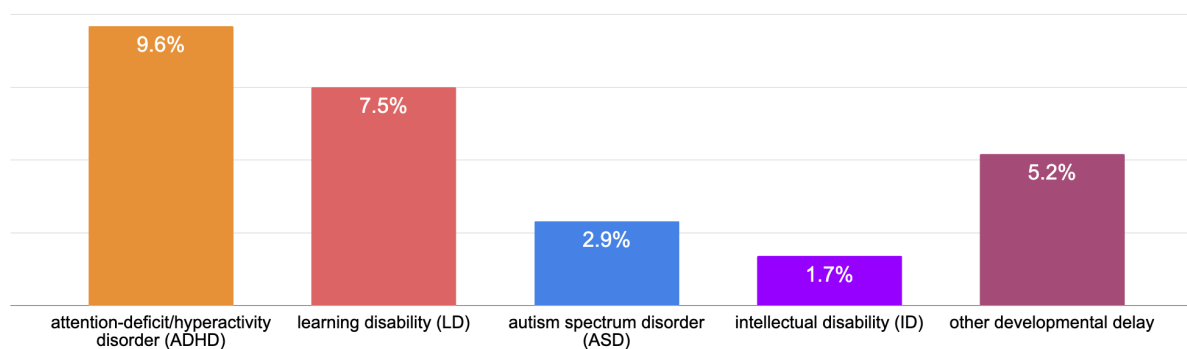
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<sup>3</sup> The IDEA was originally enacted in 1975 under the name Education for All Handicapped Children Act (EHA). The name changed to IDEA in 1990, was reauthorized in 2004. New or revised regulations have been made in the years since (Office of Special Education and Rehabilitative Services, U.S. Department of Education, 2024).

developmental disabilities, as measured from 2018–2021. The prevalence of specific disabilities is shown in figure 2 below (Li et al., 2023).

## Figure 2

*U.S. Prevalence of Developmental Differences, age 3-17 years, 2018-2021*



(Li et al., 2023)

While 20% of individuals in the US have learning and attention challenges, only 8.5% of students in schools are classified to have these challenges and therefore receive related accommodation and/or services (Learning Disabilities Association of America, n.d., para. 10). That leaves 11.75%, or 6.65 million students without support. This discrepancy between need and access could be related to many factors. Parents need information about when and where to access services, and how to navigate the complex system that ultimately provides that access. There can also be limited availability of services with interim supports not available in a timely manner. Clinicians may also dismiss parent concerns, potentially refusing to refer a child for interventions and services (Hansen et al., 2021; Woodgate et al., 2023). There is also a general lack of knowledge related to and stigma associated with mental health (Hansen et al., 2021).

There are other challenges as well that come along with the current policies and practices for supporting neurodivergent children in the US. For example, while a diagnosis can be required

for a child to receive services, it has been found that a diagnosis can also be “disempowering” to teachers. A diagnosis can signal that clinical expertise is needed to help a child, which could take away a teacher’s confidence in helping a child using their own natural capabilities and experience (Astle et al., 2022, p. 411). There are also questions about the role that neurotypical learning and behavioral goals should play for neurodivergent children. For example, the use of Applied Behavioral Analysis (ABA)—a common approach used with autistic individuals to elicit behaviors through systems of rewards and punishments is considered to be not only a form of ableism<sup>4</sup>, but also abusive (Arthur et al., 2023).

Finally, we must consider the perspective of children and adolescents in today’s environment, which is shaped in large part by the policies and practices of our educational system. Studies of children as young as 9 years old have explored the topics of self-esteem, self-worth, and mental health. One found that children with learning disabilities (LD) were at higher risk for anxiety and depression than their peers without LD’s and emphasized that social-emotional challenges need to be addressed proactively because symptoms are often internalized and not visible in a child’s behavior (Gallegos et al., 2012). Separately, a qualitative study of children with dyslexia found a relationship between poor “person-environment fit” (PEF) (i.e., a child who is placed in a classroom that is not able to meet their needs (Mandy, 2019)), and lower self-esteem (Wilmot et al., 2023). The study findings suggest that teachers should facilitate peer support, emotional regulation breaks, and activities that allow all children to “showcase their strengths” in order to protect students’ self-esteem (Wilmot et al., 2023, p. 51).

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<sup>4</sup> Ableism is discrimination against individuals whose abilities diverge from what is considered to be normal.

### *Imagining the Neurodiversity-Affirming Classroom*

Lev Vygotsky, a psychologist well known for his cultural–historical theories of human development, explored the connection between environment, diagnosis and stigma in childhood. He saw that “primary disability”—a diagnosed condition—only appears when in the presence of a “secondary disability,” which is brought on by social stigma (Smagorinsky, 2014, p. 19). We just looked at two examples above of how stigmas have been found to relate to secondary disabilities of mental health and self-esteem. The solution to removing these two levels of disability, he theorized, “was not to fix the child, but to change the context of the child’s development” (Smagorinsky, 2014, p. 19). Vygotsky’s work holds the answer to our question: “how can we end discrimination in classroom policies and practices in order to support all children more effectively?” We must change the context.

In today’s terms, this change of context would be to adapt teaching strategies and environments to be “neurodiversity-affirming” (Dundon, 2024). A neurodiversity-affirming classroom would be one that considers how social and environmental changes could be made to level the playing field for all children. There is research that suggests how we can begin to do this, such as staff training (Astle et al., 2022, p. 411) and consideration of adjustments to physical environment, such as interior design, greenspace, music, spatial density, and environmental noise (Baird et al., 2023). Teachers can also make small changes to their teaching strategies to make them more neurodiversity-affirming. For example, they could routinely collect “strength-inventories” with information about the positive attributes of every student (González, 2018, p. 164).

Through this research, I will seek to build on these ideas by interviewing educators and neurodivergent young adults about their experiences. An analysis of these interviews will be

used to consider how we can begin to conceptualize and introduce neurodiversity-affirming practices into classrooms.

### ***Preliminary Conversations with Educators***

Before beginning my research, I spoke with school administrators and program directors about neurodiversity. This exploratory process included conversations with: (1) a senior administrator for special education and student services of a large suburban public school district in downstate New York, (2 and 3) a head of lower school and separately, the lead psychologist, at a private school for gifted children in southern California (4) a program lead for a domestic abuse prevention program run through a public school district in Southern Connecticut. In these conversations I asked about how neurodiversity is considered within their schools. I also asked about the reasoning or process behind their school's approach and what they would like to see in the future (source: private conversations, January 31-February 1, 2024).

Some of the initiatives they mentioned were using the responsive classroom<sup>5</sup> model for social-emotional development (Cline et al., 2023), teaching executive functioning skills, such as studying and organization, and educating students about healthy interpersonal relationships. The administrators also talked about individual teachers integrating neurodiversity topics within their curriculums. For instance, they might study well-known neurodivergent leaders, learn about brain science, or include books related to neurodiversity in their classroom libraries (Thomas & MacInnes, 2020). One school hosts affinity groups, among them one for twice exceptional<sup>6</sup>

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<sup>5</sup> According to the program developers, *Responsive Classroom* is an evidence-based approach to teaching and discipline that focuses on engaging academics, positive community, effective management, and developmental awareness” (*About Responsive Classroom*, n.d.).

<sup>6</sup> Twice-exceptional, or 2e, individuals “have one or more high ability or talent domain along with coexisting disability (e.g., ADHD, ASD, SLD). (Foley-Nicpon & Teriba, 2022, p. 213)

students run by a neurodivergent staff member. The administrators also mentioned presentations for faculty and parents related to children with learning differences. Finally, administrators discussed plans for assessing mental health programming (e.g., the District Comprehensive Approach from the JED foundation<sup>7</sup>) and surveying community members on feelings of belonging.

The school administrators expressed concerns with introducing the topic into their schools. These included working with parents to ensure they were comfortable with how the topic is addressed. In particular, the administrators at the school for gifted children spoke about the stigma attached to neurodevelopmental differences and sensitivity of parents wanting their families to fit in in the school community. Another administrator spoke about the importance of addressing the topic in a developmentally appropriate way as children grow. The senior public school district administrator wondered aloud about how the topic could be addressed given the extent to which children develop socially, academically, emotionally, often in unpredictable ways, over time.

Overall though, the school psychologist saw more risk in not talking about neurodiversity than in talking about it. They described that when it comes to the topic of neurodiversity, they believe that “where there is a lack of information, misinformation is the squatter” (source: private conversation, February 1, 2024). The head of lower school at the same school spoke positively about their school’s efforts and looked forward to aligning educators across the school, so that related topics were addressed in a consistent manner. For the district administrator, school

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<sup>7</sup> “The District Comprehensive Approach (DCA) is a transformational program from [the] JED [foundation] and AASA, The School Superintendents Association, that guides districts to enhance systems of support for the emotional well-being of pre-K–12 students. Based on JED’s proven approach to preventing suicide and improving student outcomes, the DCA is an evidence-based framework that combines expert support, best practices, and data-driven guidance to protect mental health and prevent suicide for millions of students.” (*District Comprehensive Approach*, n.d.)

libraries were an area with potential for growth. They described a need to have more books that are “mirrors,” not just “windows”<sup>8</sup> (source: private conversation, February 1, 2024). In other words the windows—looking at the lives of others—are important, but mirrors are what “tell students that they are seen” (Jackson, n.d., p. 56). Together these conversations surfaced that these administrators are interested in bringing neurodiversity-affirming practices into their schools, however they were not yet able to articulate how they would do that.

With these conversations in mind alongside my reading on the subject, it became apparent that (1) we are far from large scale change to our educational system that would increase the quantity and quality of support for neurodivergent children, however (2) there is an appetite and curiosity to start exploring what it could look like for schools to integrate neurodiversity-affirming practices into their teaching strategies and classroom environments. I have thus developed a research project that would result in the design of a program that helps schools take that first exploratory step.

## METHODOLOGY

### Research Approach

I collected and analyzed interview data from two groups of individuals: (1) Neurodivergent Young Adults and (2) Elementary School Educators. I asked young adults about their personal journeys, including their understanding of neurodiversity, their experiences and support systems growing up, and the classroom experience they would want for neurodivergent students today. I also spoke with teachers about their understanding of neurodiversity, the

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<sup>8</sup> This phrase was introduced originally by Emily Style in 1988 and expanded upon by Rudine Sims Bishop in 1990 as a comment on racial diversity in literature for children (Jackson, n.d.).

environment they seek to create for students, and the practices they have in place today related to diversity and learning differences. I used the interview data to surface five key themes, complete 3 other question-specific thematic analyses, and develop short young adult case studies.

### **Sample Characteristics**

Ultimately I interviewed six neurodivergent young adults, ages 18-25 and six educators who had worked in elementary schools. Four of the young adults interviews took place on Zoom and two interviews were taken asynchronously through an online form. Participants included female, transgender, and agender individuals. Young adults were all currently attending undergraduate or graduate programs at universities in the New York Metropolitan area. One young adult was a graduate student, two were college seniors, two were sophomores and one was a freshman.

Students had diagnoses or self-diagnoses that included ASD, ADHD, Bipolar Disorder, SLD, Depersonalization-derealization disorder (DDD) and post-traumatic stress disorder (PTSD). Most participants reported having multiple diagnoses, which they received at different points in time, not only during elementary school. Participants attended public, magnet, Montessori, and dual-language elementary schools in 6 different states in the northeast and southern United States.

I also interviewed six educators. Four interviews took place on Zoom, one in person, and one asynchronously through an online form. All of the educators interviewed were female and had worked in a classroom with K-6 curriculums at some points in their careers. One educator was a school psychologist and the remaining five were classroom teachers. Three currently work with elementary school students, two are currently working one-on-one with students, and one

worked in a classroom over 10 years ago. All six of them had experience working with neurodivergent and neurotypical children. Educators had taught or worked in public and/or private elementary schools in New York City and Long Island, including one school for twice exceptional (2E) students. Two educators—one teacher and the school psychologist—were from the same school.

Results were written using pseudonyms for young adults and numbers for educators in order to link interview data with their contribution to thematic analyses and case studies. The school psychologist is referred to separately from the other educator participants who were all current or former teachers.

## **Recruitment**

A brief overview of the study was distributed by email to personal contacts. A digital flier was posted on social media, including Instagram, and a physical flier was posted and distributed by professors at a private university in New York. Initial emails directed recipients to a program website where there were links for neurodivergent young adults and separately educators to complete a 15-minute survey. Survey respondents could opt-in to participate in a 40-minute interview on the topic of teaching about neurodiversity in schools by Zoom, phone call, in person, or written asynchronously through a Google form. Young adults were offered a \$20 gift card in exchange for completing the interview portion of the study. After limited response from educators to the online survey (3 responses) an additional 3 participants volunteered to participate in an interview and submitted an informed consent form by email. They did not fill out the survey.

## **Materials and Procedures**

Survey data was collected for the purpose of identifying potential interview participants and was later connected anonymously to interview data. The educator survey asked questions about classroom experience, familiarity with the concept of neurodiversity, and work with neurodivergent students. The young adult survey asked questions about current level of education, type of elementary school they attended, understanding of and interest in concepts related to neurodiversity, and personal connection to neurodivergence. Both surveys started with an introduction to the research and informed consent form and concluded by asking for interest in interview participation and demographic information.

Unstructured interview guides were used to collect qualitative data, which was then analyzed and findings were used to develop a program structure and content. The educator interview guide (see Table 1.1 below) prompted discussion of current classroom practices and support of neurodivergent students. The young adults interview guide (see Table 1.2 below) prompted discussion of the topics of neurodiversity and neurodivergence and personal experiences and relationships as neurodivergent children. Each interview guide also included questions that solicited feedback on a preliminary program concept description.

Each interview started with the explanation that,

I am a graduate student in the Child Development Program at Sarah Lawrence College.

For my thesis, I am developing an elementary school program that introduces the topic of Neurodiversity to Kindergarten through Second Grade (K-2) students in a developmentally appropriate and accessible way.

**Table 1.1***Educator Interview Guide*


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 Interview Section Topic and Questions
 

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## Confirming Participant Profile:

To make sure I have captured your profile correctly, I see from your survey that you are currently a [teacher, administrator, clinician] at a [private/public/etc.] elementary school located in [city, state].

1. Is that correct? Anything you would add?
2. This call is scheduled for 40 minutes, does that time frame work for you?

## Topic 1:

Before we discuss the topic of my work, I would like to ask some more general questions about your experience as an educator.

3. Beyond academics, what are the top three things you hope your students leave your classroom with at the end of the year? This could be from school-level, grade-level, or personal goals.
4. How do you encourage collaboration and working together in your classroom?
5. How do you discuss difficult interpersonal topics and/or address conflicts, such as bullying, with students?
6. How do you speak with children about diversity, equity and inclusion generally?

## Topic 2:

Next I would like to ask specifically about the topic I am studying.

7. Are you familiar with “Neurodiversity” and/or “neurodivergent” as terms, concepts, or otherwise? If so, what is your understanding?

8. These are the definitions from the Child Mind Institute:
- a. Neurodiversity refers to neurodevelopmental “differences in the way people’s brains work... [there are] a wide range of ways that people perceive and respond to the world, and these differences should be embraced.”
  - b. Neurodivergent children “process information differently from their peers, which can mean language, sensory stimuli, emotions, and how they adapt to change.”

Do these terms have a specific meaning for you in the context of your work with children? (this could be an anecdote, a relationship, a time of year, etc.)

9. Have you ever presented or discussed topics related to these concepts with children (one-on-one or in groups)? This could be through books, academic work, class discussion or more casual conversations
10. Do you have sensory-related supports in your classroom (e.g., fidget toys, special seating, etc.)? If so, how and when are they used by or presented to children (name, purpose, when they are used).
11. How do you handle learning differences in your classroom? This could be in how you structure your classroom, activities or curriculum or support your access from outside your classroom (like the school or parents)?
12. Do you feel that peer-to-peer differences are noticed by children in your classroom? If so, how, why, and when? Does anything positive or negative happen as a result of differences being acknowledged?

### Topic 3: Program Concept Feedback

The program I am developing will discuss the topic of neurodiversity with both neurotypical and neurodivergent students in grades K-2. Program content may address the impact of Neurodiversity on friendships, emotions, sensory experiences, attention, study habits and subject matter learning, such as math or literacy. Content will be shared

with children through collaborative activities, books and stories, writing prompts, and classroom conversations or games.

An example of how Neurodiversity might be discussed with children is: “Everything you do and why you do it is because of your brain. Brains from the outside can all look the same. But there are certain parts of the brain that aren’t so visible, and those little pieces are what make us all different” (Petix, 2023, pp. 12–14).

13. Is this similar to any topics you currently talk about with your students? Which ones and how so?
14. In what ways do you think this may benefit children with established learning, social, sensory, or other behavioral differences? What about other children in your classroom?
15. What concerns do you have with the program concept or how children might respond to it?
16. Are there any topics you would encourage the program to cover?

#### Closing

To close out our conversation:

17. Please share any additional comments or thoughts.
-

**Table 1.2***Young adult Interview Guide*


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 Interview Section Topic and Questions
 

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## Confirming Participant Profile:

To make sure I have captured your profile correctly, I see from your survey that you are currently in [12th grade, freshman year of college, graduate school, etc.] and are/have [ADHD, autistic, dyslexia, etc.]. You grew up in [California, Florida, New York, etc.] and went to a [private, public, etc.] school for elementary school.

1. Is that correct? Anything you would add?

## Topic 1: What is Neurodiversity?

I will tell you more about the program I am developing later in our conversation, but first I would like to hear about what Neurodiversity and Neurodivergence means to you.

2. How would you define Neurodiversity? Neurodivergent?
3. How and at what age did you come to learn about what these are?

## Topic 2: Personal Story

I have some questions for you about your personal connection to these terms and your “timeline” of learning about your personal “difference” from others.

4. When and how did you learn about your diagnosis? Looking back, was that the right time and way for you?
5. Did you have a sense of being “different” than others before learning of your diagnosis? If so, when and how did you begin noticing that?
6. How was your diagnosis described to you and how did you feel when you first learned about it?

### Topic 3: Community

This program will be developed for neurotypical and neurodivergent students. Teachers and parents will also be exposed to the content, either directly through program materials or by speaking with participating students.

7. What role did your parents and teachers play for you as a young neurodivergent student?
8. How do you feel that your neurodivergence impacted your learning, friendships, and overall school experience? [will pause for an answer to each]
9. If you could go back in time, what would you tell your younger self about who they are or will become?

### Topic 3: Program Reactions

The program I am developing will discuss the topic of neurodiversity with both neurotypical and neurodivergent students in grades K-2. Program content may address the impact of Neurodiversity on friendships, emotions, sensory experiences, attention, study habits and subject matter learning, such as math or literacy. Content will be shared with children through collaborative activities, books and stories, writing prompts, and classroom conversations or games.

An example of how Neurodiversity might be discussed with children is: “Everything you do and why you do it is because of your brain. Brains from the outside can all look the same. But there are certain parts of the brain that aren’t so visible, and those little pieces are what make us all different” (Petix, 2023).

10. What is your reaction to this program concept?
11. Is there anything about this idea that makes you uncomfortable?
12. What are 3 topics or concepts you would encourage the program to cover?

### Closing

13. Please share any additional comments or thoughts.
-

## **Data Analysis and Discussion**

All interviews on Zoom were recorded and transcribed through the Zoom platform. The interview that took place in person was recorded and transcribed using the Otter Pilot platform and iPhone app. Interview transcriptions were cleaned to remove filler words, such as “like” and “um” when they did not serve a specific purpose within discussion. Data was analyzed in two ways. The first was surfacing the high level themes across interviews. The second was grouping and comparing responses to three direct prompts. One prompt was only asked to educators. The other two prompts were given to both educators and young adults.

The findings from the two areas of analyses were then woven together to understand the relationship between them. Narratives and perspectives from young adult and educator interviews were also compared and contrasted in order to identify the cross sections between them. Ultimately I surfaced key topics that should be considered in the development of neurodiversity-affirming classroom practices.

## **Research Limitations**

There were some limitations to this research. All young adult participants were female, transgender male, or agender. There were no cisgender males or transgender females that participated within the study. This is notable because current research points to underdiagnosis of young women with neurodevelopmental disorders and in particular ASD. Misdiagnosis or underdiagnosis means that neurodivergent females may have a uniquely challenging experience in early schooling due to gender bias in diagnostic criteria and greater ability to mask compared to male peers, among other factors (Zakai-Mashiach, 2023).

The current prevalence of social media content related to neurodivergence is also important to acknowledge as young adult participants, and potentially educators as well, may have been exposed to similar social media content related to the experience of neurodivergent individuals. Interview participants were all part of Gen Z, a generation that grew up with social media and has entered college with higher levels of self-reported disabilities (Haidt, 2024, p. 71). A hive mind effect could impact topics discussed and themes surfaced within interviews.

In developing program content from interview data, it is also important to note that the young adults interviewed were in elementary school ten or more years ago. This brings into question whether their experiences remain relevant today or if schools have changed in that time so that neurodivergent elementary school students today may be having a very different experience than these young adults did a decade ago. For example, social emotional learning and mental health are prioritized more today than in decades past with programs like the Responsive Classroom<sup>9</sup> (Cline et al., 2023).

An important question may also have been missing from interview discussions. Students were not asked specifically whether they received individual support in the classroom. Other questions allowed space for young adults to address this, however there was not a prompt that asked about this directly.

Finally, for educator participants, only teachers and one school psychologist self-selected to participate. None of the educator participants were school administrators. Five educators currently work with neurodivergent children – either at a school or in private practice. The educator who has been out of the classroom for ten years, also worked most recently in the classroom with children with mental health challenges and/or neurodevelopmental differences.

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<sup>9</sup> According to the program developers, *Responsive Classroom* is an evidence-based approach to teaching and discipline that focuses on engaging academics, positive community, effective management, and developmental awareness” (*About Responsive Classroom*, n.d.).

Only one teacher currently works in a general education setting. All teachers had experience at public schools, but most recently worked in private schools.

## **RESULTS**

The data were analyzed in four ways. The first was a thematic analysis, which surfaced high level themes across interviews with a focus on young adult interview data. The second analysis considered data related to adults' roles in working with early elementary school students, as reported by educators as well as young adults. The third analysis compared responses to short answer questions related to classroom priorities, definitions of neurodiversity and suggestions for neurodiversity-affirming classroom practices. In the fourth analysis I reviewed the classroom experience and suggested neurodiversity-affirming topics for each of the young adult participants.

### **Discussion Themes**

In order to run a thematic analysis on the clean interview data, I first identified quotes that made distinct points from clean interview transcripts. I then coded these quotes by topic area. Similar topics were joined together to form sub themes. Finally, I grouped related sub themes into high level discussion areas or "themes." Overall, five discussion themes, or topics, emerged. Within each theme, I identified and then summarized related suggestions for how educators can support students. See Table 2 below. ‘

### **Table 2**

*High-level Themes with Related Subthemes and Educator Roles*

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Theme and Subtheme	Educator Role
Feeling Different	Facilitate Understanding between Peers
Social Differences	
Learning Differences	
Uncertainty in Friendship	Guide Students in Friendship
Teaching “Mean vs. Nice”	
What Friendship Feels like	
Difficult Relationships with Teachers	
Validating, Not Labeling	Give Students a New Perspective
Who You Are, Not What You Do	
Misuse of Diagnoses	
Stratifying Students is Counterproductive	
The Role of Adults	Understand Student Needs
Risks of Not Acknowledging	
Learning Differences	
Complexity of Parent Relationships	
Curriculum and Environment	Adjust the Classroom Environment
Executive Functioning	
Reading and Identity	
Flexibility in the Classroom	
The Right Environment for learning	

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Themes were also reviewed against interview prompts to recognize how prompts may have influenced themes. Throughout the thematic analysis I used pseudonyms for young adults and numbers for educators. This labeling allowed me to later weave together the narrative of each young adult participant.

### ***Feeling Different***

One of the questions asked to young adult participants was, “Did you have a sense of being “different” than others before learning of your diagnosis?” In response to that question and at other points during the interviews, young adults expressed feeling different than their peers as early as 4 or 5 years old. They felt different in how they were developing social skills, their relationships with peers, their behavior in school, sensory responses to their environments, and performance in academic work, such as reading or learning math.

### **Social Differences**

Young adults spoke about a lack of social understanding standing in the way of them developing friendships. For example, Finnegan watched their peers develop social relationships as an outsider, realizing that they were never going to be like their peers and that neurotypical approaches to communication just weren't “clicking.” Remy spoke about isolating themselves purposely in childhood and later understanding that conversation for them was—and still is to this day—hard to sustain once it moves past initial pleasantries.

Orly felt different than their peers because they read more often than them. They were also socially awkward and “socially isolating.” Looking back, they said, it was “just who [they were] as a kid.” Madison thought of themselves as “separate from human.” They “[did not] feel connected to the people around [them] or understand how they function.” They associated themselves with fairies and wizards and felt like they were “herding cats to get people to come to a birthday party.” They spent 2nd grade recess playing chess against a teacher. Their social discomfort was ignored because they were doing well academically. See examples in Table 3.1 below.

**Table 3.1***Feeling Different: Social Differences*

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**Pseudonym and Quote**

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Finnegan

“And one thing with ADHD too is not being the most socially or spatially aware. So at an age where people are developing those skills, it's not even that I was behind, it's just that I was never going to get ahead. I still am not the most socially or spatially aware person, and that's not going to change, and I'm okay with that, but at a time when people were learning to be that way, it was weird for me to realize that I never was going to be or that it just wasn't clicking, and I don't think it wasn't really something that most of my friends were too aware of.”

Madison

“I had a very hard time with the social aspects of being a kid. I did not have any close friends, really at all. I had a couple people that I would talk to sometimes, but, especially when I was very young, I essentially had no friends. At school, in second grade, at recess—rather than going and doing normal childhood recess things with people your age—I played chess against the teacher. So it was sort of a thing of I didn't connect with people my age at all, and so that caused a lot of problems for me. But because I was doing well academically, it never occurred to anyone to look into accommodating me. Because people only cared about my grades. So that was sort of my experience as a very small child.”

“I did not have close friends at all... I always felt like I was herding cats in order to get people to come to a birthday party or anything like that... I felt very socially isolated.”

“I very much had a preoccupation with fantasy and the idea of being something separate from human, because I did not feel connected to the people around me or understand how they function, and so the way that I rationalize that as a very small child was, ‘oh, I’m secretly a fairy,’ or ‘I’m actually a wizard,’ or something like that until I was about 10.”

Orly

“I felt different because I was just socially awkward. I felt different because I read a lot of books... I didn’t go on playdates or anything. I’m just very socially isolating and that I don’t think was influenced by the underlying bipolar disorder. It was just who I was as a kid.”

Remy

“I started to feel different at age 5 or 6 in the first grade. I didn’t want to play with other kids. I only wanted to watch them from a distance, if at all. I remember sitting in a car seat (not a booster seat, a true car seat) and my parents asking me if I wanted to have a playdate with anyone and I said no. I remember thinking to myself that I didn’t want to play with other kids because I didn’t like it.”

“Long term friendships for me feel nearly impossible. I struggle to interact with people beyond first meeting them because the first meeting has a prescribed ‘script’ to it such as: ‘What is your name?’ ‘How old are you?’ ‘What do you like to do?’ ‘Do you like to do anything for fun?’ ‘Do you have pets?’ etc. The prescribed script is a lot easier because I know all my answers and I know the questions but once the script has been run through I start to struggle with improvising my answers and follow the social cues that other people leave. I am often afraid that new people perceive me as ‘off-beat’ in a not-endearing way and kind of weird.”

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### **Learning Differences**

Young adults also compared themselves to peers in how they learned. For example, Finnegan struggled to absorb information, which made it hard to take tests. They received accommodations but found those accommodations embarrassing in front of peers. This painful experience went unnoticed by teachers who instead thought Finnegan’s deficits could be “unlearned.” By first grade Kadon “felt stupid that [they] couldn’t read the same books [as] the other kids,” and struggled in math. In the years since they have been able to relate those challenges to their neurodivergence.

For Nash, social and learning differences made them feel lesser than peers and misunderstood by adults. They reported being “extremely inattentive in classes, especially if understimulated.” Their mom brought them for an IQ test where the provider told them—without explanation—that they would never have friends. Teachers also had a “strong hostility” towards them. At the time they felt that they were “just weird,” “just fucked up,” “the problem” and that there was “something wrong.” See examples in Table 3.2 below.

**Table 3.2**

*Feeling Different: Social Differences*

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Pseudonym and Quote

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Finnegan

“I was very aware that I didn’t absorb information or grasp my surroundings like my peers did, and my teachers usually called me out on these things in front of those peers. I’m not sure whether this was to make an example or just what happens when you’re tasked with a classroom of 20+ children. Standardized testing was ironically the time when I had the most accommodations, but I felt embarrassed to need them (and I didn’t mesh well with tests, anyway). I was diagnosed with ADHD before elementary school, so my teachers probably knew it was there, but maybe not how to address it in a way that wasn’t condescending (at that age, I knew what condescension felt like, but I didn’t understand it to be unjust). My symptoms were regarded as childish habits that, if caught early, could be unlearned.”

“Well, I definitely did feel different. I’ll tell you that. I think it was mostly that a lot of my classmates just seemed to have an easier time with testing, for one thing, or with quiet time, sitting still, paying attention, because every once in a while I would see one of my classmates crying during a test or something, but for the most part it just seemed like I was the only one who was struggling with the way that things were done. So there was that, and my friends also did notice that I had this tendency to zone out. So that was very clear.”

Kadon

“I felt embarrassed and stupid that I couldn’t read the same books the other kids were... First grade is when I realized that everyone could read books at a first grade level and I was still stuck on the kindergarten books.”

"How did neurodivergence impact your school experience? Learning was “greatly impacted, it made it much harder to learn math.” Friendships were “greatly impacted, I had huge trouble making friends.” Overall school experience was: greatly impacted, I didn’t realize at the time, but looking back I can see how so much of my struggles were related to my neurotype."

Nash

“...during this ‘IQ testing’ the psychologist basically told my mom that my brain fundamentally worked differently than other children, and that I would most likely never be able to connect with other peers the same way. I'm like, “that is a wild thing to tell a 9 year old like, ‘you're never gonna have friends,’ but that was one of the first times that it really was noted, ‘there is something fundamentally different with your brain. We are not going to tell you what...”

“...I think one of the earliest hints of something that was concrete that I can remember is that I struggled greatly in elementary school due to a lot of ADHD and autism traits, as well as dissociative disorder stuff, and trying to understand why I was struggling so much at school.”

"...in terms of the symptoms, so I was extremely inattentive in classes, especially if I was under-stimulated."

“A lot of the experiences that I had were kind of dictated as, ‘oh, I'm just weird or there's just something wrong with me. It's obviously not autism or something. No, it's just...it's just me kind of thing.’”

“There's a very preconceived idea of what a neurodivergent child has to look like... [If you have] children that don't fit that bill, suddenly it's not a thing of “you're neurodivergent.” It's a thing of, “there's something fucked up about this kid, so they're the problem here.” It was just very strong hostility to me as a person [from teachers], and I'm like, ‘why do you have beef with me? I am 10 years old.’”

“Absolutely. I felt different. I knew it was from childhood—there's this potential sense of ‘there's something wrong about me, but I don't know what it is. So it must obviously just mean that I'm the one who's fundamentally the problem here.’ As most traumatized, undiagnosed neurodivergent kids, we've all been there...”

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### **Educators can Facilitate Understanding between Peers**

Educators were asked, “When, how, why and what happens after a child’s behavior is noticed as different?” In response, the school psychologist gave an example of a child who talks nonstop in the same classroom as a peer who needs a quiet environment to learn. To support all children, she pays close attention to students’ unique profiles. Conversations related to diversity are intentionally facilitated outside of times where there is conflict between students or in a classroom.

Teacher One discussed how children in her class generally were aware when children were different from others just as a matter of their small class size. She finds that over time neurotypical students become more accepting of their neurodivergent peers and tolerant of behaviors that may have previously been considered disruptive. Teacher Two has noticed that students in her fourth grade class tend to distance themselves from peers that have “trouble socializing or playing with others.” When behavior is disruptive because a student reacts strongly or gets very upset, the children know however not to “escalate” the situation and instead speak to a teacher. See examples in Table 3.3 below.

**Table 3.3**

*Feeling Different: Educators can Facilitate Understanding between Peers*

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Educator Identifier and Quote

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### Teacher One

“It was inevitable that the other children knew and they knew it at an early age because the kids are together year after year. “Oh, that’s Joey who tends to call out,” I think other kids with—neurotypical—[learned] an acceptance and tolerance from their experience with people who need different things. As long as it’s not disruptive to the class, I think that finding that balance is really important. I think everybody benefits from an inclusive setting.”

### Teacher Two

“In a 4th grade classroom, students are very aware if a student acts differently and—oftentimes—understanding/accepting. If a student reacts strongly, gets very upset, other students do not escalate the situation, but will step back or try to get a teacher to help. 4th graders might distance themselves from a student who continually has trouble socializing or playing fairly with others.”

### School Psychologist

“Each kid in their profile is completely different. And so I think it’s tricky at times when one kid who struggles with impulse control and talks, talks, talks, talks, and that really annoys another kid. And they need quiet.”

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## *Uncertainty in Friendship*

Young adults were asked, “how do you feel that your neurodivergence impacted your learning, friendships and overall school experience?” and separately, “did you have a sense of being ‘different’ than others before learning of your diagnosis?” In response to these questions and at other points during the interviews, young adults shared specific memories of peers being overtly or discreetly mean to them. They talked about how peers pointed out their weaknesses (e.g., not focusing in class) and pretended to be their friend while laughing behind their back. Young adults also talked about what it felt like to have teachers challenge them, call them out on

their behavior, or punish them or others in front of classmates. Meanwhile educators talked about trying to help students, by supporting them in making good friend choices.

### **Teaching “Mean vs Nice”**

Young adults were aware when and why others were picking on them. For example, Finnegan talked about “the trope of little girls being mean.” Their weakness was “zoning out,” so peers would make comments about their lack of knowing what was going on. They remember someone standing up for them for the first time when they were 11 years old at summer camp. A girl made fun of them for having a behavioral tic. It felt good when their counselors and peers supported and spoke up for them. That said, it wasn’t until college that they heard a peer call them smart.

Madison did well in school academically, but peers made fun of them for displaying autistic or ADHD traits when working in groups or presenting in class. In their interview, Madison said children should be taught how to be nice and what a positive interaction looks like—as opposed to the “anti-bullying schtick,” which made them feel like they were “being lectured at for being a victim.” See examples in Table 4.1 below.

**Table 4.1**

*Uncertainty in Friendship: Teaching “Mean vs Nice”*

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Pseudonym and Quote

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## Finnegan

"They saw that I was zoning out a lot, or that I didn't always understand what was going on and—I don't want to play into the trope of little girls being mean, but they can be kind of mean. So if there's a weakness—and I think this is just true with kids and teenagers in general—people were gonna go for it. So that was what elementary school mostly was like. I just wasn't always aware of my surroundings or what was happening or what was supposed to happen, and that was highlighted at any time that it could be."

"The first time I remember anyone being supportive about it I was at summer camp. I was eleven. And I've been having this tick where I kept doing like this [shows me] every couple seconds. And we were playing capture the camper where the counselors basically have the campers hide all over camp and then chase them out. In retrospect, I'm like, "wow, that was a little brutal," but it was fun. So we were hiding in this bush, and this one girl who we were hiding with was like, "so what's the matter with you? You keep nodding," and we got into this little girl punching match... and my counselors and also the people who were hiding with me all sided with me."

"Well, it wasn't until I got to college that I had a friend tell me that I was smart, which blew me away when that happened, because I realized it was something I hadn't known I was missing. So I'm only friends with, like, 4 people from my grade school years still, and 3 of them are in the same family. So there's my best friend and then there's these 3 sisters, and, other than that, it's all college and beyond. So I think, like a lot of the reason for that is because my friends very much didn't think that I was smart."

## Madison

"I was often punished and socially isolated for displaying autistic traits—particularly issues with public speaking/presenting work and working in groups with other students—and for attention issues stemming from my ADHD. I performed well academically but had social difficulties due to bullying which was not adequately addressed by the school."

“We got the anti-bullying schtick in my classes when I was small, and, as the child who was being bullied, it was always particularly miserable to sit there for that. So, maybe,—I don't know if there would be an emphasis on that in this—but maybe less of, ‘here are all the things that are bad about bullying,’ and more of a like, ‘here's what can be gained by being nice to people,’ would have been less miserable for me to sit through, because it would feel less like I was being lectured at for being a victim.”

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### **What Friendship Feels Like**

Young adults talked about the challenges they encountered because of differences in social awareness. Neurotypical children who they perceived as friends would play jokes on them, cheat off them during tests, and be condescending to or infantilize them. For example, a classmate asked Madison out on a date as a joke. Madison politely declined before realizing they were being laughed at. A teacher had to move Nash's seat in class because their peers were cheating off of them and they didn't realize it. Remy regrets having “always [given] people the benefit of the doubt” just because they wanted to be liked.

Kadon wishes they could go back in time to tell their younger self that “the kids you are so desperate to be friends with, you are better off without most of them.” Nash described being belittled for years, starting in elementary school and increasing in severity in middle school. They thought of some of their classmates as friends only to later realize that they were being bullied. See examples in Table 4.2 below.

### **Table 4.2**

*Uncertainty in Friendship: What Friendship Feels Like*

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Pseudonym and Quote

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Kadon

I would tell my younger self, “there is a reason you have such a hard time making friends and it’s not because no one likes you. It’s because your mind tells you that. The kids you are so desperate to be friends with, you are better off without most of them.”

Madison

“I did not understand a lot of the time when I was being bullied like I wouldn't pick up on the fact that people were being mean to me. Like I got the thing where you get asked out as a joke and I wouldn't understand it was a joke, and so I would very genuinely be like, ‘oh, thank you. I'm not looking for a relationship right now, though,’ and then people would laugh at me. I wouldn't understand why. Because I didn't get that it was a joke in the first place. Things like that.”

Nash

“I could not understand how to socialize with my peers to the point that I was so socially far behind that my fifth grade science teacher was really kind. I love her. She ended up having to pull me aside and be like, ‘hey. I'm gonna move your seat, cause I don't think you've realized that people have been taking advantage of you to use you to cheat on tests,’ and I didn't even realize. I was like, ‘huh?’ she was like, ‘yeah, I don't know how you didn't realize...but okay.”

I'm the “poster child of neurodivergence in that I had a very hard time making friends, and a lot of the “friendships” that I had were usually exploitative. I was the kid that was being used as the popular kids’ pet kind of thing. [They] were like, ‘oh, my God, you're so cute! I'm gonna treat you like you're like a little sibling, even though we're the same age. I'm going to very much infantilize you,’ and all this and that.... led to like in my middle school years being taken by like very negative friendships, like people that were just straight up bullying me, but they're like, ‘yeah, we're friends,’ and I am obviously so neurodivergent so I am like, ‘Okay, we're friends.’ ...it would just be like constantly getting into negative friend groups... ‘Oh, you said you're my

friend, so obviously there can be nothing wrong here.’ Top 10 lies. Top 10 lies of all time.”

Remy

“I wish I knew then that not everyone has positive intentions when interacting with someone else. I always gave people the benefit of the doubt growing up because I wanted another chance for them to like me - I would tell my little self that I don't need to do that.”

### **Difficult Teacher Relationships**

Four young adults mentioned having challenging relationships with teachers. Remy saw teachers as “insecure themselves and projecting onto others.” A teacher told Finnegan that they would be sending an email to their mom about correcting their behavior in class. Another teacher requested that a peer “poke” them when they were being inattentive.

Nash’s teachers called their parents if they were stimming, “doodling” or not staying focused. Stimming—or to stim—refers to “repetitive sensory practices used to regulate emotional states, to cope with external sensory stimuli, or for purposes of self-expression” (Felepchuk, 2021, para. 1). One of Nash’s teachers would not let them go to their violin class with their peers so often that they weren’t allowed to perform with the group. They were also accused of lying without acknowledgement that it may not be purposeful. It was their short term memory deficits related to Post Traumatic Stress Disorder (PTSD) that went untested and unnoticed.

Orly recalled teachers physically restraining another child who eloped from class. The teachers carried the dysregulated child back into the classroom as the child was “thrashing” about. Orly realized in that moment how important it was for them to continue masking in class.

Masking is when a neurodivergent person takes on the characteristics or behaviors of a neurotypical person to avoid being treated negatively for appearing or acting differently than others (O'Connor, 2023). See examples in table 4.3 below.

**Table 4.3**

*Uncertainty in Friendship: Difficult Teacher Relationships*

Pseudonym and Quote
<p data-bbox="203 730 324 762">Finnegan</p> <p data-bbox="224 785 1421 1312">“I’m not unsympathetic to people who have 25 to 30 elementary schoolers to teach in one classroom. That sounds excruciating and I think it takes a special kind of person to even be able to do that. So if anyone was going to be at the end of a teacher’s rope, it was probably going to be the kids who weren’t cooperating, and I understand that, but it did mean that I was usually the one at the end of that rope. So I wasn’t the ‘time out kind of distracted,’ but I did once have a teacher tell me in front of the entire class that she had to send an email to my mom, so I’m like, ‘okay, collective punishment.’ ... for the most part, they didn’t really know how to handle neurodivergent kids, or even grasp that that was the way in which we were different. Yeah, like it was either ‘oh, you are absolutely debilitated’ or ‘you’re not.’”</p> <p data-bbox="224 1367 1421 1732">“...this was actually really embarrassing. I was in fourth grade. I had a lot of trouble focusing on math in particular. That actually is a trait that’s never gone away. So I had trouble focusing in general, but especially in math, and my teacher told the kid next to me to just give me a poke with his pencil if I seemed like I was zoning out, so then the responsibility was put on this other kid to basically herd me like a sheep. So that was weird and also personal. Note: he ate his own boogers, so I really wasn’t too happy about him being the scout.”</p>
Nash

“I would get in trouble all the time for doing things like stimming in class, or I would always have issues of... I was so understimulated that I would be doodling in my classes... to the point that my parents got called in multiple times because I just couldn't stay focused, and my third grade teacher had such beef with me for being a neurodivergent child that she literally would keep me from going and doing my violin lessons. I don't even remember what for, but so I would miss out on violin all the time to the point I couldn't perform, because she literally had such beef with me. She is like, “no, you're not allowed to, and I'm like, “I'm just neurodivergent.” Some other fun things went on: the constant issue of... “doesn't know when to talk in class.” So I would be so extremely hyper verbal, and didn't realize it, and my teachers were like “what the fuck?”... also had beef with me not understanding assignments... I remember, there was one of my childhood notebooks from elementary school, and she was like, “this is unacceptable,” and I'm like “I am 10 years old. I'm 10 years old. I am 10 years old, calm down!” No, I feel like 9 years old. I'm 9 years old!”

“None of my teachers thought it was a red flag that a lot of the times I was treated as, ‘Oh, you're probably lying about this,’ when legitimately I couldn't... My memory loss was so severe—and still kind of is, but it's gotten a little bit better—that I couldn't remember the class prior to that. It would just be completely gone in my memory, and there was no, ‘this is weird. This is something to keep an eye on.’ It was just ‘no, you're probably lying about that.’”

Orly

“At one point I remember there was this one kid who had really severe anger issues and one time he was having a fit and they were trying to get him to calm down. They were trying to get him to go back in the building, but eventually they couldn't do that, so they literally picked him up—holding his hands and then holding his legs—and brought him back into the classroom while he was thrashing around, and it was very, very difficult to watch, and I remember it to this day because it was like, ‘oh, you guys don't know how to fix this because you're looking at it through the lens of what a normal child should look like, or what a normal child should be behaving like, and it was sort of alienating in the fact that if I had shown any form of difference, I probably

would have been treated it treated in a similar fashion' ... Yeah, it was just like, 'Oh, 'Henry's crazy'. This happens because Henry is different.'”

Remy

“Honestly, I kind of hate teachers. I think most teachers are school bullies that peaked in high school and didn't know what else to do with their lives, so they went back to what they know—being a bully in school. A terrible impression, but I really do believe there is a pipeline of bullies that go into professions where they have "control" over other people (teachers, nurses, kid sports coaches, etc.).”

“Many kids were mean to me, many teachers were mean to me, and I didn't know how to function like the other kids to make them all like me more. I would not do it over again, even if I could change something because there is always the risk that it would have the same outcome because of genetics.”

“If I could go back in time, “I would tell myself that the bullies, teacher or child, were insecure themselves and projecting onto others.”

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### **Educators can Guide Students in Friendship**

Teachers discussed proactively supporting healthy relationships between students.

Teacher Three helped a student understand the meaning of a friend and guided her to choose friends that would be kind to her instead of wishing she could be friends with the “popular girls.” Remy, who called out some teachers as bullies, also discussed how important supportive teachers were to them. For example, in high school, an administrator introduced them to the person who would become their best friend by placing them in a group together.

The school psychologist encourages teachers to use restorative justice (RJ) practices to foster inclusion, improve communication, and build relationships within a classroom. RJ is a philosophy and set of practices that encourages structured conversation to discuss “harm within a

community,” as opposed to punishment for wrong-doing (Sedillo-Hamann, 2022, p. 98).

Teachers use scripts to lead community conversations. For example, Teacher Four gives every child or adult a chance to speak about their experience and needs following a conflict, “the goal isn't necessarily to leave and everyone feels great... some people are like, ‘I need time’ or ‘I need space and time from you.’” The same teacher emphasized the need for “friendship” to be taught proactively. See examples in Table 4.4 below.

#### **Table 4.4**

##### *Uncertainty in Friendship: Educators can Guide Students*

Pseudonym or Educator Identifier and Quote
Teacher Two
<p>“I have taught specific bullying lessons in the past when necessary. Many times I address it in the moment with the specific students who are a part of it. Morning meeting is a time when it can be discussed as a whole class. Great books have been used for read aloud that address conflicts/bullying. Severe bullying situations need to be addressed by the head of lower school and involve the families.”</p>
Teacher Three
<p>“...working with the student who was being bullied to help them pick correct friend choices is sometimes a thing. I'm thinking of this one girl in particular, who used to always go to the most ‘popular girls.’ There were girls in her class that wanted to be friends with her, but she didn't want to be friends with them, because she wanted to be with the ones that people viewed as the most popular... Teaching the students who are getting bullied that ‘that's not the right friend group for you. We need to make the right choices. If someone's not being nice to you...’ Not all kids try to go to their bullies, but in working with kids who are neurodivergent, I find that sometimes they make not-great social choices.”</p>
Teacher Four

“I love the topic of friendship. I think that's super important. From the friendship side, something I've noticed a lot in our setting is—especially at the younger age—we see a lot of parallel play, and we've really encouraged cooperative play, but it's been really... It's sometimes really hard. So I think that topic is super interesting.”

“So you talk about what happened, how that made you feel, who it might have affected, or who might have had big feelings from it, and then how we can—the most important, which is how—we can repair the harm. And the goal isn't necessarily to leave and everyone feels great, and the goal isn't necessarily even that someone apologizes, but that there is at least a start of repairing or people feel comfortable to continue on with the day. So sometimes some people are like, “I need time” or “I need space and time from you.” And that's okay. So that's one way we do it.”

#### School Psychologist

“So we use restorative practices and we make it developmentally appropriate for a kindergartener. Fifth grade, it depends on what's happening. But typically, it involves either myself or another adult previewing what a conversation may look like and what the goal is, and then we facilitate a restorative meeting, following a script, and then—whatever those outcomes are—I follow up with them and follow up with the students. We also do informal conversations if something happens with students, like, ‘hey, what are we gonna do next?’ or ‘what's the skill we can use next time instead of doing XYZ?’ Teachers do that all the time as well.”

#### Remy

“I had two teachers and one headmaster in high school that I felt close to and helped me. They were both art teachers who would talk to me when I felt down or needed some ‘TLC’ (tender loving care) and my headmaster would let me sit in his office to have lunch with him and his secretary, because I would never enter the dining hall out of fear of food/some of my peers... My headmaster also specifically put a new, non-athlete student entering in the middle of the year in my athlete-based advisory group to help me find connections and she became my best friend in high school.”

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### ***Validating, Not Labeling***

Several young adult participants shared their opinion that stratifying students in elementary school—for example, through gifted or remedial programs or based on subject-matter strengths or weaknesses—could be counterproductive. They found themselves lagging behind their peers in important study skills later in their education, which they believed to be related to being separated early on from their mainstream classmates. In addition, in regards specifically to perceived weaknesses, they said they would have liked for adults to validate their experience and explain that their difficulties may be related to who they are, not anything they are necessarily doing wrong.

Educators spoke about striking a balance so that every child understood their own strengths or challenges areas, without focusing on labels, unless a child brought one up themselves. Teachers talked about helping students understand their strengths and challenges.

### **Who You Are, Not What You Do**

Young adults were asked, “if you could go back in time, what would you tell your younger self about who they are or will become?” Madison talked about how they wished an adult would have told them that the way they thought, felt, or behaved was not a “personal failing” but rather something that is intrinsic to their body and brain. For example, their sensory responses (e.g., how itchy shirts were) were not a bad thing. They also would have liked if someone had told them that even though they didn’t fit into their current environment that they would find one that fit them.

Kadon suggested explaining the concept of Neurodiversity as ““everything you do is because of how your brain *responds*... there are environmental impacts that change behavior.”

They referenced their discomfort socially and struggle to concentrate in school as examples of that interplay. See examples in table 5.1 below.

**Table 5.1**

*Validating, Not Labeling: Who You Are, Not What You Do*

Pseudonym and Quote
<p data-bbox="203 640 324 674">Finnegan</p> <p data-bbox="224 695 1373 835">“I definitely got to a point where I kind of thought I was just like chronically stupid for a while. It wasn't until I really started learning about neurodivergence that I realized, “oh, my brain just works differently and it's not entirely a negative thing.”</p> <p data-bbox="224 894 1414 1142">“I would rather have known at a much younger age, and I would rather that my teachers were honest with me too. I don't know—in the US at least—to what extent that's a possibility for teachers to speak about this sort of thing with students that young, but it would have been helpful for me to know that (A) there's a reason for all of this, and (B) that I wasn't alone in it.”</p> <p data-bbox="224 1201 1414 1503">“I would tell my younger self... “this is what you have. This is how you're wired. And it's not a bad thing. You can use this stuff to your advantage once you know what it is and what it's doing.” So, I think that 22 years in I finally have figured out how to do that, especially from a writing perspective. So yeah, I would say, you need to know who you are and what you have, so that you can use it to your advantage. And so that, like, you can live life to the fullest.”</p>
<p data-bbox="203 1562 289 1596">Kadon</p> <p data-bbox="224 1633 1373 1831">“I only wish I had been told I had dyscalculia at the same time, and I wish that throughout my education when I really struggled, someone had explained to me that it was a symptom of ADHD because I didn't fully understand that. All I knew was that it made it hard for me to concentrate, I wish I'd had it explained how else it made me</p>

struggle, so I would have known it wasn't that I was just bad at school and making friends.”

“‘everything you do is because of how your brain responds’ because there are environmental impacts that change behavior.”

Madison

“I think having the very basic scientific understanding of ‘your brain is... your neurons—or whatever—are physically structured differently. The parts of your brain work together in a different way. This is not a personal failing,’ would have been very good for me.”

“a lot of like having an understanding of, ‘there is not something intrinsically wrong with you. You just don't fit in the environment that you've been put in and there are places that you will fit,” would have been very helpful for me as sort of someone who is that isolated. I think having an understanding of, there are, in fact, other people whose brains work in the same way that you do, even if it didn't have the label of autism, or ADHD, PTSD, whatever on it...’ If I had met someone who I had seen displaying some of the same traits as me, or who had or he was like, “yeah, I understand where you're coming from, that like the tags in the back of your shirt makes you wanna scream, or that you can't eat you know, or you only drink cold coffee. That's not weird. You're not like a little freak. I get it.”

### **Misuse of Diagnoses**

Young adults were asked, “when and how did you learn about your diagnosis? Looking back, was that the right time and way for you?” Separately they were asked, “How was your diagnosis described to you and how did you feel when you first learned about it?”

Several young adults cautioned against introducing diagnostic labels into conversations with children. Orly worried about a misdiagnosis being told to a child “in an early developmental stage” when one diagnosis could mask another or doctors might not have enough data to give a

correct diagnosis.” Orly was diagnosed with bipolar disorder when they were 20 years old. Since then, they have thought of themselves as “neurodivergent,” however at the end of the interview they said they “feel the need to have people believe [them] when I say [they’ve] had these experiences.”

Nash talked about the misconceptions of the term “neurodivergent” as relating only to autism or neurodevelopmental disorders more generally, when really there is no diagnosis that fits or doesn’t fit within the category. Finnegan worried about children being made fun of if diagnoses were talked about. They had negative perceptions of their own diagnosis and didn’t want to take medication as a child because of the stigma around it. They were also concerned about how different races or genders may be misdiagnosed.

In regards to a child’s awareness of their diagnosis, Teacher Five adjusts her work with children based on the child. If a child is aware of their diagnosis or differences, she may adjust the language she uses to use when they need support (e.g., to walk down the hall to co-regulate). See examples in table 5.2 below.

**Table 5.2**

*Validating, Not Labeling: Misuse of Diagnoses*

Pseudonym or Educator Identifier and Quote
<p>Finnegan</p> <p>“When I heard of other kids having ADHD, which I did not hear of often as a kid—I knew it existed, but I didn’t hear about it very much—I was like, ‘oh jeez, I don’t want to talk to them. They’re weird... I’m not weird. Right?’”</p> <p>“I don’t think I was really told that it was ADHD, or not regularly, at least. My parents never clearly said, ‘this is ADHD,’ or if they did, it was incredibly rare, and I was very</p>

averse to going on medication for it as early as like third grade. I actually remember telling my GP at the time that I didn't want to be loaded full of pills, and I don't even know where I got that, because in retrospect, I was there with my dad, who has been on Zoloft for years.”

“I do wonder if, after learning this stuff, some kids are gonna be like, ‘oh, you just tripped. You have ADHD.’ So I'm definitely curious how it's going to be taught.”

“That’s my main thing... it's just you can't control kids. You can't really control how they react to stuff. So it's possible that's going to happen, but I do still think these are very important lessons to teach. But yeah, I do think it's important that this isn't something that kids are gonna be made fun of for, or that's going to be used as a punchline, because, “oh, retarded,” has been a punchline in many years past. So as long as it doesn't circle back to that, but I'm all for neurodiversity education, and I think that it can be made interesting to elementary schoolers.”

“I'd been open about OCD since I was diagnosed with it, but a lot of that was I think I saw myself as some kind of a martyr, or I wanted people to know that it wasn't just like, “oh, so you wash your hands a lot.” I was like, ‘no, what happens is I get these horrible, intrusive thoughts about, like, hurting people.’ I don't think I've ever really explicitly said that, but I was like, ‘look, I have OCD’ and it wasn't explicitly like this horrible thing. It wasn't like my entire personality to talk about, but it was something I was open about. And I was like, ‘yeah, I'm mentally ill. What about it?’ ... I think I was outspoken about it because I wanted people to know what it was actually like. Without saying exactly what the intrusive thoughts were, because that's something I to this day still really hate revisiting. So there was that... And I think about if I wasn't white like I've heard a lot of, for instance, young black kids getting diagnosed with some personality disorder or something instead of ADHD, which they actually have at a much younger age. So I think about this—where I was having these really gruesome, violent thoughts—, and I'm like, ‘if I was seen as a threat to begin with, I don't think I would have been treated with as much compassion as I was.’”

“It was always just oriented around school. So it was like I said, like ‘doesn't test well,’ ‘doesn't pay attention sometimes,’ like ‘can't sit still’ or like, ‘easily distracted’ that sort of thing. If I'd had the full picture of what ADHD was, I don't think it needed to be described as this wonderful magical thing, that is attention deficit hyperactivity disorder, but it would have been nice to have the whole picture and to have a better explanation of what it was that was appropriate for a younger kid, but that also unified everything I was experiencing.”

“A running joke about Gen Z is that we self-diagnose ourselves all the time, and I don't know what the line is between self diagnosing or information online, but I do think that if we were exposed to that stuff in elementary school, it would have helped make things a lot more clear.”

Nash

“And I know that a lot of times neurodivergence... is treated as a shorthand for... this actually means autism when really there's so many different disorders that fall under, not even beginning to go into like learning disabilities and intellectual disabilities, and all of that.”

Orly

“I think we tell kids things in stages like it's not like we're actively lying to them, but as kids grow up, there are thresholds in which, ‘okay, it's appropriate or like acceptable for them to learn XYZ.” So I don't think it should not be like actively hidden from neurodivergent kids, but, you know, giving them a label and saying, ‘this is what you are,’ especially while they're in an early developmental stage, is probably not the best idea, because, like I was diagnosed with anxiety and depression, and it made it harder to see that there was something else wrong. Or maybe the doctors were just completely wrong with my diagnosis and they just didn't have enough evidence to understand that I was bipolar so telling a kid one day that they're autistic, and then having them look through the world through the lens of ‘oh, I'm autistic,’ and then eventually figure out that maybe they have something else—I don't know what else

they would have. I think they shouldn't be sheltered from the fact that they are neurodivergent, but also they shouldn't be put in a little box.”

“So as we started talking, I just sort of was like, “oh, no! What if, after this she turns off the camera and thinks, ‘oh, this kid is not neurodiverse.’” I don't know why that came into my mind, and I don't know why I feel the need to have people believe me when I say I have had these experiences, but it was a thought that popped in my head for a second. So like, I know, there's no judgment here, but also talking about it can make it feel more vulnerable.”

Teacher Five

“At the BOCES it seems there wasn't a lot of explaining to the kids unless the kids were aware. You had some kids that were aware, they would say to you, 'you know I have ADHD. I can't sit down. That's why I have to keep getting up. There was more self-... What's the word? I don't wanna say self awareness. I guess self understanding. Those kids seem to know, 'this is my diagnosis and this is what it means.' Whether they really understood that. So when you would talk to them well, 'I'm gonna take you for a walk down the hall so you can get a break, because I see you're getting, you know. How do you feel?’”

### **Stratifying Students is Counterproductive**

Young adults felt that by putting children in gifted or special ed classes, their actual needs were ignored. Orly was in a “gifted room” in elementary school. They were treated as “smarter” and said that the school encouraged them “until it peter[ed] out, and then you just leave them with no support.” Nash struggled with math, but because they were considered “gifted” they were not allowed to opt out of higher level classes until they did very poorly in them. They feel that the school treated “gifted” as a diagnosis in itself, as opposed to testing for autism. They associated being “violently under-stimulated” or “unable to concentrate” with being gifted.

Remy and Finnegan both talked about the risks of separating out children who are considered to have disabilities or those considered less smart. Remy spoke about how their school had a separate class for special ed students or those with “communication difficulties,” who then did not interact with typically developing children. Finnegan talked about how German schools stratify children based on their school performance from a very early age. Early academic performance determines the areas of study they can go into in the future. They were shocked by this system. They felt it would have denied them many of the opportunities they have had access to in the United States. See examples Table 5.3 below.

### **Table 5.3**

#### *Validating, Not Labeling: Stratifying Students is Counterproductive*

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##### Pseudonym and Quote

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##### Finnegan

“I was one of the kids that got pulled out of class to go be ‘special’ every now and then, but not in the smart way”

“So my [German] exchange partner, Kira, was trying to explain it to us. She was like, “so there are 3 levels. There is this stupid. There is in the middle, medium stupid, medium smart, and we are in the smarts. That is why we are in America.” So she didn't mean it to be rude. That's just legitimately how it's done over there. But it did really freak me out, because I have said to my parents multiple times like, “I would have been in the stupid if I'd been sorted out that young.” I would not have been able to do what I did in high school, or go to the college that I wanted to go to, and my mom is like, “no, no, you wouldn't have been in the stupid. Your teachers would have seen that you were smart, and they would have at least put you in the medium.””

Nash

“I also could not graph anything for the life of me, which when you're in geometry... yeah, I was put in geometry honors, too. I was refused the ability to opt out of these classes because it was just treated as ‘no, no, you're so smart; you should be able to do this. You're a gifted kid,’ and I'm like, ‘I'm not gifted. You guys just didn't assess me for autism!’ All of the traits that they were like, 'oh, it's just because you're a gifted kid,' they're like, 'yeah, being a gifted kid makes you unable to concentrate on anything and makes you violently under-stimulated.’ And I'm like ‘no. Where did you get that from? Gifted is not in the DSM. That's not an actual psychological term that is... where are you pulling this from?’”

Orly

“I think that the gifted program is a bit odd. You take all of these kids, and you tell them that they're special, and that they're smarter, or they think differently, and then they encourage it until it peters out, and then you just leave them with no support... I think it is sort of like sheltered in a sense... We were taken to the gifted room, and we were taught educational games. I think it was literally called academic games. We learned about things like propaganda and math.”

“I think that kids should be told that they're special and unique, and they deserve to feel smart and wanted, but they also shouldn't be told they're special for the entirety of their childhood, and then realize, “oh I am very much a regular person.”

Remy

“My elementary school put children with developmental disabilities into a separate class that rarely, if ever, interacted with the typically developing population”

“It was not supportive of neurodivergent students, they had a separate class for "special ed" students—this only applied to students with communication difficulties—pretty sure consensus is now that this method of separation is mostly unhelpful”

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### **Educators can Give Children a New Perspective**

Educators spoke about the ways in which they reframe developmental differences for children. For example, teacher two compares neurological differences with more visible differences between children. For instance, she makes a parallel between a child who needs glasses and a child who needs extra support in school. Teacher Three spoke about pairing students together carefully so that every child could feel good about their strengths while observing and appreciating a peer's different strengths. She encourages students to reframe their thinking as "it doesn't mean that you're never going to be good at it, but it's not something you're great at. It's not something you enjoy doing right now." Along with focusing on challenges as simply skills in-development, she makes a connection for her students between enjoying an activity and being good at an activity, validating that it's ok that not to like something and letting them know that just because they feel that way now, it's possible that will change in the future.

Teacher five talked about the importance for all children to understand that differences exist. She felt that that understanding can lead to kindness, acceptance, and confidence within a community of students. The school psychologist talked about the importance of helping children "hone their perspective" to prepare them for college life and beyond. See examples in Table 5.4 below.

**Table 5.4***Validating, Not Labeling: Educators can Give Students a New Perspective*


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 Educator Identifier and Quote
 

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## Teacher Two

“...gives neurodivergent children a reason/answer for why they might be different from peers. Something that is not their fault, similar to a child who needs glasses—everyone is made differently”

## Teacher Three

"This is something kind of working...having students be aware of their strengths and weaknesses to a certain degree, and know that, 'oh, well, I'm really good at writing, so maybe I'm gonna write the ideas that my friend gives me'—pairing students that would be maybe a good match. Maybe one doesn't like the actual task of writing something, but it has great ideas, or vice versa, right? Or one student doesn't know their math facts, but knows the concepts. And the other one struggles with that. Pairing students together that could play off each other's strengths and weaknesses."

"We've started to call them strengths and stretches versus strengths and weaknesses or strengths and challenges. It's, 'okay, this is your strength and this is something that you're stretching to work on. It doesn't mean that you're never going to be good at it, but it's not something you're great at. It's not something you enjoy doing right now.'"

“... there was also a lot of discussion about [sensory supports] in the younger grades, and it wasn't considered something taboo. And I find too, some kids got pulled out for OT or different things, and I think people—a lot of my parents—are always like, “that's gonna single them out.” But in my experience a lot of students actually become jealous of those students like, “they get to go do something fun and cool!” Most students would love some extra help, would love some one-on-one time, would love to be able to—even if they don't have OT struggles—go have one-on-one time. A lot

of these kids were coloring or doing swing things that their bodies needed, but it looked fun to all the other kids.”

#### Teacher Five

“...if all the other kids in the school were educated and understood that every kid is different and unique, and 'just because someone is in that class that we only have 10 kids as opposed to 30 kids...' That might help everyone just be a better human and more tolerant. And those children, with those differences, feel more accepted. Confidence. And you know, secure in just their day to day movements.”

#### School Psychologist

“...foster that mutual understanding and (1) celebration of differences, but (2) help kids understand, 'this kid may learn a little differently than me or receive feedback a little differently than me, but different isn't necessarily bad.' I may have to do two steps in order to support them or help them understand, but if we can help kids foster that understanding piece—or even just that working-to-hone-their-perspective piece—younger, then as they move into college or their workplace environments, hopefully, we're positively shifting the trajectory forward, because, a lot of time, it's just not talked about. It's just, 'here we are in this class. We have some kids who receive a little more adult support, some kids who don't, why is that?' It's just not spoken about that much.”

### ***The Role of Adults***

Young adults were asked, “What role did your parents and teachers play for you as a young neurodivergent student?” In response, and throughout interviews, they talked about their teachers not understanding them. They wished that teachers were trained to identify the types of support that a child might need as opposed to focusing on the behaviors they were seeing. They expressed being misunderstood by their teachers, who seemed to ignore that they were struggling socially or academically.

Educators gave examples of successful relationships between the school, teachers, students and parents that allowed them to best support a child. Stigma was often a stumbling block to creating these bonds. Some young adults found their parents unaware of their challenges or in denial that their family members were neurodivergent. Young adults and educators both reported that training is critical for teachers and parents. Topics children are exposed to at school must be understood and echoed at home. Schools can then work with parents to support children.

### **Risks of Not Acknowledging Learning Differences**

Young adults spoke about challenges for them later in their education, after elementary school. Madison, who attended gifted and talented schools as a young child, described how academics came easily to them in elementary school, but later they “almost failed [their] junior year of high school” when the work became more challenging. Nash felt misunderstood by school teachers and administrators, who ignored their dyscalculia and dysgraphia because they were gifted. Instead, they nearly failed many classes in middle and high school.

Remy wove together stories of their learning differences, the ease and challenges in school, mental health history, and self-harm. Without directly connecting any one piece to another, the way in which they reported on these occurrences in one train of thought demonstrated the relationship between these pieces of their childhood and adolescence. See examples in Table 6.1 below.

**Table 6.1***The Role of Adults: Risks of Not Acknowledging Differences*

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Pseudonym and Quote
Madison
“I didn't struggle very much on the academic side of things as a small child. It got harder as I got older. I almost failed my junior year of high school.”
Nash
“And obviously I have Dyscalculia and Dysgraphia. I was so bad at math. but they kept because it was misattributed to, "oh, you're just a gifted kid." So they refused to put me in the actual classes that I needed to. And I was forced into... like, “here, we're gonna put you into algebra and geometry even though you can't process math in your brain.” So I was like failing all of my math classes, because... this is way into middle school, I was doing so poorly in math that I literally was just barely scraping by, like it is a miracle that I did not fail those classes, because ...I just could not process anything that was happening.”
Remy
“Academics have always come easily to me, except for math and languages. My brain can't compute those two topics well and I mostly barely passed those classes or had a lot of extra credit growing up. When I started struggling with more intense anorexia at 17/18/19 and had severe brain fog and consistent fainting did my academics begin to suffer. I couldn't walk up a flight of stairs without having to take 1-2 breaks and this made it difficult to attend classes and keep concentration. This led up to my second suicide attempt at 19 - my first was at 13 but was "hush hushed" and I didn't receive any mental health follow up care.”

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### **Complexity of Parent Relationships**

Four young adults expressed disappointment in how their parents related to their neurodivergence. For example, Nash's family denied the presence of ADHD in their family, which was very "invalidating" for them as they sought to understand their own neurodivergence. They felt just as their teachers did, their parents also ignored glaring red flags. Remy described their parents as playing a "very negative" role in their life and named the turbulence of their household and family relationships as leading to their Complex Post-traumatic Stress Disorder (CPTSD). In regards to teaching young children about neurodiversity, they suggested also giving parents a way to opt-in to learning about the subject too, because if parents give a "negative response" to their child when they come home, then the impact of the program is significantly decreased.

Madison felt that their parents had little interest in understanding them or their needs beyond cheering on their good grades or speaking to the teacher when they got in trouble for something at school. Finally, Finnegan was disappointed by a lack of transparency on the part of their parents. Instead of referring to ADHD by name, they would use phrases like "trouble focusing" or "doesn't test well," which made them feel that there was something wrong with them. See examples in Table 6.2.1 below.

**Table 6.2.1***The Role of Adults: Complexity of Parent Relationships (young adult perspective – Negative)*


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 Pseudonym and Quote
 

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Finnegan

“I wish that both my parents and my teachers had been more transparent about me having ADHD, and what that meant. I said my parents didn't ever bring it up, but I think they thought I wouldn't understand “Attention Deficit Hyperactivity Disorder,” so it was always trouble focusing, or she doesn't test well, and those seem to me more like something that was just wrong with my personality.”

Madison

“And then on the parental front, my parents—I touched on this a little bit before—but were very happy that I did very well in school, but did not appreciate anything else about the way that my brain worked really, so they were very pleased that I was a straight A student, and then they would be told that I read under my desk during class and I would get shouted; things like that... I was caught in this weird thing of, “you really really like the fact that I'm smart... but you don't like any of the things that I do or the way that I act because I'm smart,” was also a thing for me”

Nash

I grew up in a very, very non supportive environment that pretty much didn't deny the existence of autism and ADHD, they just denied it if it was in the family, especially for somebody who is non-white... the environment I grew up in is very, very invalidating of neurodivergency, especially to the point that they just straight up ignored glaring red autism flags like, did just any form of neurodiversity, they're like, ‘okay. that's not in our fam. I'm like, ‘okay. cool yay.’”

Remy

“My parents are a big part of the reason I struggle with CPTSD (complex post traumatic stress disorder). My household was incredibly emotionally turbulent growing up. Pots and pans being thrown with nightly screaming matches. I was the protector of my

siblings. I was also called too sensitive by my father as I got older because I would react to little things with big reactions - I was constantly on high alert and him calling me that only made it worse. They both played a significant negative role.”

“I think this should extend to 4th or 5th grade and not stop at 2nd grade. I think parents should have some level of education, both with their children in the classroom and separate from their children in just a parent program. I think the separate opt-in parent portion is really important because if a kid comes home with this information and shares it with their parents and is met with a negative response it could be to major detriment of your goals for their learning. When you work with kids you are not just working with kids as you are also working with their parents.”

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The other two young adults interviewed spoke positively about their experience with their parents related to their neurodivergence. Kadon’s parents “gave [them] extra support and encouraged [them] to not be afraid to ask for help.” They also appreciated how seamlessly necessary supports—such as medication—were introduced to them. The only thing they remember about starting ADHD medication is that they would get ice cream in the morning because of it.

Orly appreciated the support of their mother in helping them get diagnosed with anxiety and depression and allowing them to take medicine. Their father was less supportive, speaking negatively about taking medication and generally not understanding the seriousness of their mental health disorders. See examples table 6.2.2 below.

**Table 6.2.2***The Role of Adults: Complexity of Parent Relationships (Young Adult perspective – Positive)*


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 Pseudonym and Quote
 

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Kadon

“I think it was the right time. (she learned at a young age; was excited because she got to have ice cream for breakfast with ADHD medication) I never felt like anything was wrong with me cause in my household, ADHD was just a part of life.... They gave me extra support and encouraged me to not be afraid to ask for help.”

Orly

“My mother is the parent I [...] lived with for the majority of my childhood. She was very supportive in helping me get diagnosed with anxiety and depression. I don't think she fully understood what was going on because of her life experiences, but for her to get me a therapist at all was helpful. For her to let me go on medication was helpful. My dad, well at the time—he wasn't this bad—, but he sort of turned into an alt right kind of person. I showed him my bipolar medication when I was first getting on it, and he was like, “I think we're over medicating our society” and I was like, “okay, well, tell that to the 7 different heart control pills that you take to make sure you don't have a heart attack.” It was a very different experience, and it still is. I only recently explained to him, like how bad my manic episode I had when I was 21—that I was literally delusional and hallucinating. I still don't know if he fully understands. So for the majority of high school and into college, and even now that I feel stable, it's been my mom that's been helping me.”

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Conversations around accommodations and support can be complicated between school policies, teacher experience, child and family needs and the perceptions of each group by the others. For example, Teacher Three gave an example of how a parent fought to get their child necessary accommodations that the school was pushing back on. The school psychologist mentioned the necessity of these parties working closely together around any topics related to the neurodivergence of individual children. See examples table 6.3.3 below.

**Table 6.2.3**

*The Role of Adults: Complexity of Parent Relationships (Educator perspective)*

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Educator Identifier and Quote
<p>Teacher Three</p> <p>“And the mom has [said something to the school], but [the school will] be like, “well, we can't do that because everyone doesn't get that.” And she's like, “but she needs this to bring her up to meet her peers.” And it wasn't crazy things. It would be being able to test in a different room and simple things. But they'd be like, “well, what is everyone else gonna say?” ... That shouldn't be the whole school's ethos. Like, “everyone doesn't get that.” And the mom used to always say, “this is about equity, not equality.” She always said that to them, and they got it, and they came around.”</p>
<p>School Psychologist</p> <p>“Kids are really familiar with different language in general, but I would say, those specific conversations about neurodiversity or students' profiles are done in coordination with parents or with the participant.”</p>

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### Understanding Student Needs

Young adults felt that teachers need to be trained on how to identify children who need support and what they need. Nash felt that his teachers missed “red flags” when they were young. They suggested teachers be trained by and taught how to “interact with neurodivergent individuals.” This would guide teachers away from assuming that every child is neurotypical and avoid jumping to stereotypes of what a neurotypical—or neurodivergent—child looks like.

Madison felt that their teachers labeled them as gifted and then moved on to teach the rest of the class. In hindsight they wished that their teachers were more prepared to work with them, including their strengths and areas of challenge. When Finnegan was organizing the *education* section at a bookstore they worked at, they were shocked to find teacher training books with titles like ‘The Placid Retard’ still being sold. To replace these books, they imagined a “toolkit for teachers to learn about [topics related to neurodiversity], then pass that information to students.” See examples in Table 6.3 below.

**Table 6.3**

*The Role of Adults: Understanding Student Needs*

Pseudonym and Quote
<p>Finnegan</p> <p>“And I think that it's also important that this is something teachers are familiar with when they go into it, because I had a job at a used bookstore last summer and one of the sections that I sorted was education, and there was some really weird stuff in there from like the 90’s that was supposed to teach rising elementary school teachers about neurodivergent kids. There were titles like—the one that always sticks out to me is</p>

something like—'the placid retard.' So yeah, it was pretty bad. And I think that if there's a toolkit for teachers to learn this stuff. then pass it on to students. That's very good, which it sounds like is what you're doing.”

Madison

“I think in regards to my teachers, a lot of them just didn't know what to do with me because I was—not to toot my own horn, but—I was a fairly smart 5 year old. I would be sitting in kindergarten with my little book. I was hyperlexic as a child, so I would sit with the book under my desk and read during class, and not pay attention, and then get A's on all the tests. And so my teachers just really don't know what to do with me, because I was always bored in class no matter what we were doing.”

Nash

“...just having people be aware of what to look out for, because there's a lot of things like, 'oh yeah, we're training our teachers,' and then those teachers miss every red flag. I feel like there's a strong assumption of two things: (1) that every child's brain is neurotypical—and that every child is inherently neurotypical—or that (2) every neurotypical child presents a specific way. And being like, 'oh, but if this kid isn't already like pulled out and put in a specialized class, then clearly, they're not neurodivergent,' when really neurodivergency is not just a very large umbrella, but even within the subclasses—subgroupings—it's a spectrum, and some kids are able to do this thing but not do others. And I think just being really informed on, 'here's what this looks like,' and especially... and I guess then that gets to this whole thing of training... making sure that neurodivergent voices are actually doing and leading, 'hey, this is how you interact with this.’”

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### ***Curriculum and Environment***

Young adults and educators talked about the many ways to support children with learning differences in the classroom, such as through children’s literature, flexible learning environments, individualized teaching strategies, and executive functioning support.

Some young adults were very direct in their suggestions. They talked about a certain book, an academic club, or a technique for studying that brought self-understanding and confidence in their ability to learn. Educators also spoke of specific creative solutions that they have used to help children learn subjects that may be challenging for them and self-regulate in the school environment.

### **Executive Functioning**

Young adults talked about specific executive functioning tools and skills they wished they had learned as children. For example, Remy would have liked “clear storage units” and to know that they were not the only one of their peers who struggled with organization. Teacher Three suggested working memory as an area that children need to strengthen in order to follow multi-step directions and remember detail as they work through problems. She explained that all children can benefit from learning approaches and tools that will help them become self-sufficient learners. Teacher Four said that instead of expecting a child to use certain body posture or eye tracking, she asks them how they think it looks like to pay attention or how they know when they are using good study habits. See examples in Table 7.1 below.

**Table 7.1***Curriculum and Environment: Executive Functioning*


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 Pseudonym or Educator Identifier and Quote
 

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## Finnegan

“Some things that can help, honestly. Some of the stuff that I've learned about is object permanence. So some people will use clear storage units to keep stuff or learning about, well, just knowing that there were other kids who had it too would have been nice.”

## Orly

“For me, school was always easy. Then I got to like high school, which was much more rigorous, and I realized, “oh, I don't know how to study. I don't know how to keep up with my peers who have been working harder than me for their entire school careers.”

## Teacher One

“The foundational skills are built on / developed at elementary and then, in adolescence, the advanced skills are developing. So as these executive functions, new skills are developing, it's really hard for kids to understand what's happening, but you could start with, like, working memory is one that is a foundational skill. As you're working through something, what are the things you have to remember as you go? So like, sort of like a multi step direction transition? These are things that we expect...”

## Teacher Four

“I think attention and the academic side of it, like attention and study habits, is really interesting, because especially from my previous experience to now, especially being in charter schools. I don't know if you're familiar with them, but what it looks like and sounds like, and feels like to be in a classroom. I think my perspective is super different from a lot of the schools I've worked with in the past, like, “does a child need to be tracking or looking at the learning? Does your body need to look a certain

way to do the learning?” In my opinion, the answer is “no.” But on the other extreme, like sometimes in our classroom, I might see a kid and I'm thinking to myself, “I don't know if they're showing attention or hearing what I'm saying.” So I find that topic really interesting, and I think I saw a lot of questions on it, and what language we use to describe it like, “what can it look like to focus?” and “how do you know when you're not focusing?” or “when you're not using your study habits.” So I think that's a really interesting thing to delve deeper”

School Psychologist

“So it really depends what the entry point is, but I would say, for the most part, we do a lot of work supporting executive functioning and the brain, and so we do talk a lot about different topics. So kids are familiar with it. And we focus a lot on emotional regulation and we use Zones of Regulation and Social Thinking<sup>10</sup> language.”

### **Reading and Identity**

Young adults and educators spoke about particular types of books that helped them or their students better understand themselves and their classmates. Finnegan talked about the book series Percy Jackson (Rick Riordan, 2006). Percy is a fictional Greek demigod (half god, half mortal) with ADHD and dyslexia. These books stood out to them because the character's diagnoses were written about explicitly. Madison also mentioned this book series—in elementary school they imagined themselves to be a demigod as a way of acknowledging and understanding their difference.

Remy suggested books from the series “A Little Spot” by Diane Alber, including A Little Spot of Emotion books, A Little Spot of Emotional Regulation books and A Little Spot of

<sup>10</sup> The Social Thinking methodology is “composed of evidence-informed and evidence-based concepts, frameworks, and strategies to support social attention, self-awareness, social metacognition, social communication, executive functioning, social and emotional awareness, social responsibility, and social competencies” (Crooke & Winner, 2022, p. 282). The Zones of Regulation is “a curriculum geared toward helping students gain skills in consciously regulating their actions, which in turn leads to increased control and problem solving abilities” (Kuypers, 2019, Chapter summary).

Learning(Alber, 2020, 2022, 2023). They read these books with an autistic child they worked with to help them understand and learn how to “show/cope with their emotions in ways that are productive and don't hurt themselves or others.”

Teacher Two read a novel called “The Bridge Home” by Padma Venkatraman to her 4th grade students, who wondered whether one of the characters was Autistic (Padma Venkatraman, 2019). When the author came to speak about the book, she explained that that character did not have a specific disability.

The school psychologist showed off her school’s approach to a library with books lining the hallways. They have books at all grade levels and across subjects, including special interest books. Children are able to access the library at any time. For instance, a child can take a break from class to read in a hallway nook for five minutes before returning to class. See examples in table 7.2 below.

## **Table 7.2**

### *Curriculum and Environment: Reading and Identity*

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Pseudonym or Educator Identifier and Quote

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Finnegan

"And my counselors and also the people who were hiding with me all sided with me, which was very sweet, and I remember like mentioning Percy Jackson at the time, because, even though I was never a huge Percy Jackson fan, I did read *The Lightning Thief*, and that was literally the only time I ever read any book for kids that mentioned ADHD, so I was like, yeah, he has ADHD, but it seems like it kind of helps him sometimes. So a good representation there, I guess. I just wanted to feel less weird. Maybe it was because it was something I had read, and that was the first time that ADHD was really mentioned by name. So yeah, there was that. And in retrospect, I

realized, like the tick thing was probably more of an OCD thing, like it was a compulsive action, but it was still the fact that I could still connect it to a Percy Jackson thing does indicate some neurodivergence. Unity, yeah."

"If I was gonna do something to just make my younger self feel a little better, and there weren't gonna be any consequences like I guess I would say, "this is what you have. This is what it means. I also want you to read about it."

Madison

"I was very into Percy Jackson. So for a while it was like, "oh, I'm a demigod" and sort of I had that until I was about like 10 or 11. I had this whole host of fantastical explanations for why I was different."

Remy

Are there any materials you think might help children or teachers understand this topic? "(1) 'Little spot of emotion [because] identifying your emotions is the first step of emotion regulation. I used to work with kids with autism before coming to SLC for grad school and I had a client who had these books. He was proficient in language for his age but these books were so amazing in helping him understand himself and set up boundaries that met his needs. I truly believe in the good power of these specific books. (2) 'Little Spot of Emotional Regulation' [because] after they become comfortable/more confident identifying their emotions, they should understand that they are ways to show/cope with their emotions in ways that are productive and don't hurt themselves or others. These books go more in depth on some of the strategies briefly touched on in the previous set of books; (3) 'Little Spot of Learning' [which discusses how] everyone learns differently and at different paces."

Teacher Two

"In a recent book, 'The Bridge Home,' a character was clearly different than her sister and peers. Students questioned if she had autism. When the author came to visit and was asked the question about the character, she said she never says a specific disability."

### School Psychologist

“So I'll actually take you into the hallway quickly and show you our library. It's pretty different than a typical school and the thing that is awesome about it is it's not a specific room. So we're in the hallway. There's some shelves, and then we keep walking. There's shelves. So it's basically just there and what's cool about that is that you have kids of all different levels here, like K-12, and the whole library spans that and so I think when you have a kid who is in second grade, but is really interested in pre-algebra, some sort of math advanced topic, they're able to just go access that and learn about it and then they just return it on the cart. I think that a lot of kids here love to read, and at their old school they would get in trouble because they couldn't put a book down. Here you have kids who, especially when they have a certain interest, they just scour through the library... We have a very balanced library. We have a lot of books that incorporate social emotional learning and different topics. They usually are based on topics we know our students like. A lot of our students are very interested in World War 2 and learning about every aspect of that. So, we have a big section on that. Kids who love origami, puzzles, art. It's really utilized because kids here really love books, so I like the model we have.”

"They can go get a book at any time, and they also have a library class when the librarian comes in and they go select a book or they do a different activity. Most of them keep a book on their desk that they can read, or there's a spot in the classroom where they all keep a book. The kids here can take a break at any time. They just have to request a break and then we have a break pass that they take and it tells them where they're going, so they'll take a break and go into a little nook which has cushions and they can read for 5 minutes, but then they have to come back. They can't just obviously read throughout class all day long."

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### **Flexibility in the Classroom**

Another topic that came up frequently was the importance of flexibility in the classroom. Four young adults suggested accommodations or adjustments to the classroom that could have helped them. Kadon needed a calculator for math. Nash appreciated it when a teacher let them wear an ear bud with music playing to focus. Remy loved their 5th grade math teacher for making “a super fun weekly after school math club for [them and their] friends.”

Both Madison and Nash suggested ways for their teachers to organize classroom activities to meet the sensory and learning needs of different students. These included options for independent work or quieter alternatives for some students when the class may be playing a loud game. Teacher Three talked about how schools were teaching children to do math problems four ways, and while it seemed like it would create flexibility for students, it did the opposite. Teachers would require children to master all four ways. She suggested that instead, teachers show students all four ways, but then allow them to choose the way that works best for them.

Teacher Four had been teaching math through “guided instruction” for 9 years, which she loved because it was very open-ended. It gives children a problem and asks them how they would solve it. They then share it with their peers who could try that approach next time. See examples in table 7.3 below.

**Table 7.3***Curriculum and Environment: Flexibility in the Classroom*


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Pseudonym or Teacher Identifier and Quote
<p>Kadon</p> <p>"I would go back in time and tell myself, "you're not stupid. There is a reason this is hard for you, and you should have the right to a calculator."</p>
<p>Madison</p> <p>"I would have appreciated a lot more of that as a child—autonomy—cause I knew that there were some people who really really did like group projects and good for them, but I was not one of them, and I did not understand why people liked group projects or working in a group, and so I would have liked more options to do things independently. So I think just having autonomy of choice in the way in which we teach children is good because it also makes—even if it's not a huge choice of "you can choose to never work in a group"—it can be like, "you're gonna talk to these people for 15 min to come up with ideas, and then you can go and do things independently," but having the little bit of autonomy, I think is good, even if you can't give full full freedom."</p>
<p>Nash</p> <p>"My teacher was weird, but at least she let me have an ear phone, because I was only able to do class if I had music playing in one year, because otherwise I was like, no, I can't focus at all. So I got that."</p> <p>"Some people take some more stimulating things, like some kids learn better by, 'we're gonna play a game,' and some kids require a quieter alternative."</p>
<p>Remy</p> <p>"My 5th grade math teacher created a super fun weekly after school math club for me and my friends because I struggled so much with math."</p>

#### Teacher Three

“And it's like, “the point of learning the 4 ways isn't so they master all 4 ways. It's so they learn what way would work best for them.” But I think a lot of schools are like, “well, they have to be able to show that they can do it all 4 ways,” and I'm like, “but the point of teaching it 4 ways, isn't...they don't need 4 ways to learn how to add. They need to pick one of the ways and master that.” So sometimes and a lot of times, the teachers will be like, “yeah, once we learn all 4, they can pick which one works for them.” And it's like, “but why make them master 4 and then let them pick?”

#### Teacher Four

One of my favorite things to teach is called “guided instruction,” which is essentially a story, “so and so has 20 balloons. She gives 7 to her friend. How many balloons does she have left?” It's that type of curriculum is really structured to have kids explore themselves and see what they do. I have been teaching that for 9 years and I'm always surprised at the strategies kids come up with and the things they say about it. And then the next day another kid will try... that kid's strategy. So, that's one of those beautiful curriculums. And I'm still shocked at what kids are able to do. And I think it's really fun, because it's a math curriculum. And you know, especially when I was growing up like this idea that math is one way and one brain and one right answer. It really isn't so. But the way to be able to see so many different strategies and learn in so many different ways comes out a lot in that.”

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### **The Right Environment for Learning**

The environment of the classroom can also impact students in the classroom. Madison talked about struggling with “emotional regulation and time management.” They grew irritated when things weren't done on her timetable, but no one looked into why that might be, or why they were crying in the cafeteria when it was loud, because they got straight As.

Nash said that there should be “places of refuge” inside a classroom. This could be just a “little calm nook.” They explained that it can be overwhelming for a neurodivergent child to

enter a classroom knowing that they can't leave that environment once inside. Having a nook would add dimension to the classroom as an additional space that children could go to if they needed to "check out." If they were understimulated by classwork, they could go there, or they explained, "sometimes you need to go lay face down on the bean bag." Orly also suggested having a calm sensory space in the classroom where a child could go proactively to "slow down, take your breaths, and find a way to get through what's making you so anxious without acting out."

When asked about meeting children's sensory needs, Teacher One spoke about adapting the classroom environment to support children with hyperactive or inattentive profiles, both types of ADHD. For example a child with a hyperactive profile needs to work on controlling their impulses while the inattentive child needs to minimize distractibility during classwork. She made the point that the medications that help children with these executive functioning skills—response inhibition and sustained attention—are stimulants. She suggested that "quick bursts of energy" in the classroom can help these children in the same way if done in a way that doesn't disrupt the greater classroom environment. Teacher One also suggested activities that could include the whole class such as push ups or jumping jacks. See examples in Table 6.4 below.

**Table 7.4***Curriculum and Environment: The Right Environment for Learning*


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Pseudonym or Educator Identifier and Quote

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## Madison

"As a kid, I had issues with emotional regulation and time-management things. I got very irritated with not being able to do things on my own timetable. Things like that did cause problems for me, but I got straight As, so no one ever thought, 'maybe we should look into why you can't sit in the cafeteria for a really long time without crying because it's so loud,' or 'why you can't articulate your feelings in a way that's normal for a child your age,' things like that."

## Nash

"Two main things are the environment and having what I call "places of refuge...." I think a lot of the times what we really struggle with—for a lot of neurodivergent kids—is in the classroom, it's expected that, once you go in, you're in a classroom setting.... You're not exiting the classroom setting. When really I think there's a lot of benefits to having 'check out spaces'—even if it's just a little calm nook of the room where, if a child gets overstimulated, or if they need to go—like maybe trying to do the learning is a little too under stimulating on their brain, so they need to go over there and—just stim for a little bit. But having spaces where... not even just neurodivergent children, but children... There's so many things that are happening in a growing brain where sometimes you need to go lay face down on the bean bag. And you know, there's a lot of big things in tiny bodies trying to process. I think that's a really important factor."

## Orly

"So I proposed that we would—there's this sensory room in the library—and I was thinking that we could have them in the sensory space, which is a little bit calmer than the regular children's section, and teach them about, I don't know, like breath control, or stretching, or, like, I learned like the tapping thing that you're supposed to slow down,

take your breaths, and find a way to get through what's making you so anxious without acting out?"

Teacher One

“Again, I know I keep bringing it back to executive functioning but they're really intertwined with everything we're talking about, because really what it comes down to is response inhibition, and sustained attention. So response inhibition is the ability to control your impulses, so those are the children who are more hyperactive, and sustained attention is distractibility, so those children tend to be very distracted. And interestingly, when a child has medication to cope with those difficulties, it's usually stimulants for both hyperactivity and distractibility. So, I think like a quick burst of energy to get that stimulation actually fulfills that need. So building in like some sort of movement break—that's not disruptive to the classroom environment—for the child like that... [for the individual] or for the class. It could be, “okay, we've been sitting for 15 minutes...” I also think sitting for 40 minute periods is not ideal for a classroom structure... that bit of jumping jacks or push ups or something... can fulfill that need more than a toy.”

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### **Direct Responses to Prompts**

There were three prompts during the interview that encouraged participants to give a clear answer or answers as opposed to other prompts that encouraged a more lengthy response about one's experience or opinions. Educators were asked to list three hopes they have for their students outside of academics. Educators and young adults were asked to give a definition of “neurodiversity” or “neurodivergence.” Educators and young adults were asked to suggest three topics for a neurodiversity program to cover.

Below they are written about in the order they were asked in the interviews, hopes, definition, then suggested topics. That said, only hopes for students and suggested topics were

used directly in the development of program goals. The analysis of definition themes were used specifically to consider topics that would not be covered.

### ***End of Year “Hopes” for Students***

The first question educators were asked in the interview was, “beyond academics, what are the top 3 things you hope your students leave with at the end of the year?” This prompt was critical to program development as it ensured that program goals, structure and content would align with and enhance educators' work with students. Educators did not receive this question prior to the interview and the placement of this prompt was purposeful. I started the interview with it in order to capture educator sentiments before introducing the topic of neurodiversity, which could have biased their answers based on subject matter discussed.

To identify themes related to this prompt, I pulled responses from clean educator interview transcripts. This resulted in a list of 18 “hopes” across the 6 participants. The three high level themes for educator “hopes” were for students to be confident and independent learners (9 responses), to create a safe, connected and caring community (6 responses) and for students to be able to communicate about their needs and advocate for themselves (3 responses). Below are the categorized responses from educators. If an educator gave more than one answer related to a single “hope” those responses are numbered (see Table 8).

**Table 8***End of year “Hopes” for Students*

“Hope” and Educator Identifier	Educator Responses
Confidence	
Teacher One	(1) “Autonomy” (2) “Confidence”
Teacher Two	“Confidence”
Teacher Three	<p>(1) “Confidence is a huge, huge piece. I find that the confidence piece in my students is one of the things that starts to impact them sometimes more than the academics, because when they don't trust their abilities, they really can't complete the task even if they are academically capable. I find that they don't trust themselves... ‘I don't know’ is their immediate reaction for a lot of my students. And they don't want to take that risk because they don't have the confidence.”</p> <p>(2) “...know that it's okay to get something wrong... I have so many students that will say, “I'm sorry” when they get something wrong. They'll apologize. I'm like, “it's okay to get something wrong.” Or they're like, “oh, I'm so dumb” if they spell something wrong like, “you're not dumb. You spelled something wrong.” Then they internalize every mistake as reflecting so badly on that.”</p>
Teacher Four	<p>(1) “...depending on where they are in their journey, a sense of independence, and like owning their own abilities and being like part of themselves.”</p> <p>(2) “That school can be fun and learning can be fun.”</p>
Teacher Five	<i>In reference to 8th/9th graders, “how to read and not reading for the purpose of academics, but reading for the purpose of survival and ability to get along in society. Many of these kids could not read. They struggled just getting around.</i>

How do they take the buses? How do they navigate the subway system? How do they read instructions? How do they fill out a simple DMV form? That was a lot of my focus in terms of, and and what I would like them to have left at the end of the year with just basic not reading necessarily for educational purposes. But I guess so. Reading for functional life purposes.”

School Psych. “Knowing their strengths, their interests, what they're good at, and feeling positive about that.”

#### Community

Teacher Two (1) “Empathy and Kindness”; (2) “Social Skills”

Teacher Four “I think what's really important to me is the classroom, community and culture. So I would love for students to leave with a sense of loving themselves, but also love and care for their community.”

Teacher Five “How do I say this nicely? Just being kinder? Being more tolerant? Let me say that that was a huge thing that I would pray every year that these kids would take away, because it was very difficult for them to tolerate their situations, tolerate their peers around them. You know they were not very considerate of each other's disabilities. You know it was only 10 kids. I'd always have a phenomenal teacher assistant. But even with, and all other kinds of supports in the school. they found it very hard to tolerate anything outside of what they needed or were feeling.”

School Psych. (1) “Feeling safe and comfortable at school”  
(2) “Feeling connected with both peers and with adults—that school connectedness factor is really important.”

## Communication

Teacher One

“Communication”

Teacher Three

“It's being able to advocate for themselves and ask for help when they need it, and explain why they're struggling with something. Because sometimes they don't even know how to explain. They're just saying, “I don't get it.” But sometimes they don't know what they don't get, or so I think a lot of my students being able to actually ask for support, appropriately, and take that step and not just sit there, is a big piece.”

Teacher Five

“A big thing was having them be able to communicate their needs in an appropriate way. That was huge for me. And luckily, many kids, I think, that I taught with over the years were able to leave my class, leave the building and move on to the high school with that basic skill of just advocating for themselves, being able to say, you know, ‘I'm hot,’ or ‘the reason why I come into class pissed off from the bus ride is because the bus driver is smoking from Manhattan to Queens, and it's irritating my eyes,’ as opposed to, they would come in...excuse my language, fucking, lunatic, screaming, and ripping apart our class rooms, and you know we'd spend an hour just diffusing and calming and disrupting the rest of the building classrooms with that, and then eventually the kid was able to say, ‘you know, this is what's going on on the bus ride here,’ Or, ‘this is what happened in my house this morning.’ So being able to advocate was a big one.”

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### *Definition of Neurodivergence*

Educators and young adults were asked about their definition or understanding of the terms “neurodivergence” and/or “neurodiversity.” For young adults, the prompt was, “How would you define ‘Neurodiversity’? What about ‘Neurodivergent’?”. Educators were prompted with, “Are you familiar with ‘Neurodiversity’ and/or ‘neurodivergent’ as terms, concepts, or otherwise? If so, what is your understanding?” Responses to these questions were pulled from clean interview transcripts, resulting in a list of 12 definitions total across 6 educator and 6 young adult interviews. Respondents each gave one response as opposed to giving answers for “neurodiversity” and “neurodivergence” separately.

Responses tended to align more closely with their impressions of the term “neurodivergence” (related to a type of person) as opposed to “neurodiversity” (related to a characteristic of a larger population). Each response was tagged according to the nature of the response resulting in 2 “neurodivergence definition” themes: (1) a deficit or (2) a difference. Deficit refers to a feeling of being lesser than, struggling compared to, or unable to meet expectations of a neurotypical child. Difference refers to neutral statements that discuss the ways that a neurodivergent individual may think, act, or respond differently than a neurotypical child.

Young adult responses were equally split between deficit (3 responses) and difference (3 responses). Educator responses primarily related to difference (5 responses), with only one educator responding with a tone of deficit. The teacher who responded within the deficit theme had not worked in schools in over ten years. This is promising in regards to the direction school’s philosophies are moving in regards to neurodiversity. All but one educator currently work at a school or independently with neurodivergent students. Young adults by contrast were in

elementary school over ten years ago and mainly in general education, with some in gifted programs for periods of time. See examples in Table 9 below.

**Table 9**

*Definition of Neurodivergence*

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Definition Type, Respondent Group, Pseudonym or Educator Identifier, and Responses
<p>Deficit</p> <p>Educator</p> <p>Teacher Five: “It's not like you put on your red pair of pants today. This person didn't choose to wake up and make these noises, or flap their arms or not be able to sit still in the chair or not understand that sarcastic joke you told because they have—you know,—their brain doesn't understand that.”</p> <p>Young adult</p> <p>Kadon: “Neurodivergent is someone whose brain works outside of the way that is considered typical by society, so that is sort of falling under a host of like neurodevelopmental issues, learning disabilities, psychiatric disabilities... going about the world with some sort of condition that deems you as other in the way that you think and understand and process things.”</p> <p>Nash: “Neurodiversity is a divergent brain, a brain that has any sort of abnormalities. Neurodiversity is pretty much any disorder or anything that's significantly impairing the brain's function to the point that cognitively the brain is functioning differently.”</p> <p>Orly: “Neurodivergence is a way of thinking or just a manner of being that is not the same as people who don't struggle with what is considered to be mental illness. It's a difference in brain chemistry or something... I feel different than people who are able to just go about their day without having to take 5 different types of medications or see things through the lens...”</p>

## Difference

### Educator

Teacher One: “The word neurodiverse wasn't a word thrown around in grad school, over 12 years ago. When I was in grad school, I studied special education and I chose to do it. Now it's all wrapped up. There's no special ed option. Like the only option is to do general and special, there's no special. An inclusive mindset is just the norm now.”

Teacher Two: “I have a limited understanding. They seem to be used more commonly now than years prior. To me, it seems like an umbrella term for students with different needs than the ‘typical’ gen ed kid.”

Teacher Three: “Your brain works differently... while most people might take this road to learn how to read, there's a lot of traffic on that road for you. So we have to go around this way so it might take us a little longer. But we're still gonna get to the same path” or, “we have to approach math this way, because your brain thinks differently.”

Teacher Four: “Kids can define that in a lot of different ways. So I wonder if there's a couple of different ways to word it or how you might make it into a visual like so that kids can visualize it or tactile or sensory, using that information. Ask questions: “what can it look like to focus?” and “how do you know when you're not focusing?” or “when you're not using your study habits.”

School Psych.: “The different ways that people's brains work” and encouraging people to embrace those differences and helping kids, especially, understand how their brain works and how, why certain things are easier for them. Other things may be more challenging.”

### Young adult

Finnegan: “Neurodiversity would be people with all kinds of different ways that their brains work. Neurodivergence is just if your brain works differently from what's expected. Maybe you could even call it—with respect and

affection—neuro-deviance, because we don't work in the way that capitalism at least expects us to.”

Kadon: “Neurodiversity: A disorder that prevents the brain from operating as it normally does. Neurodivergent: my brain does not operate the way a typical brain does. This may mean it makes connections differently or processes information differently.”

Remy: “Neurodiversity refers to a person or group of people that think and function differently at a neurobiological level than typically developing people. People who are neurodivergent process, interpret and act on information differently than their typically developing counterparts. I would say that the little pathways that exist in their brain for how to do daily tasks and thinking are not the same pathways in someone who is neurotypical.”

### ***Program Topic Suggestions***

At the end of each interview, I shared the below high-level program description—which was based on my early research. The participants were then asked to give three topics that the referenced program should cover. This resulted in 36 suggested topics total from six educators (18 responses) and six young adults (18 responses).

*The program I am developing will discuss the topic of neurodiversity with both neurotypical and neurodivergent students in grades K-2 program. Content may address the impact of neurodiversity on friendships, emotion, sensory experiences, attention study, habits and subject matter, learning such as math or literacy. Content will be shared with children through collaborative games, books and stories, writing prompts and classroom conversations or games.*

*An example of how neurodiversity might be discussed with children is “everything you do and why you do it is because your brain. Brains from the outside can look the same, but there are certain parts of the brain that aren't so visible, and those little pieces are what make us all different. That quote comes from a book called Kids book about neurodiversity.*

I collected and reviewed educator responses collectively (see table 10), organizing those responses by themes and comparing the responses for each theme to the responses from young adults, as listed above.

**Table 10**

*Topic Area with Educator and Young Adult Responses*

Topic Area and Educator Response and Identifier	Young Adult Responses and Pseudonym
Inclusivity	
Small group work (teacher 1)	Validate that learning can be hard (Finn)
Partner work: ways to listen or contribute (2)	Strategies for focus (Kadon)
Attention and study habits (4)	Autonomy of choice (Madison)
Diversity of disability (5)	Different ways to learn (Nash)
What does diversity mean? (5)	Calm nook for when overstimulated (Nash)
Being a flexible thinker (Psych)	Everyone learns differently and at different paces (Remy)
Identity	

Literature (teacher 1)	See themselves/peers in stories (Finnegan)
Find your strengths (3)	Advocating for yourself and being proud of your neurotype (Kadon)
Academics vs athletics vs. art (3)	Sensory sensitivity (Madison)
Parent component: so parents know how to talk to kids (3)	Basic understanding of the brain (Madison)
	Books with ND main characters (Orly)
“Who am I? Finding positives (psych)	Coping mechanisms (Orly)
Social norms and alternatives: e.g., non-verbal signals (psych)	Identifying your emotions (Remy)
	Physical activity (Orly)
Connection	
Community time (teacher 1)	Friendship (Finnegan)
Playing games: taking turns, winning/losing (2)	Making friends (Kadon)
Unstructured time: Ways to socialize or be by oneself (2)	What friendship looks and feels like (Nash)
Empathy (4)	Ways to show and cope with emotions in productive ways (Remy)
Friendship (4)	
Teacher Workshops (5)	

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## DISCUSSION

### Neurodiversity-Affirming Classroom Practices

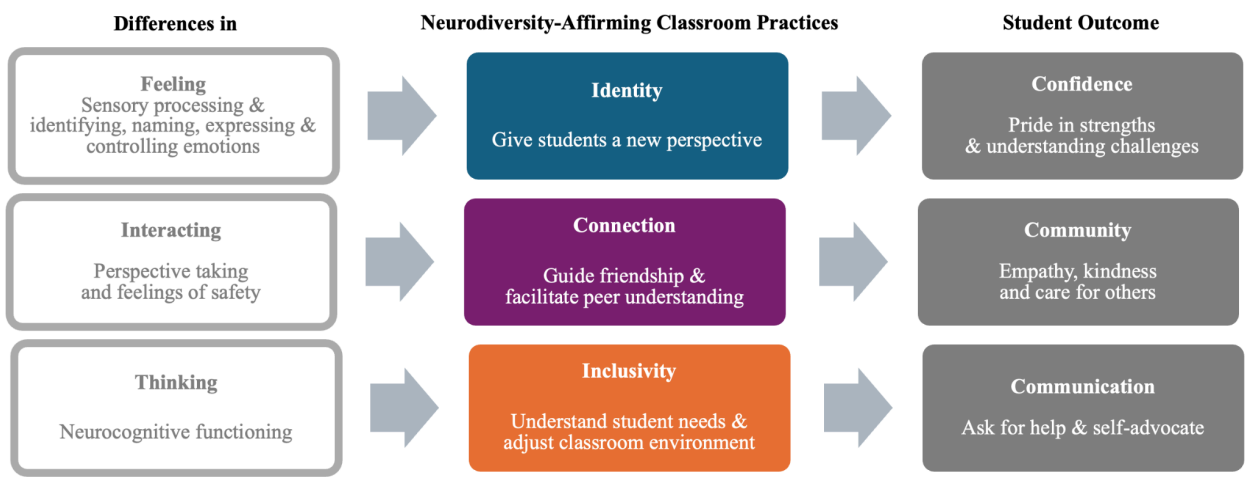
In the introduction I discussed some of the neurological functions that take priority in a child’s brain before that child can prioritize learning. These were: feeling of senses and emotions, interacting with others, and thinking (Rogers & Thomas, 2022, p. 10). Because of differences related to one or more of these areas, neurodivergent children may experience school in a different way than a neurotypical student, often making it more difficult for them to learn than

their peers. For example, (1) sensory processing and interoception differences may make a typical classroom feel overwhelming, (2) less developed theory of mind and differences in neuroception can make a child feel misunderstood or rejected by peers, (3) differences in inhibition or working memory can make paying attention to the teacher or focusing on individual work more difficult, or (4) differences in verbal reasoning or understanding of mathematical concepts can relate not only to underachievement, but also mental health concerns. This research has given us a window into how classrooms could adapt to support children in these areas.

This research found that outside of academic performance, educators' hopes for all young students could be categorized as the ability to communicate with teachers about their needs, a sense of safety in their school community, and feelings of confidence in themselves. A neurodiversity-affirming classroom would be one that helps students succeed in these areas. Alongside those “hopes” or goals for students, this research surfaced actionable topic areas that could help all students reach these goals. In Figure 3 below we can see how the neurodiversity-affirming classroom practices identified through this research could bring positive outcomes to ND students..

**Figure 3**

*How Neurodiversity-Affirming Classroom Practices could lead to Positive Student Outcomes*



Identity From Differences in Feeling to Confidence	Connection From Differences in Interacting to Community	Inclusivity From Differences in Thinking to Communication
<b>Young Adults</b>		
Identifying your emotions	Friendship	Validate that learning can be hard
Sensory sensitivity	Making friends	Strategies for focus
Physical Activity	What friendship looks and feels like	Autonomy of choice
Books with neurodivergent main characters	Ways to show and cope with emotions in productive ways	Everyone learns differently and at different paces
Basic understanding of the brain		Calm nook for when overstimulated
Coping mechanisms		Different ways to learn
Advocating for yourself and being proud of your neurotype		
See themselves and peers in stories		
<b>Educators</b>		
Literature	Community time	Small group work
Social norms and alternatives (e.g., non-verbal signals)	Unstructured time: ways to socialize or be by oneself	Partner work: ways to listen or contribute
Academics vs. athletics vs. art	Teacher workshops	Attention and study habits
Parent component: how to talk to kids	Empathy	Diversity of disability
“Who am I?” Finding positives	Friendship	“What does diversity mean?”
Find your strengths	Playing games: taking turns, winning/losing	Being a flexible thinker

### ***Identity: From Feeling Differently to Confidence***

In The Brain’s Hierarchy of Priorities, feeling senses and feeling emotions were two critical milestones on the path towards learning (Rogers & Thomas, 2022, p. 10). These areas of difference were also mentioned frequently in interviews. Madison’s crying in the cafeteria went unnoticed because of their perfect grades. Teacher one believed strongly in the sensory experience of physical activity as a way to help children pay attention and focus on work.

Overall, young adults commonly felt lost when it came to their personal challenges, such as differences in sensory needs or expressing emotions. They wished their teachers could have moved beyond their behavior, to help them understand why they struggled in certain areas (e.g.,

focusing or reading). They would have liked to have teachers acknowledge those differences and explain that they were not at fault for them. Their differences were simply a part of them.

At the same time, educators hoped their students would become confident and independent learners. To bridge this gap between a student who feels misunderstood and one who leaves the classroom as confident in and proud of who they are, young adults and educators suggested several topics: the importance of literature that neurodivergent students can see themselves in, learning about sensory differences, emotional management and the brain, and helping students find their strengths.

These suggestions together embody the topic area of “Identity.” In other words, a neurodiversity-affirming classroom is one that helps teachers understand their students in order to give them a new perspective on who they are. Ultimately that shared understanding is used to help a child build on their strengths, which is also one core tenets of the neurodiversity movement: to acknowledge the positive contributions of neurodivergent individuals (Leadbitter et al., 2021).

### ***Connection: From Interacting Differently to Community***

Another piece of the foundation for learning that can be a barrier for neurodivergent children is the need to “deal with other people” (Rogers & Thomas, 2022, p. 10). In interviews, this concept came up most frequently in discussion of friendship. Young adults spoke about their awareness of social differences and disappointment now as they look back on how they were treated by peers who they believed to be their friends. Young adults wished they would have understood more literally how a friend acts and that their neurotypical peers were taught to be a friend and respect their classmates. Overall, young adults struggled to make, keep and understand the intentions of friends.

Educators also mentioned the importance of friendship along with empathy. They thought that students should be given opportunities to interact and work together and teachers would benefit from scripts to help them work through conflict between students. Ultimately, their hope for students was that they develop a sense of community within their classroom.

Bringing together these suggestions from both young adults and educators, the topic of “connection” appeared. In other words, a neurodiversity-affirming classroom is one that helps students access positive friendships, facilitates understanding between peers, and promotes healthy interactions between students. Strong community connections could also potentially reduce the stigma of difference that Vygotsky saw as compounding disability (Smagorinsky, 2014, p. 19).

### ***Inclusivity: From Thinking Differently to Communication***

The final priority that must be met before students can learn is thinking (Rogers & Thomas, 2022, p. 10). For ND students, there are many areas of neurocognitive differences that can prevent them from learning in an environment meant to support a neurotypical student. They may have differences in processing speed, working memory capacity, inhibitory control, verbal reasoning and/or understanding of mathematical concepts. In interviews, young adults talked about, at least in hindsight, an awareness of their learning differences. In addition to struggling with executive functioning and subject matter learning, they were also called out by peers and teachers in negative ways. For example, Finnegan said:

I had trouble focusing in general, but especially in math, and my teacher told the kid next to me to just give me a poke with his pencil if I seemed like I was zoning out, so then the responsibility was put on this other kid to basically herd me like a sheep.

Young adults and educators mentioned three topics related to neurocognitive differences that they would like to see within a neurodiversity-affirming classroom or curriculum: (1) support with executive functioning (e.g., Remy wished they knew about “clear storage units”) (2) flexibility in the teaching environment and strategies (e.g., teacher three talked about a student choosing one way that works best for them for learning math, not learning four), and (3) educating students that every person learns differently (e.g., teacher four believed that a child’s eyes didn’t necessarily need to track a teacher to learn). Bringing these suggestions into the classroom could mean giving students practical ideas to build their executive functioning skills, opening a discussion about different ways to learn, and giving students language to discuss their needs. This aligns with educators' last “hope” for students: for them to leave their classroom with the ability to communicate.

Together, these suggestions from interview participants become the final theme: “inclusivity.” In other words, inclusivity is the bridge between neurocognitive differences interfering with a child’s learning and that child being able to communicate their needs in the classroom to adults. Inclusivity is a key term within most diversity movements, such as those for women as well as ethnic and cultural minorities (Tzovara et al., 2021). In the case of the neurodiversity movement it is the ultimate goal, with lower-level goals (i.e., recognizing difference, acknowledging strengths, ending discrimination) ladder up to it (Leadbitter et al., 2021).

Educators are also aware of its importance too. When I looked at the results of the “belonging” survey mentioned in one of my preliminary conversations with school administrators, inclusivity is one of the three takeaways as “what’s next?” (study referenced in private conversation, January 31, 2024). According to the research findings, that goal includes being aware and responsive to difference, affirm identities of students, and give students a voice in their education and listen to it. The suggestions within this topic area meet those goals in regards to neurodiversity.

### **Teacher and Parent Guidance**

Neurodiversity-affirming classroom practices would change the classroom not just for students, but also teachers and parents, without the need to call out any one area of neurodivergence (i.e., diagnosis). This may contrast what some, including some of the administrators I spoke with before my research, think of when they hear “neurodiversity” curriculum (source: private conversations, January 31-February 1, 2024).

Participants in this research, especially young adults, saw past that though. Young adults thought that discussion of diagnoses is unnecessary and risky for children at a young age. They also believed that it was not helpful, and often detrimental, to group students based on intelligence or academic strengths. For these reasons, the focus of any neurodiversity-related programming should not be on the individual—far from it. These findings suggest that a neurodiversity-affirming learning environment is one that focuses on the classroom, community, and strategies for teachers.

Teacher training and parent support were discussed many times during interviews with young adults and educators. They have also been acknowledged in prior research on the topic of making classrooms more neurodiversity-affirming (Astle et al., 2022, p. 411). The school

psychologist talked about the importance of scripts for teachers to help them use consistent language and messaging that is aligned across educators. Teacher three spoke about the importance of partnerships between the school and parents to support the needs of individual students. Kadon and Orly were grateful that their parents acknowledged their differences in order to help them get the support they needed inside and outside of school. Nash spoke about teachers needing to be able to look out for “red flags” and not assume that every child is neurotypical.

These interview excerpts emphasize that parents and educators must understand how neurodiversity-affirming practices are beneficial to students. Both groups would play a critical role in a classroom transformation. Students look to teachers at school as much as they look to parents at home. Without both groups scaffolding children’s learning, any neurodiversity-affirming classroom practices introduced would just remain conceptual ideas.

As discussed in my literature review, students’ diagnoses can at times be disempowering to teachers. These neurodiversity-affirming practices are meant to emphasize teacher’s natural abilities to support their students (Astle et al., 2022, p. 411) and would hopefully help parents do the same. That said, teachers and parents are also “students” of a sort in this process. They need to be guided through the same topic areas. Therefore, classroom teachers should not be the leaders in education on this topic. Instead those leading any effort to bring neurodiversity-affirming classroom practices into schools must be neurodivergent themselves. This brings us back to the foundational concept at the core of the neurodiversity movement, that the “atypical among a society provide the different perspectives needed to generate new ideas and advances, whether they be technological, cultural, artistic or otherwise” (Botha et al., 2024, p. 2). In this case those advances are in education, they are within reach today, and neurodivergent individuals must be leading the charge.

## CONCLUSION

This project has identified three key practice areas that can be used to begin the process of making classrooms neurodiversity-affirming. Moving beyond this research, I have begun to develop a curriculum that could introduce these practices into classrooms. The program would be brought into classrooms in the form of four 45 minute sessions across a school year. The program brings to life the topics suggested by young adults and educators in this research in the form of student activities and discussions, parent take-homes and professional development programming for teachers. The curriculum and all content within it would be further developed and ultimately taught by neurodivergent individuals (e.g., a psychologist who is dyslexic, occupational therapist with ADHD, or an autistic teacher).

Identity, connection and inclusivity are at the core of the program, with modules built around executive functioning, friendship, leadership, and learning environments. The activities are meant to get students moving, working together, and reading literature with neurodivergent main characters with discussions that encourage all students to voice, draw, write, or build their experience. Next step will be to work with neurodivergent individuals to ensure the program meets its goal to begin bringing neurodiversity-affirming practices into schools. Following that process, I will work with teachers to ensure the program is realistic to bring into classrooms and aligns with their existing teaching strategies. Once our initial program development is complete, we will design and run a pilot test.

The practices suggested in this paper are just one step towards much larger societal change. While this research could influence the practices or policies in one classroom, at one school or in one district, a far greater and unified effort would be needed to bring these ideas and

changes to larger societal practices and government policies. The neurodiversity movement has been successfully pushing in this direction, and has made considerable progress in the past 25+ years, however we have a ways to go towards removing the stigma around neurodivergence and changing the “context” in which neurodivergent and neurotypical children learn and grow together.

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