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District 75 Redesigned for Students with Autism Spectrum Disorder

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By

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Abstract

This paper is intended to analyze what is currently offered by the New York City Department of Education, and District 75 (D75) school programs, to students with moderate to severe autism spectrum disorder (ASD) and their families. Changes to District 75 programming, based on current research, could vastly improve educational outcomes for students with ASD. Individuals on the autistic spectrum have been historically underrepresented, under-resourced, and underestimated. This paper highlights an educational and social justice need for change. Using the framework that analyzes race and ability called Dis/ability Race Studies (DisCrit), educators and administrators will come to understand that disability classifications are often based on professional judgment that is subjective, and, therefore subject to the influence of bias and cultural misunderstandings. As educators and administrators, the goal is to educate students with ASD in a student-centered environment with the presumption of competence. A sample will be provided that will examine what is currently available in the five boroughs of New York City and why change is needed within the currently established programs. Analysis of the long-term effects on students, if they are not given an education that is tailored to their needs, is included, as well as what the most appropriate education would be for students with ASD. Additionally, I will provide a blueprint for a new school program that is science and research-based for ASD students using the Universal Design to Learning (UDL) framework, best teaching practices, and student and family-centered policies, which can be adopted by the New York City Department of Education for all District 75 schools that educate children on the autistic spectrum.

Dedication

I dedicate this thesis work to my twin daughters, Kiara and Izabella. The day I was told you both had autism spectrum disorder is the day I looked into your eyes and saw my purpose in this life. I dedicate this thesis to my husband, Rafael. You have encouraged me, hugged me, loved me, and given me words of affirmation throughout this whole process to assure that I reach every goal I have set for myself. You are my best friend and truly my life partner. I dedicate this work to my firstborn, my son Geordie. You were my inspiration to become a special education teacher and you inspire me every day to be a better version of myself. To my last born, my daughter Rieley. Thank you for the strength you gave me through all your little hugs and kisses. With all my heart and all my love.

Lastly, I dedicate this to every person in the world with autism spectrum disorder.

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Introduction

Focus of Inquiry

The idea for this study started from my career at the Department of Education within District 75 and having twin daughters on the autistic spectrum within the same school system. District 75 educates students with moderate to severe autism spectrum disorder (ASD). Autism spectrum disorder is a neurological and developmental disorder (National Institute of Mental Health, 2022). Individuals with ASD do not have one set of symptoms, but overall, people with ASD have difficulty interacting with others, communicating, learning, and behaving as prescribed by societal norms. Children and adults with ASD also have restricted interests and repetitive behaviors, and symptoms that affect their ability to function in school, work, and other areas of life (National Institute of Mental Health, 2022). Individuals of all genders, races, ethnicities, and economic backgrounds can be affected by ASD. ASD is a lifelong disorder and does not have a "cure", but therapies and services can improve a person's daily functioning (National Institute of Mental Health, 2022). Students with ASD and their families are required to receive a free and appropriate education that children on the spectrum are entitled to through the Individuals with Disabilities Education Act (IDEA, 2004). Congress recently amended the IDEA through Public Law 114-95, the Every Student Succeeds Act, in December 2015. In the law, Congress added, "Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities" (IDEA, 2022).

But does free and appropriate education mean that ASD students will receive the best education possible based on scientific evidence of how ASD students learn so they can be challenged and meet their greatest potential? My research has shown that District 75 has not provided that consistently across all of its school programs. IDEA (2004) says "free and appropriate" but "best" has never been in the equation. In the 2017 Endrew F. case, the Supreme Court determined that students are entitled to more than a *de minimus* education. Students have the right to meet "challenging objectives" and make progress. (Turnbull et al., 2020, p. 20). It is critical to ASD children's quality of life to receive an education that meets all their needs.The succeeding research addresses the need for District 75 schools to reevaluate and update their approaches to the autistic students they serve, by providing the framework of a scientific and research-based, District 75 program that serves students with moderate to severe autism and their families.

Reasoning and Particular Bias

Autism spectrum disorder (ASD) affects 1 in 44 children in the United States today (Braun et al., 2018), an increase from previous data. Research on what is currently available in New York City for children with ASD is critical because change is happening in the world but there are individual communities and populations that are still getting left behind. Autistic students need to thrive and can thrive if educators continuously reflect on their pedagogy and practices, communicate and support the families of students, and always have the presumption of competence which, "in light of the pessimism that surrounds autism and the intellectual abilities of persons so classified, to presume competence is to step outside of conventional theory and practice" (Biklen & Burke, 2006, p. 167).

Historically, people with a disability have been looked at as less than capable and the DisCrit framework points out the ways in which race and ability are socially constructed and interdependent as racism and ableism often work together (Annamma et al., 2013). This framework stems from the history of scientists attempting to prove that African Americans have lower intelligence than their caucasian counterparts. Throughout the nineteenth century, this notion continued and evolved with a claim that physical attributes were the basis of, "intellectual, social, and moral growth. Black and brown bodies were viewed as less developed than white bodies, more 'primitive', and even considered sub-species of humans…used to justify slavery, segregation, unequal treatment, violence, and even murder" (Annamma et al., 2013, p. 2). The historical beliefs about race and ability based on white supremacy have, over the years, bled into our special education system up until our present day. Self-contained, special education classes have always had a higher percentage of what is considered the non-dominant racial or ethnic groups (Annamma et al., 2013).

DisCrit theory is important to this paper because educators and administrators need to understand that disabilities are clinically determined and based on professional judgment that is subjective. Whether the differences are physical, cognitive, or sensory, determinations are made on a societal interpretation of what signifies a disability (Annamma et al., 2013). African American students are three times as likely to be labeled intellectually disabled, two times as likely labeled as emotionally disturbed, and one and a half times more likely to have a learning disability. Latino, American Indian, and Native Alaskan students are also disproportionately represented (Annamma et al., 2013). These facts alone are evidence that race and perceived ability, or lack thereof, were and still are connected within our educational system, although it is not as evident to society today as it used to be because the educational system today exhibits this,

"albeit in much more subtle ways" (Annamma et al., 2013, p. 3). The DisCrit framework points out the ways in which race and ability are socially constructed and interdependent as racism and ableism often work together.

The DisCrit framework and my personal observations and experiences are the reason this research is pertinent to the special education community. It is not just about a good special education program, but developing a program for the autistic population that assures, "we do not lose sight of the most vulnerable population of dis/abled students of color. These students have historically been among the first to fall through the cracks, as they do not and cannot fit rigid norms imposed upon them and are now even considered a liability" (Annamma et al., 2013, p. 22).

There is a personal component to my reasoning for this study as a Black educator. This study addresses needs that seem to have been forgotten about in mainstream education. As a parent to Black autistic daughters as well as an educator to autistic children, I feel a calling to teach in low-income communities of color, within programs that educate autistic children, and where teaching posts can be especially difficult to fill (Western Governors University, 2020). Among non-white students, there are disparities in access to the identification of and services for ASD up until the present day (Braun, 2018), which makes it critical that all District 75 programs have a blueprint for success for children with ASD from all backgrounds.

Glossary

Activities of Daily Living (ADLs) also known as Daily Living Skills (DLS)- program that includes basic skills needed by people with disabilities to function independently (NYC Department of Education, 2022). Refer to a big range of personal self-care activities throughout a person's daily life in all aspects of their life (home, school, work, and community), (Stabel, 2013).

Adaptive functioning- an individual's ability to care for self and function independently (Stabel, 2013).

Annual Review- IEPs must be updated at least once a year in a meeting with parents called an annual review. (NYC Department of Education, 2022).

Applied Behavior Analysis (ABA)- a type of therapy for individuals with autism spectrum disorder (ASD) that target / elicit behavioral modifications through highly intensive and structured trials where adult-chosen stimuli are repeatedly shown to induce targeted behavior" (Grigorenko et al., 2019).

Augmentative and Alternative Communication (AAC)- is any technological device or system that can help adults and children with autism communicate, often using speech-generating devices (SGDs) that can be operated with the hands, eyes or even a tilt of the head (Welch, n.d).

Autism Spectrum Disorder- Autism spectrum disorder is a neurological and developmental disorder. Major effects can be difficulty interacting with others, communicating, sensory and stimuli seeking, restricted interests, repetitive behaviors, and symptoms that affect the ability to function in school, work, and other areas of life ((National Institute of Mental Health, 2022).

Behavioral Skills Training (BTS)- a multicomponent approach that implements four teaching techniques, instruction, modeling, rehearsal, feedback, and next steps if needed (Leaf et al., 2015)

Dis/ability Race Studies (DisCrit)- combines Critical Race Theory (CRT) and Disability Studies (DS) to form a new theoretical framework that analyzes race and ability (Annamma et al., 2013).

Discrete Trial Training [Teaching] (DTT)- follows a guideline that shows progress within data collection for 8-10 teaching sessions. With the data, it is determined if there is evidence of skill acquisition or lack of progress within a time frame. With the data collected, a determination of continuation of the skill or reconsideration is determined. Each teaching session consists of five parts (Ferraioli et al,. 2005).

English as a New Language (ENL)- instruction for students who have a home language that is not English (NYC Department of Education, 2022).

Individuals with Disabilities Education Act (IDEA)- a law that "makes available a free appropriate public education to eligible children with disabilities throughout the nation and ensures special education and related services to those children" (IDEA, 2004).

New York City Department of Education, District 75 (D75)- schools that provide highly specialized instructional support with special classes of the following ratios, 12:1:1, 8:1:1, 6:1:1, and 12:1:4 for students who exhibit significant challenges, such as autism spectrum disorders, significant cognitive delays, emotional disturbances, sensory impairments, and multiple disabilities (NYC Department of Education, 2022).

No Child Left Behind Act of 2001 (NCLB)- signed into law in January 2002, outlines how all children are required to have a fair, equal, and significant chance to receive a high-quality education with the expectation that students with disabilities, will have annual yearly progress and perform at a "proficient" level when given high-quality education (NCLB, 2002).

Scientific-based research (SBR)- practices that, "have met rigorous peer review and other standards and that, when consistently and reliably applied with fidelity" (Simpson, 2005, p 140), and have demonstrated over a period of time, positive outcomes.

Structured Teaching (TEACCH)- a teaching method that involves creating a classroom environment with a specific physical structure, schedules for the sequence of activities, work systems, and visuals highlighting the entire structure and directions of tasks (Howley, 2013).

Teaching Interaction Procedure (TIP)- is systematic and has six steps, labeling and identifying the skill to be learned, providing a rationale, targeted skill, teacher model, the student role-plays, and feedback is given (Leaf et al., 2015).

Pivotal Response Training (PRT)- stems from ABA therapy, teaching children with autism behaviors that improve their independence in the world. Focuses on four aspects of functioning: motivation, self-initiations, responding to multiple cues, and self-management (Verschuur et al., 2014).

Presume Competence- understanding ability does not mean potential, believing that any student with a disability has the potential to develop their thinking, learning, and understanding (Biklen, Burke, 2006).

Related Services- "developmental, corrective, and other supportive services as are required to assist a student with a disability and include speech-language pathology, audiology services, interpreting services, psychological services, PT, OT, counseling services, including rehabilitation counseling services, orientation and mobility services, evaluative and diagnostic medical services to determine if the student has a medically related disability, parent counseling, and training, school health services, school nurse services, school social work, assistive technology services, appropriate access to recreation, including therapeutic recreation, other

appropriate developmental or corrective support services, and other appropriate support services and includes the early identification and assessment of disabling conditions in students" (New York State Education Department, 2011).

Sensory integration (SI) theory- the understanding that sensory processing disorder (SPD) stems from neurological processing and integration of sensory information disrupting the construction of purposeful behaviors (Pfeiffer et al., 2011).

Sensory processing disorder (SPD)- common in students who have ASD. SPD often exhibits behaviors that show difficulty regulating responses to certain sensations and stimuli. Self-stimulation can occur to compensate for a lack of sensory input or to avoid overstimulation (Pfeiffer et al., 2011).

Social Development Intervention (SDI)- an ASD Nest Program, the evidence-based curriculum used by teachers and related service providers to help students improve social functioning skills and is designed to be taught in small groups (New York University (NYU), Steinhardt, 2022).

Social Stories- describes social situations in book form and helps identify the behaviors needed (Crozier, Sileo, 2005).

Three-Year Evaluation- A reevaluation of a student's IEP must be completed once every three years unless the parent and the DOE agree in writing that it is not necessary. This includes a reassessment of all evaluations and assessments previously completed when the student's IEP was first written (NYC Department of Education, 2022).

Transitional Services- activities that aim to improve academic and functional skills to assist in the movement from school to post-school activities, for students graduating from high school (NYC Department of Education, 2022).

Transitional Planning- a results-oriented process that focuses on improving the academic and functional performance of a child with a disability when a child is moving from school to post-school activities. These activities can include postsecondary education, vocational training, integrated employment, continuing education, independent living, and community participation (IDEA, 2004).

Travel Training- "providing instruction, as appropriate, to children with significant cognitive disabilities, and any other children with disabilities who require this instruction, to enable them to develop an awareness of the environment in which they live, and learn the skills necessary to move effectively and safely from place to place within that environment (e.g., in school, in the home, at work, and in the community)" (*Sec. 300.39 Special Education*, 2017).

Universal Design for Learning (UDL)- a science-based approach to lesson planning and classroom environment, for educators, to guide their practice and lesson planning (Izzo, 2012).

Vocational Education- work-based training that includes, direct relation to, "the preparation of individuals for paid or unpaid employment, or for additional preparation for a career not requiring a baccalaureate or advanced degree." (*Sec. 300.39 Special Education*, 2017)

Methodology

This study sought to analyze what is currently offered by the New York City Department of Education, District 75 school programs, and the ASD Nest Program, a partnership between the DOE and the New York University Steinhardt School of Culture, Education and Human Development. Data collected consisted of quantitative and qualitative data. Data collected included, a sample of what District 75 (D.O.E., 2019), and the ASD Nest (New York University (NYU), Steinhardt, 2022), schools currently offer, including each program's pedagogy, mission/vision statement, curricula, daily schedule, related services available on-site, parent programs, supports, and experiences, demographics, and staff experience. The District 75 school programs chosen were based on the diverse visions and mission statements each program offered. One elementary, junior high, and high school, District 75 school program was selected from each borough. That is a total of fifteen, District 75 school programs included in the sample used for this study.

A thematic and discourse analysis of what is currently available will show an inconsistency in providing students with moderate to severe ASD the best quality education that meets their needs. This includes diversity within school staff, curricula used for ASD students, related services provided for students and their families, and the need to provide a system for ASD students to have the ability to independently function and advocate for themselves. Results shed light on an educational and social justice need for change. Concluding the research is the development of a self-contained school program that is designed with the most up to date, scientific and research-based teaching practices and curricula, so educators and administrators can provide ASD students with an optimum free and appropriate public education (IDEA, 2004), possible.

Data Analysis

Introduction- District 75

The New York City (NYC) Department of Education (DOE) provides families with children that exhibit significant challenges, with highly specialized school programs under District 75. District 75 has school programs in every borough with classroom ratio (students:teachers:paraprofessionals) sizes of 12:1:1, 8:1:1, 6:1:1, and 12:1:4 (NYC Department of Education, 2022). Significant challenges as described by the NYC Department of Education (2022) include autism spectrum disorders, significant cognitive delays, emotional disturbances, sensory impairments, and multiple disabilities. Within District 75, home and hospital instruction is provided to children who are emotionally or medically unable to attend school, or in instances that a child is awaiting placement in a school, but there is no available seat for a period of time (NYC Department of Education, 2022). Other services provided by District 75 school programs are English as a New Language (ENL), Travel Training, Activities of Daily Living (ADLs), and Vocational Programming, which is a work-based training program (NYC Department of Education, 2022). Also provided are services for families whose children are getting ready to graduate from high school, called transitional service coordination. Transition services are activities that aim to improve academic and functional skills to assist in the movement from school to post-school activities, for students graduating from high school (NYC Department of Education, 2022). For parents, District 75 offers services that are required to be on a student's Individualized Education Plan (IEP), a legal document that outlines a particular child's educational and functional needs (NYC Department of Education, 2022). These include Parent Counseling and Training, which helps parents understand the special needs of their child (NYC Department of Education, 2022) and the IEP process. Within this study, I will focus on the services District 75 provides students with autism spectrum disorder (ASD).

Student Resources

Based on IDEA (2004), every child with a disability must receive their education with their nondisabled peers to the maximum extent appropriate, defined within the law as the least restrictive environment (LRE) requirement. LRE is defined under the IDEA law (2004). The law outlines the requirements for students to be placed in a specialized school program. LRE requirements state, “special classes, separate schooling, or other removals of children with disabilities is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily” (Sec. 300.114 LRE requirements, 2017). A District 75 school program in Staten Island, New York, included LRE in its mission statement saying, “Our mission is to create programs that afford every student with a rigorous, equitable, and positive learning experience. The purpose is to provide opportunities that will enhance student performance, as well as, to move students toward a Least Restrictive Environment (LRE). We provide multiple options to achieve LRE, specifically: Day Treatment; Community Based Instructional Programs, Work Study, and full-time General Education Inclusion (Intermediate and High School). We believe that all children have the potential to succeed” (D.O.E., 2019).

With laws put into place to assure students with special needs are educated with the same equality as their peers, to assure that each student's needs are met academically and based on daily life skills needed, the IEP is created for each student and follows them throughout their public school years. Included in all IEPs are each student's present levels of performance, which include current school performance, evaluation, academic achievement, social development, physical development, management needs, measurable annual goals for content areas, life skills, and progress reports for parents (NYC Department of Education, 2022). Also included are recommended special education programs and services **(**services required to access, participate

and progress in the general education curriculum), the extent of participation with students without disabilities in general education classes and other school activities with non-disabled peers, if students will or will not participate in state and district-wide assessment, and transition services that are included on the first IEP that will be in effect when 15 years old (NYC Department of Education, 2022). Transition services, required to start at 15 years old, are "a coordinated set of activities, services, and supports that will support your child's movement from school to post-school life with goals of education, employment, and independent living as appropriate" (NYC Department of Education, 2022). IEPs must be updated at least once a year in a meeting with parents called an annual review. A reevaluation must be completed once every three years unless the parent and the DOE agree in writing that it is not necessary. This is called a Mandated Three-Year Reevaluation (NYC Department of Education, 2022).

With these requirements by law, District 75 is required to provide an education that will enable student progress and eventually lead them to an inclusive environment with their "non-disabled" (IDEA, 2004) peers. Schools are not required to use specific teaching practices and specialized curricula designed for autistic students but autistic students need more than a specialized IEP; educators and administrators need resources to provide students with a learning experience that allows them to process what they are learning.

Students with autism spectrum disorder require systematic prompting, repeated opportunities to practice, instructional strategies, and systematic prompting that is in unison (Hunt, et al., 2020). Students on the autism spectrum also require instruction on activities of daily living due to ASD having an effect on social interactions with others, communicating, learning, and behaving to the norm of society (National Institute of Mental Health, 2022). Another requirement District 75 schools have is based on the No Child Left Behind Act of 2001

(NCLB) which was signed into law in January 2002. The NCLB law is an attempt to make sure that all children have a fair, equal, and significant chance to receive a high-quality education (No Child Left Behind [NCLB], 2002). Within NCLB, outlined is an expectation that students with disabilities will have annual yearly progress and perform at a "proficient" level when provided with high-quality education (NCLB, 2002). That is why the IEP is a legal document that needs to be updated annually by each student's school-based support team.

With the NCLB (2002) requirements, an effective educational program uses effective educational practices developed from scientific-based research (SBR). Scientific-based research is defined as practices that, "have met rigorous peer review and other standards and that, when consistently and reliably applied with fidelity" (Simpson, 2005, p 140), and have demonstrated over a period of time, positive outcomes. Dependence on interventions and curricula that use unproven methods and encourage, "unhealthy, unrealistic, and improbable expectations" (Simpson, 2005, p. 141), can cause regression and/or no progress for students with ASD.

The reasoning for this study is to outline a solution, identifying and using science-oriented, evidence-based teaching practices (Simpson, 2005), also known as scientifically based practices. Scientifically based practices include, "products and materials validated by means of research designs that use random samples and control and experimental groups" (Simpson, 2005, p. 142). Recommended teaching practices in this study are SBR practices for students with moderate to severe autism. Recommended curricula in this study are based on scientifically based practices for students with moderate to severe autism.

Based on research from a small sample of District 75 self-contained school programs, what is currently available, and the reasoning behind the need for a, "restructured education system" (Simpson, 2005, p 140), changes within District 75 are needed.

Based on a sample of District 75 schools (NYC Department of Education, 2022), only 13.33% of schools described on their website that they use SBR and evidence-based practices to instruct their autistic students. An elementary school in Queens, New York highlights (D.O.E., 2019) two evidence-based practices used Applied Behavior Analysis (ABA) and Structured Teaching (TEACCH). ABA is a type of therapy for individuals with ASD that targets, "elicit behavioral modifications through highly intensive and structured trials where adult-chosen stimuli are repeatedly shown to induce targeted behavior" (Grigorenko, Torres, Lebedeva, Bondar, 2019, p. 717). Howley (2013) describes TEACCH as a teaching method that creates a classroom environment with a specific physical structure, schedules for the sequence of activities, work systems, and visuals highlighting the entire structure and directions of classroom expectations. An elementary school in Manhattan, New York describes their use of TEACCH as observation, applied skills, and task performance (D.O.E., 2019). The school goes on to explain that with structured teaching, teachers are required on a regular basis to "observe, ask students to perform tasks and show his/her mastery of certain academic skills. These may or may not be on grade level however are in accordance with their academic mandates on their Individualized Education Plan (IEP)" (D.O.E., 2019). Later in this study, a list of evidence-based practices will be presented.

With the use of scientific and evidence-based teaching practices such as structured teaching, proven curricula are needed to pair with the teaching practice (Howley, 2013). ABA intervention and structured teaching include targeting behavior skills related to, "engagement, on-task/off-task, on-schedule behaviors, independence, transitions, independently locating activities, attending to activities, organizing tasks and materials, and completing tasks" (Howley, 2013, p. 108) but not academic skills. Curricula paired with scientific and evidence-based

teaching practices will allow for schools under District 75 to meet all the requirements under IDEA (2004) by providing students with ASD an equal opportunity to succeed with the same equal education as their non-disabled peers while assuring all academic and daily life skill needs are met.

Table 1, outlines a sample of the District 75 schools offering specialized curriculums that are designed to teach students on the spectrum that is scientific and evidence-based for ASD students.

Table 1. Sample of the Percentage of District 75 schools offering specialized curricula (D.O.E., 2019)

Subject	Percentage of District 75 schools offering specialized curriculums for autistic students
English Language Arts	33.33%
Math	6.67%
Science	6.67%
Social Studies	6.67%
Social Emotional Learning	0%
Activities of Daily Living	6.67%

Based on the data provided, 86.67% of schools sampled described the use of a standard-based curriculum that was developed for the general education population of students or a nonspecific academic approach with no curricula information available to the public. A D75 school program in Brooklyn, New York, (D.O.E., 2019) states in its mission and vision statement that its goal for students with ASD is, to recognize and develop each student's academic and emotional strengths in order to maximize their potential and foster critical thinking skills independence. This school's vision is to provide a challenging and inclusive educational

environment of equality, opportunity, and access that will enable all students to maximize their potential as educated, healthy, and productive members of a multicultural community (D.O.E., 2019).

Developing independence and being able to live independently in a healthy and productive way is the goal but in my experience as a new teacher in this program in the 2021-2022 school year, it was not a priority to provide teachers with curricula and resources outlined in New York State (NYS) educational standards but designed for ASD students. No priority was given to providing scientific and evidence-based curricula and resources that allow teachers and students to excel in the educational process. Given access to general education curricula and being told to adapt the curriculum is not an effective way of educating students with ASD. NCLB requires students to have access to inclusive education and access to the general education curriculum but also calls for exceptions. The way students with autism learn are the exception. Individuals with ASD need behavioral, psychological, and educational interventions simultaneously and general educational curricula, adapted, are not appropriate (National Institute of Mental Health, 2022). With understanding how students with ASD learn, educators who work with ASD students need to continuously build relationships of security and trust while keeping a presumption of competence because, “in light of the pessimism that surrounds autism and the intellectual abilities of persons so classified, to presume competence is to step outside of conventional theory and practice” (Biklen, Burke, 2006, p. 167).

A D75 school program in Queens, New York, (D.O.E., 2019) states in its mission and vision statement that its goal for students with ASD is that children of all levels of functioning have great potential to learn if the school-based support team provides the appropriate path. This vision outlines that in this school program, there is a presumption of competence. A D75 school

program in Brooklyn, New York (D.O.E., 2019), stated a similar mission statement, to challenge students to achieve their personal best and empower them to become productive, independent members of society. But with the best intentions, this particular program provides similar standard-based curriculums not designed for students with ASD. It is with a true belief that the best intentions of District 75 programs are to, provide our students with opportunities to develop physically, emotionally, and academically in a safe, orderly, creative, and non-threatening environment (D.O.E., 2019) but with a lack of guidance, most District 75 programs are falling short in providing children on the autistic spectrum with a fully appropriate education.

Related Services

Students with ASD are provided with related services, a legal requirement under IDEA (2004). According to the New York State Education Department (2011), related services are defined as a means of developmental, corrective, and other supportive services. These services can include but are not limited to, speech-language therapy, audiology, interpreting, psychological services, physical therapy, occupational therapy, counseling, including rehabilitation counseling, orientation and mobility, and evaluative and diagnostic medical services to determine if the student has a medically-related disability, parent counseling, and training, school health including nursing services, school social work, assistive technology, appropriate access to recreation, including therapeutic, and services required for the early detection of disabling conditions in students.

Included under related services is postsecondary transition planning with vocational training services. Transitional planning is defined as a set of activities that focus on improving the academic and functional abilities of a child with a disability to facilitate the movement from school to post-school activities (Prince et al, 2013). Post-school activities can include but are not

limited to, post-secondary education, vocational education, integrated employment, and independent living (Prince et al, 2013). These services are what ASD students need to be able to live independently, with the same quality of life as their nondisabled peers. Even though these services are required and every District 75 school sampled in this study stated that they provide all related services mentioned, not every child is receiving an appropriate education defined by law.

Another way that the need for District 75 to be redesigned is highlighted is in court proceedings filed by District 75 parents. Parents who participated in the suits are not happy with the current District 75 system and the children of District 75 are the ones suffering the consequences of neglect by the school-based support team that is supposed to assure success, based on court documents. A class-action lawsuit, filed in 2014, claimed the city's education department systemically failed to comply with state and federal laws that require transitional services for special education students (Cheng, 2014). One of the plaintiffs, according to the parents, was never given a vocational assessment or subsequent training to help their child transition after high school. The plaintiff's father stated, “the school system never even disclosed something like that to us -- to let us know that he is entitled to vocational assessment or vocational training,’ said his father, Hossam Khattab” (Cheng, 2014, para 4). The lawsuit continued on to highlight how the New York City Department of Education committed to providing all students, who are at the age of qualification for transitional services, the services needed to ensure every student receives the services needed to achieve desired post-secondary outcomes (Cheng, 2014). These services are crucial for students with ASD to become productive members of the community, but this was not provided in this case and is not provided to every student.

In January of 2021, attorneys in Staten Island, NY, filed a major class-action lawsuit that challenged New York City's, "segregated school system for students with disabilities on Staten Island" (Disability Rights Advocates, 2021, para 1). The lawsuit alleges, "New York City's separate school district for children with disabilities, known as District 75, denies these students an equal education, forcing them into segregated schools and classrooms without adequate resources" (Disability Rights Advocates, 2021, para 1). The lawsuit is not asking for money; instead, the lawsuit seeks reforms. The reform aimed at the Department of Education is that resources are necessary so that every Staten Island District 75 student has the opportunity to attend their neighborhood schools if they choose. The goal of this lawsuit is for New York City to provide more supportive services in Staten Island. The lawsuit continues to highlight current deficits, including unequal access or no access to playgrounds, cafeterias, libraries, electives like music and art classes, and extracurricular activities like clubs and sports teams. Even though no statistics are given, the research done by the Disability Rights Advocates (2021), showed that very few District 75 students graduate with a regular diploma, and Black students with disabilities are overrepresented in segregated District 75 schools. Parents have shown concern and District 75 has been a controversial topic since, "at least 2008, when the Council for Great City Schools issued its City-commissioned report, 'Improving Special Education in New York City's District 75 '"(Disability Rights Advocates, 2021, para 8) According to the report, "the isolation of students [is] more pronounced in the New York City school system than in other major urban school systems known to the team…leaving District 75 alone is not acceptable"(Disability Rights Advocates, 2021, para 8).

With education and disability advocates continuously seeking reforms to District 75 and the City continuously maintaining the segregated District 75 system" (Disability Rights

Advocates, 2021, para 8), continuous evidence of a need for change is displayed. These court proceedings mentioned are evidence that reform is needed and a redesign of District 75 is not just an educational need but a social justice need. According to New York State data as of 2020, only 31 percent of students with disabilities graduated from high school. When looking at the data for students who are educated in a self-contained classroom, the graduation rate has been as low as 4.4 percent in past years (Siegel et al., 2020).

Family Resources

Within New York City public schools, there is a school-based parent coordinator, social worker, psychologist, and/or counselor that supports families in navigating their child(ren)'s educational needs. If a student has special needs, this school-based support team's task is to help families through the process of receiving services and maintaining those services as per the needs of the child(ren). To support the school-based support team, the New York City Department of Education has a team called Family and Community Empowerment (FACE). This team is responsible for developing and supporting parents' voices in New York City (NYC) schools. FACE offers opportunities for leadership, training, coaching, etc., for families. These resources are set up to allow families to have the opportunity to be as educated as possible and have the ability to advocate for their families and themselves (New York City Department of Education, 2022). This program has representatives that oversee every borough in New York City and also for districts 1-32 including, a parent empowerment liaison, a school-based parent leader liaison, and a district-based parent leader liaison. With a school support team for every school district, this program is a great way to bridge the gap between schools and families. FACE also gives schools further assistance in bridging the school and family disconnect that may occur by providing specific parent empowerment, school-based, and district-based liaisons for each school

district in the New York City, Department of Education. The goal is to empower families and help NYC schools with their continuous effort to make all families feel welcome, supported, and heard (New York City Department of Education, 2022). The discrepancy with this team is that there is no specific parent empowerment, school-based, or district-based liaisons for District 75. To verify, further information was requested directly from the FACE team. An explanation provided was, there are two individuals that work with the citywide council of D75 and attend monthly meetings to provide support (Suib A., May 27, 2022). There is also a citywide parent leader liaison that is in contact with the Citywide Council for District 75 (CCD75) to provide support (Suib A., May 27, 2022). With this information, the conclusion is that every District and school has a team of liaisons to go to for support except District 75. District 75 does receive support but while all other Districts, which cover portions of each borough, have three individuals to go to for support, District 75 is not given the same equal support. That conclusion has been drawn due to the fact that District 75 has school programs in every borough throughout New York City and is provided with three individuals to cover an entire city of school programs.

There is another team within the Department of Education that is specifically designed to support families of students with special needs, the Division of Specialized Instruction and Student Support. Within this team, The Beyond Access Series was created (New York City Department of Education, 2022). The Beyond Access Series is workshops that discuss and inform parents about topics related to special education. Most workshops prepare families for Individualized Education Plan (IEP) meetings and understanding the IEP afterward. For new families, there are workshops that introduce the special education process as well as workshops to help families with behaviors as well (New York City Department of Education, 2022). This resource is wonderful for special education families but if there is no information available on

the school level, District 75 families are more likely to not attend these workshops. The school-based support team in District 75 schools should have support and guidance from the New York City Department of Education central offices. This would allow the school-based support team to provide parents with the most up-to-date information, supporting families in receiving and navigating all the resources available while the central office of the New York City Department of Education supports schools. It should be a systematic, collaborative effort.

Collaboration Efforts

Current collaboration efforts within District 75 schools are not consistent. After reviewing the sample of District 75 school websites and what is provided to parents as resources, the results are extremely scattered. A D75 school in Brooklyn has a family corner tab with important forms, IEP information, Related Services information, NYC Department of Education Student Accounts information, and a school-based parent coordinator tab that has the parent coordinators' information, and a family workshop from March 2021 (D.O.E.,2019). A D75 school in the Bronx does not provide families with any information that they can access with a parents resources tab on the school website (D.O.E.,2019). But then another D75 school in the Bronx has parent resources available such as a school website tab dedicated to transition services, a tab for community partnerships with a quote that says, “committed to tapping the community's diverse cultural, social, and intellectual resources to support the learning and development of our families, staff, and students” (D.O.E.,2019), with tabs for a NYC arts program, online art resources, and other community resources, including but not limited to, museums, zoos, and botanical gardens. Also available are enrollment information, parent town halls, Saturday academy, moving up information, D75 parent meetings, virtual workshops that are available throughout the city, a parents schedule tab, useful links tab that includes advocacy,

and parent training (D.O.E.,2019). In a D75 school in Queens, NY, the school makes it clear that parents will only be offered services designated on students' IEPs by stating for parenting counseling and training collaborative services, they will assist parents in, "understanding the special needs of their child, providing parents with information about child development, and helping parents to acquire the necessary skills that will allow them to support the implementation of their child's individualized education program. It is typically provided as part of the program to the parents of children in special classes with staffing ratios of 8:1:1, 6:1:1, and 12:1:4. *These are not adult counseling services and are not intended to meet the personal or educational needs of the parents*" (D.O.E.,2019). What happens to parents who do need personal support and do not know how to navigate and find resources? There needs to be a standard within every D75 school that is a dedication to not only supporting students but students' families that are a part of each school's program. If the caregivers are not in an adequate personal and educational space, how will the child or children, with ASD, of the caregivers be able to have successful daily lives and live a quality life?

Professional Development

Within the New York City Department of Education, teachers are required to collect Continuing Teacher and Leader Education (CTLE) hours, regardless of the number of certificates held that are subject to CTLE (United Federation of Teachers, 2020). Every 5-year period, teachers must complete 100 clock hours of acceptable CTLE. All educators are not required to complete these hours, only educators that hold professional teaching certificates (United Federation of Teachers, 2020). Educators who hold initial, conditional initial, Transitional A, Transitional B, internship, or permanent certifications, do not need to collect CTLE hours (United Federation of Teachers, 2020). The reasoning is that the educators that hold these

teaching certificates do not need CTLE hours due to the fact that they are early in their careers, have recently graduated from college, and have recently taken special education classes. With this understanding, there is still a need for more specialized professional development for first-year educators and educators in the early years of teaching. Within an ASD classroom, there is a need for a more specialized understanding of classroom development, lesson planning, curriculum development, and differentiated instruction based on the needs of autistic students and from personal experience, university classes do not cover all that is needed. Veteran teachers with five or more years in the classroom should also be provided with continuous learning opportunities because, as Dr. Stephen Shore said as an autism advocate and as someone with autism himself, "if you have met one person with autism, you've met one person with autism" (International Board of Credentialing and Continuing Education Standards, 2020, para 2). As veteran teachers continue to educate students with autism, different learning and behavioral strategies will continuously need to be implemented. College and CTLE courses do not cover the broad spectrum of needs that autistic students have. There is great diversity within the autistic spectrum and even though there are common factors of autism such as communication, social interaction, sensory needs, and highly focused interests, it is important for educators to continuously learn about ASD in a specialized professional developmental way as these characteristics blend together differently in each autistic individual (International Board of Credentialing and Continuing Education Standards, 2020).

Within D75, there is a need for continuous professional development for early career, and veteran educators so that there can be a continuous reflection on the approach to students with ASD and the teaching practices used while keeping the mindset that ASD students are competent and can excel when given the right tools. With specialized, continuous professional development,

educators can keep in mind that autism is an extension of the diversity that is already evident to society, which is why some students on the spectrum excel at math and others at arts, sports, or writing, “just like the rest of humanity” (International Board of Credentialing and Continuing Education Standards, 2020, para 3).

Demographics

The New York City Department of Education and District 75 need to also be more mindful of the diversity of educators being brought on for our students with ASD because representation matters. There is a higher proportion of Black children compared with White children classified as having an intellectual disability. ASD has increased from 6.7 (one in 150) per 1,000 children aged 8 years from 2000 and 2002 to 18.5 (one in 54) in 2016 and according to the most up-to-date data information available, 2018, one in 44 children at age eight was estimated to have ASD (Braun et al., 2018). With a steadily increasing number of children being diagnosed with ASD, it is more important than ever to have educators in whom these students can see themselves. Going back to the DisCrit theory, the historical beliefs about race and ability based on white supremacy have seeped into our special education system (Annamma et al., 2013). Looking at the demographic statistics in *Tables 2* and *3*, it becomes even more evident.

Table 2. District 75 Teacher Demographics Sample (D.O.E., 2019)

Borough	*Black*	*Hispanic or Latinx*	*White*	*Asian*	*Native American*	*Native Hawaiian/ Pacific Islander*
Brooklyn	13.5%	9.5%	71.5%	0%/N/A (fewer than 5)	0%/N/A (fewer than 5)	0%/N/A (fewer than 5)
Queens	10.33%	16%	62.33%	6.33%	0%/N/A (fewer than	0%/N/A (fewer than

					5)	5)
Manhattan	14.33%	17%	52.66%	7.33%	0%/N/A (fewer than 5)	0%/N/A (fewer than 5)
The Bronx	24%	31.66%	34%	3.66%	0%/N/A (fewer than 5)	0%/N/A (fewer than 5)
Staten Island	1%	7.33%	83%	1.66%	0%/N/A (fewer than 5)	0%/N/A (fewer than 5)
District 75 Sample Average	12.63%	16.30%	60.70%	3.80%	0%/N/A (fewer than 5)	0%/N/A (fewer than 5)

Table 3. District 75 Student Demographics Sample (D.O.E., 2019)

Borough	*Black*	*Hispanic or Latinx*	*White*	*Asian*	*Native American*	*Native Hawaiian/ Pacific Islander*
Brooklyn	49%	30.5%	18.5%	14%	1%	1.5%
Queens	20%	41.33%	14.33%	20.66%	3.33%	1%
Manhattan	36%	49.66%	7.33%	5%	1%	0.66%
The Bronx	40%	56.66%	3%	2.66%	1%	0.66%
Staten Island	26.33%	30%	59%	17.66%	1%	1%
District 75 Sample Average	34.27%	41.63%	20.43%	12%	1.47%	1%

Based on the school quality reviews of the New York City Department of Education District 75 schools from all five boroughs, sampled for this study, there are 12.63% Black teachers, 34.27% Black students; 16.30% Hispanic or Latinx teachers, 41.63% Hispanic or

Latinx students; 60.7% White teachers, 20.43% White students; 3.80% Asian teachers, 12% Asian students; 1% Native American teachers, 0% (fewer than 5) Native American students; 1.47% Native Hawaiian/Pacific Islander teachers, 0% (fewer than 5) Native Hawaiian/Pacific Islander students (D.O.E., 2019).

Self-contained, special education classes have always had a higher percentage of what are considered the non-dominant racial or ethnic groups (Annamma et al., 2013). African American students are three times as likely to be labeled intellectually disabled, two times as likely to be labeled as emotionally disturbed, and one and a half times more likely to have a learning disability. Latino, American Indian, and Native Alaskan are also disproportionately represented (Annamma et al., 2013). These facts alone are evidence that race and perceived ability, or lack thereof, were and still are connected within our educational system. With D75 having 12.63% Black teachers, 16.30% Hispanic or Latinx teachers, and 60.7% White teachers (D.O.E., 2019), there is a clear lack of representation for the majority of students. When seeing representation in the classroom, "representation means that teachers, principals, and other leaders reflect the demographics of the student body in the schools they serve"(School of Education American University, 2022, Para 1).

Only 20.43% of students in the D75 school system are White, but 60.7% of D75 teachers are White. These numbers are of concern and the New York City Department of Education needs to take note and make specific diversity requirements. Diversity and representation in the classroom for ASD students are as important as in the general education setting because having teachers of color in the classroom affects students of color in several ways, including, boosting overall academic performance, improving graduation rates, increasing aspirations to attend college, and the reduction of the number of absences (Western Governors University, 2020). The

student population will only become more diverse and the ASD student population will only increase as data has shown. Schools across the country are striving to educate their increasingly diverse student populations more effectively by making it a priority to hire a diverse teaching workforce (Western Governors University, 2020), and the NYC DOE needs to follow.

It is important to note that students of color are not the only students to benefit from being taught by teachers of color. “White students reported feeling academically challenged and cared for by their teachers of color, according to the Learning Policy Institute. And when White students are exposed to greater diversity in their elementary and secondary classrooms, they're able to address topics such as bias and racism and gain a deeper level of appreciation for people of different races, ethnicities, and backgrounds” (Western Governors University, 2020, para 8). When discussing how D75 needs to be redesigned, ASD students and the background of the teachers who teach them are a part of that redesign.

Autism Spectrum Disorder (ASD) Nest Program

Introduction

The New York City Department of Education has the potential to provide students with ASD with a high-quality, specially designed education. This is evidenced by the NYC Department of Education's partnership with the New York York University (NYU) Steinhardt School of Culture, Education, and Human Development which created the Autism Spectrum Disorder (ASD) Nest Program. The NYC Department of Education and NYU have an ASD Nest Model that states that the program is fully inclusive and is designed for autistic students who are able to do grade-level academic work when provided with support (New York University (NYU), Steinhardt, 2022).

The goal of the ASD Nest Program is, to partner with public schools to develop a more inclusive culture and advance the development and use of educational practices for autistic students (New York University (NYU), Steinhardt, 2022), but the requirements to enter this program leave out students with moderate to severe autism because of the behavior and special needs requirement limitations. This program does not allow paraprofessionals, teaching assistants who provide assistance to students under the general supervision of a certified teacher (New York City Department of Education, 2022). A student with ASD who needs a paraprofessional usually needs one-on-one or small group instruction, reinforcing behavior through the use of positive behavior support, and daily living skills support such as independent feeding, dressing, and toileting (New York City Department of Education, 2022). Because the ASD Nest program's framework is designed so paraprofessionals are not allowed in the classroom, students with moderate to severe autism will be denied access to this program every time. With that being said, there are parts of this program that can be implemented in D75 schools.

To have a successful program that effectively teaches students with ASD, the Universal Design for Learning (UDL) planning technique and evidence-based instructional methods are needed and are included in the ASD Nest Program framework. The Universal Design for Learning (UDL) framework is a science-based approach to lesson planning and classroom environment set-up, for educators, to guide their practice. The framework includes flexibility in the ways information is presented to students, in the ways that students are required to respond and demonstrate knowledge, and in ways students engage in the academic information presented. For educators, this framework reduces challenges in instruction, provides a framework for accommodation planning, and maintains high expectations for all students (Izzo, 2012). A

student-centered learning environment using UDL with key features of the Nest program will allow for D75 teachers, and ASD students to become successful and foster independent adults with ASD that can navigate the world like their nondisabled peers.

Student Resources

The ASD Nest framework designed a classroom structure where students with autism are in a classroom with general education students that have one special education teacher and one general education teacher. These classes are designed to be smaller and increase in size as students get older. Within the classroom, teachers use a strengths-based model, utilizing positive support strategies, targeted instructional strategies, and specialized social interventions to make inclusion work well for all learners in the classroom. The ASD Nest program and NYC DOE school leaders provide the necessary structures for the strengths-based model that includes, "smaller class sizes, co-taught classes, regular interdisciplinary team meetings to promote consistency across all settings, and strong home-school collaboration" (New York University (NYU), Steinhardt, 2022).

To educate ASD Nest program students, teachers use the New York State Learning Standards as well as the same curriculums offered in DOE schools except for the social-emotional curriculum. ASD Nest teachers use a specialized curriculum for social-emotional development that was designed by NYU called *Social Development Intervention (SDI)* (New York University (NYU), Steinhardt, 2022). SDI is an evidence-based program used by teachers and related service providers to help students improve social functioning skills and is designed to be taught in small groups.

Related Service Providers

In the ASD Nest framework, related service providers receive the same training and have to follow the same guidelines as teachers. Related service providers work closely with ASD students and need the same continuing education as teachers because related service providers are teachers with more specialized sessions and goals needing to be reached. ASD Nest students receive the same related services as students in D75, including but not limited to, speech therapy, occupational therapy, physical therapy, counseling, and transitional services (Siegel et al., 2020).

Family Resources

Within the ASD Nest framework, family engagement is a priority and continuous efforts are made to assist families and treat families as part of the education team. Nest provides a newsletter for ASD Nest parents**,** and parent workshop videos on the main website (New York University (NYU), Steinhardt, 2022). The belief is that schools must establish open and respectful relationships with families so that the school-based support team can serve students to the best of their ability with the whole picture. The ASD Nest programs' social worker or guidance counselor is the assigned liaison between families and the school-based support team, with the requirement to assure that the team is aware of each family's concerns and perspectives, as well as to plan and execute regular meetings to address challenges and to connect families to each other (Siegel et al., 2020).

Collaboration Efforts

Collaboration between staff, and between staff and families, was designed as a priority within the Nest program.The framework includes two teachers per classroom and regular co-planning time built into the daily schedule. Team meetings, including teachers, related service providers, and Nest coaches, are required. These efforts of collaboration are required and

included in the ASD Nest program framework because the program is designed on a philosophical foundation that includes true inclusion, collaboration, understanding of ASD, focusing on strengths, individual support, a therapeutic environment, social development, positive behavior support, and family involvement (Siegel & ASD Nest Program, 2016). With the D75 programs sampled, each school had a separate philosophical foundation and, even though every student with autism learns differently, each student with autism deserves equal paths to success with an educational experience designed with the same commonalities.

Professional Development

Teachers and related service providers that are a part of the ASD Nest program are required to participate in professional development given by NYU or another college that staff is sent to. Training is received in "effective evidence-based strategies" (Siegel et al., 2020, p 15), and is required before starting the school year. Regular professional development is also required throughout the school year. Each Nest site has a Nest coach that continually learns the "latest promising practices and strategies; their job is to help their school's Nest staff deepen their practice" (Siegel et al., 2020, p 15). Teachers and related service providers receive the same training on autism, collaboration, and family engagement. Teachers attend full-day workshops at NYU on relevant topics and all related service providers participate in discipline-specific seminars where best practices are explained by peers and experts in the field (Siegel et al., 2020). After these workshops and training, teachers and related service providers bring back the information learned to the team meetings and share it with colleagues for continuous improvements and professional development.

Activities of Daily Living (ADL) Skills

Introduction

Before beginning to discuss Activities of Daily Living (ADL) skills, also known as "Daily Living skills (DLS)" (Stabel, 2013, p 1), and how they relate to autistic students, it is important to understand what exactly ADL skills are. Activities of Daily Living skills refer to a big range of personal self-care activities throughout a person's daily life, in all aspects of their life (Stabel, 2013). These can include but are not limited to aspects of a person's home, school, work, and community life (Stabel, 2013). When considering how this relates to autistic individuals, adaptive functioning skills are one of the challenges autism brings and an individual's ability to care for self and function independently is a primary consideration when educating individuals with autism (Stabel, 2013). Children's abilities to care for themselves have been found to be a strong predictor of a person's future quality of life (Stabel, 2013). Important daily skills that will allow for independence and care of self like food preparation and personal hygiene, need to be performed on a regular basis and these skills can be difficult for an individual with autism to gain. For this reason, it is extremely important for schools to adopt an ADL program to teach and help students graduate with sufficient adaptive functioning skills.

The Importance of Daily Living Skills with ASD

Being able to take care of personal hygiene, meal prep, and the ability to manage money are important in being able to live independently. For individuals that have ASD, acquiring these daily living skills can determine the quality of life that an individual has (Bal et al., 2015). Attaining daily living skills does not come with automaticity for individuals with ASD. Contributions to this can be the mental age, receptive language abilities, and social-communication abilities (Bal et al., 2015), of individuals with ASD. With these

challenges, daily living skills need to be explicitly taught to acquire significant skills and for these skills to be carried out with success.

In research outlined by Bal et al. (2015), there is an indication that many individuals with ASD exhibit significant DLS impairments relative to their cognitive skills. This is why students with moderate to severe autism need to be introduced to DLS as early as possible with a school-to-home connection. Long-term studies have shown that "individuals with ASD make gains in DLS across childhood and into young adulthood" (Bal et al., 2015, p. 2), so gaining DLS skills in early childhood has been proven successful.

Introducing activities of daily living need to start as early as possible, integrating an ADL program in specialized programs, like District 75, as soon as a student with ASD enters the program. Further research outlined by Bal et al. (2015), explained how daily living skills improved in childhood but then in late adolescence, gaining DLS seemed to become more challenging, suggesting a slowing of skill acquisition over time. A plateau in the ASD group occurred in the age range of the late 20s and it is important to note that the plateau was not due to obtaining mastery of DLS skills (Bal et al., 2015). Overall, individuals with ASD showed progression of DLS from 2 to 21 years of age according to Bal et al. (2015), but even though gains in DLS are made, attainment is significantly affected by early cognitive and language abilities and challenges, as well as the severity of ASD symptoms. With clear evidence that DLS attainment is significant to the lives of people with ASD but takes time to acquire, DLS should be a significant part of an individual's educational program in all age ranges.

<u>What is currently offered?</u>

Deficits in DLS and negative adult outcomes for individuals with ASD have been shown to go hand in hand. There is a link between DLS and the outcomes of employment, education

after high school, independent living, and community which proves that interventions for DLS are needed profusely (Duncan et al., 2018). Currently, ADL interventions in school programs within D75, that educate ASD students, are offered depending on the school program the student attends. There is a legal requirement to provide transitional planning under IDEA (2004). Transitioning planning is a form of ADL. When the Individuals with Disabilities Act (IDEA, 1990) was written, it included postsecondary transition planning for students with disabilities starting at age 16. An amendment to the law was made in 1997 that made a requirement for transitional services to begin at age 15, 14 if appropriate, outlining a need for transition services with a connection to outside organizations. When an amendment to the law was done in 2004, it further refined the requirements for transition students that hold states accountable. Based on IDEA (2004), the transition is a results-oriented process that focuses on improving the academic and functional performance of a child with a disability when a child is moving from school to post-school activities. These activities can include postsecondary education, vocational training, integrated employment, continuing education, independent living, and community participation (IDEA, 2004).

With continuous daily living skills being acquired, when a student with ASD reaches age 15, vocational training is required to be placed on the IEP and begin under the same program as the activities of daily living skills intervention. When students with ASD start vocational education, it is “directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career not requiring a baccalaureate or advanced degree." (*Sec. 300.39 Special Education*, 2017). In research by Prince et al. (2013), young adults with a learning variation are more likely to drop out of high school and/or be unemployed than their non-diagnosed peers. With parents suing District 75 for a lack of transitional services and how

much this can affect students with ASD, this highlights a need for proper transitional programming and interventions that include ADL skills from the beginning of ASD students' school programming up until graduation and beyond. A high school in Manhattan (D.O.E.,2019), highlighted in their vision statement that they provide a rigorous combination of academics, inclusive education, vocationally-based training, cooperative learning experiences, and authentic internship-based community learning programs which is what every ASD student in New York City needs. Vocational-based training in partnership with the communities where ASD individuals live should be the standard. Another D75 program in Brooklyn states in their vision that, all members of the community (ASD students) will be encouraged through their growth and development in today's world, and ends their vision statement by saying, their school community plans for change alongside all community members for each stage of life (D.O.E.,2019).

These visions seem to outline the understanding that daily living skills are important but in further researching these programs, there was no mention of activities of daily living programming. District 75 programs make a point to, "focus on student independence" (D.O.E.,2019), but part of that independence is assuring that students with ASD can take care of themselves at the same developmental stages as their nondisabled peers. A District 75 school in Staten Island, New York vowed in their vision statement to collaborate with all stakeholders (students, teachers, leaders, parents, and community partnerships) to ensure ongoing conversations and decision-making that leaves students at the center (D.O.E.,2019), but if all of the needs of ASD students are not taken into consideration then a student-centered education is not occurring. None of the District 75 schools sampled provided information on an ADL program. From personal experience, certain District 75 school programs do provide ADL programs and others do not.

Sensory Intervention

Introduction

When discussing autism spectrum disorder (ASD), it is important to include sensory processing disorder (SPD). Sensory processing disorder is common in students who have ASD. SPD causes behaviors that show challenges in regulating responses to certain sensations and stimuli (Pfeiffer et al., 2011). For example, a student with ASD might put their fingers in their ears to block out noise that might seem like a tolerable volume. An ambulance passing might be tolerable to individuals without ASD but to someone with ASD, the sounds coming from an ambulance passing can feel like a sensation that is ear-shattering. Self-stimulation can also occur to compensate for a lack of sensory input or to avoid overstimulation (Pfeiffer et al., 2011). A student with ASD might seek certain textural stimuli and sensations such as soft strings in the carpet of the classroom and continuously rub on that string, also referred to as stimming (Pfeiffer et al., 2011). Certain behaviors that have also been correlated with SPD are stereotypical motor movements, aimless running, aggression, and self-injurious behaviors (Pfeiffer et al., 2011). School programs can use the understanding that individuals with ASD need sensory breaks, and allow for these breaks to be a part of the classroom management plan. The goal is to improve sensory behaviors and increase the ability for social interaction, academics, and independence. If a student needs sensory breaks, integrated within the school environment and daily schedule, having a sensory area or room should be integrated into all District 75 programs that educate ASD students. Research done by Pfeiffer et al. (2011), showed support for using sensory integration interventions with significant progress towards goals.

Currently, in District 75 schools

Sensory integration is extremely limited within District 75 schools. As you can see in Figure 1, a District 75 school in Manhattan, New York, displays a photo of their sensory gym on their public website that can be found under the school environment and design tab (D.O.E., 2019). This is the only school, from the sample used for this study, that had sensory integration information. This school has a room with sensory equipment that allows related service providers to work with students as well as allowing educators to give students sensory breaks as needed.

Figure 1.

Sensory Gym

(D.O.E., 2019)

Augmentative and Alternative Communication (AAC)

Introduction

IDEA defines an assistive technology device as, "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a child with a disability" (IDEA, 2004). One aspect of assistive technology is Augmentative and Alternative Communication

(AAC), which is any technological device or system that can help adults and children with autism communicate, that can be operated with the hands, eyes or even a tilt of the head (Welch, n.d.). AAC technology has advanced to the point that many individuals with autism are able to more easily communicate and connect with others, and have different ways of learning, paying attention and reacting or responding to others. From the start of the use of AAC technology, "numerous developments in the hardware and software options available to an individual using AAC, including speech output capabilities, have occurred from the 1980s to the present. The capacities of the devices and the intelligibility of the voices have improved substantially" (Romski, Sevcik, 2005, p. 174).

Research has shown that about 30% of people with ASD don't learn to speak more than a few words but as educators and administrators of autistic students, it is important to know that nonspeaking does not mean truly nonverbal (Welch, n.d.). Children on the autistic spectrum can recognize and respond to words in writing, and respond to icons, symbols, and gestures which can all be incorporated into an AAC integration plan. When communicating to parents about AAC devices and plans, it is important to understand that some caregivers worry that the use of AAC will discourage typical speech development, but the opposite is true (Welch, n.d.). With a sensitive approach, educators and administrators can communicate to caregivers that AAC helps nonspeaking children connect words with their meanings, express feelings, ask and answer questions, and make requests. An ability to communicate can also help children on the spectrum reduce stress and frustration and prevent undesirable behaviors (Welch, n.d.).

Qualifying for an AAC Device

When evaluating who qualifies for an AAC device, the IEP team makes decisions about assistive technology devices and services based on the child with ASD's unique needs. IDEA

(2004) requires schools to use assistive technology devices and services to maximize accessibility for children with disabilities. IDEA (2004) defines an assistive technology service as any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. IDEA (2004) also requires schools to provide assistive technology training for the teachers, children, and families.

If a parent believes their child needs assistive technology, a request can be made in writing. The letter can request that the IEP team refer the autistic child for an evaluation by an assistive technology specialist.

Behaviors are a result of communication needs and can be another factor that qualifies a student with ASD for an AAC device. Because children with ASD are unable to communicate with either gestures or words automatically, this can result in a variety of frustrations for a child who knows what he wants, but doesn't know that others can't understand his intentions or can't "read his mind. Tantrums come from the child's failure to express himself in gestures or words so that others understand him directly and efficiently" (Bryna, 2003, p. 158).

Currently Offered in District 75

Communication needs are one of the main causes of behaviors in ASD students. Every child should have the ability to participate in their world and an inability to communicate their needs and to immediately understand brings out frustrations and undesired behaviors. Currently, there is no universal D75 commitment to communication. In the D75 schools sampled for this study, there was only one school that explicitly mentioned technology and effective communication needs in their vision for their ASD students. An elementary school in Queens, New York (D.O.E., 2019), stated in their separate technology mission statement that their goal is to integrate technology with instruction to enhance academic programs for alternate assessment

and standardized assessment students stating, “we intend to expand communication lines through technology among all members of the school community”. The school goes on to say that their vision is to provide a safe, nurturing, instructional setting with engagement in academic, social, and emotional learning and focuses on effective communication where each student can reach their maximum potential (D.O.E., 2019).

Research from Romski and Sevcik (2005), shows that it is never too early to incorporate an alternative form of communication like an AAC device into a young autistic child's intervention program. This is important for educators, administrators, speech providers, and families who may not understand the importance of communication rather than just speech, to understand because often these devices are not the priority. AAC is, at times, thought of as a separate area of practice but it is not and it is important to ASD children that AAC be used in early language and communication acquisition. Augmentative communication should not be looked at as a second or third resort but rather as the first line of communication for ASD children with difficulties in communication, providing support that will allow for the developmental foundation of spoken language, comprehension, and production (Romski & Sevcik, 2005). Educators are the closest advocates for ASD students besides caregivers and we can use our voices to allow ASD students to gain their voice at the earliest opportunity possible.

Results- Moving Forward

Introduction

So far, the focus has been on what is available publicly for students with autism spectrum disorder and their families. There are great programs available amongst a lot of deficits because as a whole, District 75 is inconsistent in serving students with ASD and providing an appropriate education as outlined by federal law. Under IDEA (2004) special education means specially

designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability (*Sec. 300.39 Special Education*, 2017), but as the statistics and research show, our students with ASD are not consistently receiving specially designed instruction. The majority of District 75 schools are using curricula designed for general education students and special educators are left with the task of differentiating instruction with the resources available. The curricula were not designed using evidence-based practices for ASD students so educators are left researching how to educate students with ASD and how to completely adapt entire curricula to assure that their ASD students have the opportunity to learn and receive the same quality education as their nondisabled peers.

But what happens when educators do not have the knowledge on how to educate ASD students using a curriculum not designed for ASD students? Educators are then left with the task of researching, developing, and implementing a teaching plan that they have not been properly trained in while trying to provide their students with the best quality education. Or, there are some educators that will use what they have and not put in the effort to learn how to best teach ASD students, accept what was learned in their higher education classes and have tunnel vision about how this is affecting their students' education currently and the repercussions in the future. Whichever way school programs decide to go, it is a challenge.

The goal of this study is not to fault all of District 75 but to help shed light on an issue that needs attention, the reasoning and need for change, and next, the potential changes that can occur in the way the New York City Department of Education serves students with ASD and their families. Based on evidence-based research, a proposal of recommendations for best educational and partnership practices will be presented which gives District 75 schools a

blueprint to follow so they can provide all ASD students the most appropriate education possible, based on their unique needs.

Best Teaching Practices

Introduction

Even with the increase in ASD diagnosis over the past 20 years, there have been so many unvalidated methods and strategies for educating students with ASD. Special education teachers and related service providers, who serve ASD students, need to use scientific and evidence-based practices because when correctly applied, "positive and expected outcomes occur…in collaboration with parents and families" (Simpson, 2005, p 144). This allows students with ASD to have the opportunity to excel and gain skills that will allow them to live the same quality lives as their non-disabled peers. Based on the research conducted, recommendations for scientifically based practices will be described and promising practices for which further research is recommended will be presented.

Lesson Planning- Universal Design for Learning

When teaching students with ASD, educators should start with the UDL scientific-based framework. Within the UDL framework are seven principles that include:

- equal use, diversity and ability should be accounted for
- flexibility, preferences
- simple and intuitive, the material is easily understood
- perceptible information, information is understood no matter the ambient condition or sensory needs
- tolerance for error
- low physical effort

- size and space of classroom should respect students size, posture, and mobility (Al-Azawei et al., 2016)

Every child with autism naturally displays different characteristics, preferences, abilities, and needs, so it is important for educators to take into account these seven principles every year, with every individual student. As stated at the beginning of this study, this is beyond an educational issue but also a social just issue. Students with moderate to severe autism can have physical challenges, sensory challenges, communication challenges, and attention challenges (Al-Azawei et al., 2016), to name a few but, "from a human rights perspective…such limitations should not deprive people of equal opportunities in education" (Al-Azawei et al., 2016, p. 39).

Scientific-Based/Evidence-Based Practices for Learners with ASD

Results in the search for scientific and evidence-based teaching practices that best educate learners with ASD are outlined in *Table 4* and *Table 5. Table 4* outlines three recommendations that are *scientific and evidence-based practices for learners with autism spectrum disorder* and *Table 5* outlines four recommendations for teaching practices that are evidence-based and show *promising* results but have," limited supported information" (Simpson, 2005, p 146). These recommendations are frameworks in which academic curricula need to be paired and implemented for successful outcomes (Simpson, 2005). These scientific and evidence-based practices, as well as the promising practices in *table 4* and *table 5,* cannot be paired with adapted, general education curricula because ASD students need curricula that focus on specific learning objectives with a highly structured teaching approach that is tailored to the specific needs of ASD students and the way they process and learn information (Ferraioli et al,. 2005). Following these recommendations, you will find curricula to pair with these frameworks.

Table 4. Scientific and Evidence-Based Practices for Learners with Autism Spectrum Disorder

Name	*Description*
Applied Behavior Analysis (ABA)	Used in early intervention, and differentiated forms are used in public schools. The fundamentals of ABA, in all forms, are three components (Grigorenko et al., 2019): 1. First, a stimulus to cue the student to respond. 2. Second, the student should respond with a goal behavior. 3. Third, there should be a consequence. The consequence can be either positive or negative, positive is the reinforcement and negative is the "punishment". ABA has become the global treatment for ASD and the effectiveness of the ABA family of interventions has shown results of an increase or improvement in IQ scores, language skills, and adaptive behavior and decreases or removal of the need for support (Grigorenko et al., 2019). *Consider*: Factors that can affect outcomes such as the mode of delivery, length of therapy, gender or ethnicity, and general cognitive functioning. Another consideration is the effectiveness of ABA interventions in older students (Grigorenko et al., 2019).
Discrete Trial Training [Teaching] (DTT)	An intervention for children with ASD that focuses on the acquisition of a skill and effectiveness of instruction. DTT follows a guideline that shows progress within data collection for 8-10 teaching sessions. With the data, it is determined if there is evidence of skill acquisition or lack of progress within a time frame. With the data collected, a determination of continuation of the skill or reconsideration is determined. Each teaching session consists of five parts: ● a cue ● prompt at the same time as the cue, ● response time ● consequence, positive reinforcement or for an incorrect response, the teacher says "no", removes material and models or guides the child to do the correct response ● intertrial intervals, where the teacher pauses for up to five seconds before the trial (Ferraioli et al., 2005) *Consider*: DTT should be paired with curricula that focus

	on a specific objective with a highly structured teaching approach, and ASD students may not generalize the skills (Ferraioli et al., 2005).
Structured Teaching (TEACCH)	Helps students with autism develop self-determination, self-esteem, control of choice, and independence. A teaching method that involves creating a classroom environment with a specific physical structure that includes: ● schedules for the sequence of activities ● work systems, and individualized information to the learner about what work, how much work, what progress am "I" making, what do "I" do when I'm finished ● visuals, highlighting the entire structure and directions (Howley, 2013) Helps develop skills related to, "engagement, on-task/off-task [behavior], on-schedule behaviors, independence, transitions, independently locating activities, attending to activities, organizing tasks and materials, and completing tasks" (Howley, 2013, p. 108). *Consider:* Evidence neglects to include internal states of "well-being" and "happiness" (Howley, 2013p. 111) Research that includes long-term, social-emotional health, and measures behaviors would, "enrich the evidence and provide important insight into the 'bigger picture"(Howley, 2013, p. 111). With the discrepancies in research, when using structured teaching on the whole child's continuous development, structured teaching should be paired with a proven curriculum.

Promising

Teaching practices that are evidence-based and show promising results but have, "limited supported information" (Simpson, 2005, p 146).

Table 5. Promising Practices for Learners with Autism Spectrum Disorder

Name	*Description*
Pivotal Response Training (PRT)	Described as an intervention model that stems from ABA therapy. The goal of PRT is to teach children with autism behaviors that improve their independence in the world (Verschuur et al., 2014). This intervention focuses on four aspects of functioning: ● motivation ● self-initiations ● responding to multiple cues ● self-management (Verschuur et al., 2014). To motivate children and help engage them in tasks, teachers follow the student's lead and offer choices, gaining the child's attention, then providing opportunities for responses that include shared control and turn-taking. A variation of tasks, natural reinforcements, and repetition of the targeted skill is also needed. After reviewing the studies done on this approach, evidence shows the effectiveness of PRT for increasing self-initiation, improvements in communication and language, play skills, and a decrease in maladaptive behaviors. *Consider*: Based on this research (2014), the majority of studies show only suggestive evidence due to limitations (Verschuur et al, 2014).

Behavioral Skills Training (BTS)	Not until 2004, was Behavioral Skills Training (BTS) considered an intervention for individuals with ASD (Leaf et al., 2015). BTS is a multicomponent approach that implements four teaching techniques: 1. Instruction: provide learners with instructions explaining the components of the skill(s) the student needs to learn. 2. modeling: the teacher models the target 3. rehearsal: students are given the opportunity to practice the target 4. feedback: can be given during the rehearsal portion or after the teacher gives positive feedback and next steps if needed (Leaf et al., 2015) When next steps are needed because the student did not master the skill, feedback is given and the teacher provides models or re-teaches the skill until the skill is mastered. When the student masters the skill, at first or with repetitive instruction, praise, and external reinforcements are used (Leaf et al., 2015). *Consider*: The steps needed to teach skills are effective but studies only focused on social-emotional skills and not academic performance and skills (Leaf et al., 2015).
Teaching Interaction Procedure (TIP)	Not until 2009 was the Teaching Interaction Procedure (TIP), first evaluated for use with students with ASD (Leaf et al., 2015). TIP is systematic and has six steps: 1. labeling and identifying the skill to be learned 2. provide a rationale, why the student needs to learn the skill 3. targeted skill, broken down into smaller portions, the student repeats each portion 4. the teacher models the appropriate way to do the targeted skill and the inappropriate way; the student must discriminate whether what is being modeled is correct 5. the student role-plays the targeted skill 6. feedback is given (Leaf et al., 2015). *Note*: Feedback is provided throughout all the steps, use of positive reinforcement for correct responses is given and for incorrect responses, corrective feedback (Leaf et al., 2015). *Consider:* Paired with a token economy. Several studies that show TIP to be an effective teaching strategy targeted

	social behaviors (conversational and vocational skills). Important because the recommendation for this teaching practice is for all content subjects. A limited number of studies (Leaf et al., 2015).
Social Stories	When incorporating social stories in the classroom, it should be done in ways that complement other interventions and strategies (Crozier, Sileo, 2005). A six-step, systematic checklist for writing and using social stories should be followed (with the six steps, monitoring and evaluating progressive data is also essential): 1. identify targeted behavior. 2. conduct the functional assessment 3. make a plan, how will the social stories be included *Note*: Social stories should be introduced as part of a "balanced plan that includes other social-behavioral interventions. Because no strategy will be appropriate for all students, all behaviors, or all situations" (Crozier, Sileo, 2005, p 28). 4. write the social story, based on the functional assessment 5. use the social story with students. 6. collect more data, assess the effectiveness of social stories (Crozier, Sileo, 2005) ASD students need repetition to recall information. Social stories read daily or as needed can provide the information needed and repetition needed. *Consider*: Social stories must be written at the student's reading comprehension level. Multimedia social stories have not yet been proven to be effective so at this point traditional social stories should be the focus. Social stories are not designed to address all needs of ASD students but can be implemented as part of a comprehensive educational and behavioral plan (Crozier, Sileo, 2005).

Within the D75 program redesign, using one or a combination of these practices, each student will reach a level of independence that allows them to participate in a world not designed for them.

Curricula Designed for Students with Moderate to Severe Autism Spectrum Disorder

Introduction

The type of curricula that is most appropriate and effective for students with ASD are curricula that take into account the way each student with ASD learns. When educators start with the UDL scientific-based framework discussed, if the proper resources are not paired with UDL, it will be difficult to provide an ASD student with the most appropriate education. There is a lack of understanding about how important it is for students to be educated with proper teaching practices and curricula that are designed for ASD students, which makes the lack of curricula used in D75 schools that represent ASD students a systemic issue. It is important for teachers of autistic students to keep a growth mindset and understand that for autistic students, "the ability to gain meaning from text increases access and independence, provides a vehicle for cultural and social engagement, expands unique interests and talents, and fosters lifelong learning. Yet, students with severe disabilities have had little access" (Hunt, et al., 2020, p. 330) to scientific-based ASD student curricula. If schools used curricula and designed lesson plans for ASD students to gain access to that part of the world, it would mean a better quality of life.

Based on research done by Hunt et al. (2020), shared characteristics of early literacy studies show reading interventions were not designed with nonverbal students in mind. Nonverbal students require systematic prompting and repeated opportunities to practice and develop a new skill (Hunt, et al., 2020). Results of the study showed that nonverbal students with severe disabilities made greater gains using reading curricula designed for nonverbal students than using the general education early literacy curriculum (Hunt, et al., 2020). IDEA (2004) was brought into law so that students with ASD can have the opportunity to learn, and be held to the same standards as their peers that do not have diagnoses. But how can students

with ASD learn to the same standards when undiagnosed peers are able to use curricula designed for the way they neurologically process information but ASD students do not receive the same opportunities?

Curricula

With systematic instruction based on a chosen scientific-based approach, ASD students benefit from scripted instruction as well. From personal experience, using scripted curricula within a self-contained classroom, it was evident that the lesson planning process was more effective and the outcome of student learning was positive. Research from Smith et al. (2013), highlights the effects of scripted lessons, pointing out that teachers in self-contained classrooms, may not be experts in the academic areas they teach so curricula with scripted lessons provide the support teachers need to include research-based strategies in their classroom. Results show that scripted curriculums are valid, reliable, and are designed for students with special needs (Smith et al., 2013). Another study showed, "promise that students with more severe disabilities and autism can gain meaning from text with systematic and direct instruction of aligned instruction with content standards (Mims et al., 2012, p. 424).

Math skill acquisition is also important because while reading the items in the supermarket for example, an individual with ASD needs to be able to identify the price and pay using mathematical knowledge. Gaining math skills to be able to gain daily living skills should be a priority in D75 and can occur from the start of an ASD student's academic life. Research done by Browder, et al. (2012), evaluated whether a scripted math curriculum, designed with grade-aligned math skill acquisition and instruction for students with moderate to severe dis/abilities, showed a gain in math skills. The results from this study showed that students with moderate to severe intellectual disabilities can learn new math skills aligned to grade-level

content and standards connected to algebra and geometry when designed with their abilities (focusing on strengths), in mind (Browder, et al., 2012). Overall, this study provided evidence that students with moderate to severe ASD can learn middle school and above, mathematical standards with stories that focus on real-life situations that allow students to apply their math skills to situations with meaning.

One last point that is a need for ASD students is art. Based on Lambert's (2018) research, students on the autism spectrum can greatly benefit from art being integrated into their academic schedule. When students with ASD create art, you are able to see "amazing levels of creativity and expression" (Lambert, 2018, p.4). How can we tap into ASD students' creativity and allow them to express themselves in a nonverbal way if we do not have the proper resources? District 75 did understand that concept and through a development grant given to District 75, the Everyday Arts for Special Education (EASE) curriculum was created. A study was conducted by Lambert (2018), using the EASE curriculum and the students who participated in this study had a disability category of autism, intellectual disability, emotional disturbance, or multiple disabilities with a range of severity. To measure progress with the EASE curriculum, samples of students' assessment data were used. The finding showed improvement in reading and social-emotional development which may be due to the "increased engagement of students with disabilities…activities were inherently interactive, involving peer-to-peer and teacher-student communication in verbal, artistic and kinesthetic domains" (Lambert, 2018, p. 11). An art curriculum for a school program for ASD students would allow ASD students to excel using their natural artistic skills while working through ways of expression that help mitigate their ASD limitations with expressive skills and day-to-day encounters, reflecting their adapted daily living and social-emotional skills (Lambert, 2018).

Table 6 outlines recommendations for curricula designed for students with moderate to severe disabilities, including autism spectrum disorder, that are scientific-based/evidence-based for kindergarten to fifth grade. *Table 7* outlines recommendations for curricula designed for students with moderate to severe disabilities, including autism spectrum disorder, that are scientific-based/evidence-based for grades six to twelve, and students in the transitional period and graduating.

Table 6. Grades K-5 Curricula Designed for Students with Moderate to Severe Disabilities including Autism Spectrum Disorder

*6:1:1 severe ASD, 8:1:1 moderate ASD, 12:1:1 mild to moderate ASD

Subject	*Grade Band/Classroom Ratio(s)*	*Title*	*Description*
English Language Arts	K-5 6:1:1, 8:1:1, 12:1:1	Early Literacy Skills Builder (ELSB), (Browder et al., 2016).	Supports students to develop the foundations of literacy up to a first-grade reading level that includes; conventions of print, phonemic awareness, letter-sound correspondence, and sight word vocabulary (Browder et al., 2016). Based on principles of systematic and direct instruction, aligned to standards, least-prompt strategies, teachable objectives, built-in lesson repetition, and ongoing assessments (Browder et al., 2016). Applies scripted lessons, proven to aid

			in the success of students with moderate to severe autism. Eight ELSB levels contain five structured lessons each, 30-minute daily lessons.
	K-12 6:1:1, 8:1:1, 12:1:1	Structured Methods in Language Education (SMILE)	Designed to develop skills in a hierarchical format that begins with phonemes. Incorporates development of attention, specific and consistent teaching method, structure and routine, immediate reinforcement, successive approximations leading to exact repetition, pattern practice, substitution/transformation drills, and ongoing attention to generalization (Wolf-Schein, 1995). Five language modules.
	K-5 6:1:1, 8:1:1, 12:1:1	Pathway to Literacy	This curriculum of shared stories is an extension of an ELA curriculum for students with moderate to severe disabilities. The study shows an increase in independent responses. Educators applied principles of Universal Design for Learning (UDL) to

			increase success. Evidence shows this curriculum promotes early literacy and communication skills as well as, “the use of team planning with UDL….an important strategy for ensuring that the students could participate fully in the lesson” (Browder et al., 2008, p. 10). Educators can use this curriculum to build on students' ELA skills and using the UDL framework and designing lessons that focus on students' individual needs.
	Grades 2-5 8:1:1, 12:1:1	Early Reading Skills Builder (ERSB)	Research-based curriculum moving students from a first grade to a second-grade reading level. A natural progression from the ELSB curriculum lessons. Included in this curriculum is identifying, blending, and segmenting sounds, decoding words, reading sight words, connected text, and answering comprehension questions. 26 progressive levels with five structured lessons each. Lessons follow an eight-step activity sequence with a writing journal to

			reflect on what was learned during the lesson (Browder et al., 2015).
Math	K-5 6:1:1, 8:1:1, 12:1:1	Early Numeracy Skills	Standard-based curriculum for elementary students to learn number sense and skills aligned with elementary skill standards. Research conducted by Hudson, et al. (2016), showed this curriculum adapted for students with moderate to severe disabilities can help students learn early numeracy skills with an AAC component and can allow for numeracy skill gains and continuous mathematical concepts acquisition after elementary school (Hudson et al., 2016).
	K-5 6:1:1, 8:1:1, 12:1:1	Hands-On Math For Early Numeracy Skills	A skills-based curriculum for teaching elementary-age students foundational numeracy skills. This curriculum is designed to introduce math concepts using school-based standards with three skill areas:

			● counting and number recognition ● sets and categories ● symbols and patterns (Bastian, Bastian, 2019). Designed for students with moderate to severe disabilities, including autism. Accommodates students with a variety of fine motor skills. Bastian (2019), designed this curriculum for students to be able to transition from concrete, to representational, to abstract learners by beginning with one-to-one correspondence and progressing to complex addition and ABAB patterns (Bastian, Bastian, 2019).
	3-8th (9-12 depending on academic level) 6:1:1, 8:1:1, 12:1:1	Math Skills Builder	A problem-solving skills curriculum that uses real-world math problems. This curriculum will allow students with ASD to learn when and why to use their math skills with authentic story problems as the focus of instructional

			lessons. Includes eight units, with over 500 story real-world problems with themes. Guides and instructs students to solve addition (sums to 10), subtraction story problems (differences to 9), and three problem-solving strategies (group, change, and compare). Scripted lessons to suggest feedback responses for prompting, error correction, and praise. Multisensory approach. Students with mild (12:1:1) disabilities will advance through the curriculum in a year's time and be ready for higher-level math concepts. Students with moderate-to-severe disabilities (8:1:1, 6:1:1), may need repetition and multiple years of instruction. The curricula have early numeracy foundational skills, then advances to solving math story problems.
Science	K-5 6:1:1, 8:1:1, 12:1:1	Early Science	Science-based, a scripted curriculum designed for students with moderate to severe disabilities. Research and

			standard-based follow the core concepts of science that include: ● the five senses, ● rock cycle, ● earth and sky ● life cycle (Jimenez et al, 2012) Including materials and manipulatives. Framework to teach ASD students. With progress monitoring, real-time data is available (Jimenez et al, 2012).
Art	K-12th grade and Transitional students	EASE	Everyday Arts for Special Education is an integrated arts program designed for students with moderate to severe disabilities. Educators have the opportunity to strengthen their students' academic and behavioral goals. With social-emotional learning, culturally responsive pedagogy, and inclusive but differentiated instruction, educators and students will find success using this art-integrated, social-emotional curriculum (Urban Arts Partnership, n.d.).
Social-Emotional	K-5 6:1:1, 8:1:1, 12:1:1	Social Skills at School: Elementary	Skill-based curriculum. Should be modified based on students' level of

			cognitive ability and abstract thinking abilities. Includes: ● social skills for preparation when going outside ● transitions ● classroom interactions ● social-emotional breaks (Kinney, Kinney, 2019) 53 relevant social skills that follow a typical school day, a script for teachers, and engaging materials. A useful and supportive addition to curricula for activities of daily living and in the classroom for social-emotional learning (Kinney, Kinney, 2019).
	K-5 8:1:1, 12:1:1	Social Learning and Emotional Regulation (SOLER)	Social-emotional-based curriculum designed for students with social and behavioral challenges in 8:1:1 and 12:1:1 settings. Guided by evidence-based research, five domains of social and emotional learning (SEL), are addressed: ● Self-awareness, ● self-management,

	K-5 6:1:1, 8:1:1, 12:1:1	Learning to Get Along	• social awareness, • relationship skills • responsible decision-making (STAR Autism Support, 2021). The instructional framework follows Applied Behavior Analysis (ABA), embedded in the curriculum content and instructional lessons (STAR Autism Support, 2021). Social story-based curriculum. Attractively illustrated, well-written stories designed to reinforce the importance of social skills. Some book titles included are, Accept and Value Each Person, Be Careful and Stay Safe, Join In and Play, Know and Follow Rules, Listen and Learn, Share and Take Turns, and Cool Down and Work Through Anger (Meiners, Johnson, 2003). Paired with other curricula, this will enrich a social-emotional school program.

Activities of Daily Living	Upper Elementary, 6-12 and, Transition Students 6:1:1, 8:1:1, 12:1:1	Stepping Out Into the Community	A community-based instructional program for students to achieve independence outside of school. 18 community-based outings and units including ● grocery shopping ● eating at a restaurant, ● using the bank ● going to the movie theater (Schwartz, Best, 2022). Included is practice for prerequisite skills, done in the classroom before students go into the community. With single and multi-step tasks this curriculum would be a supportive addition to activities of the daily living programs to support learning objectives (Schwartz, Best, 2022).
	K-12th grade and Transitional students	Look ‘N Cook Microwave	The cookbook provides step-by-step instructions for 68 packaged and from-scratch recipes that can be cooked in the microwave. Included are 32 lessons teaching safety, nutrition, meal planning, and microwave

			techniques. With each recipe, illustrations, modeling each step including visual modeling in picture form. With this multisensory curriculum, all self-contained classrooms can enjoy learning to cook (Sudol, 2011).
	K-12th grade and Transitional students	Picture Directions	A picture-based instructional program introducing a sequence of steps, while preparing food. With no grade level specified, this curriculum is recommended to students in early elementary and beyond as needed based on skill level. In 50-lessons, students practice following a sequence of steps independently, following picture directions. Designed for students with autism or an intellectual disability, allows students to learn and practice life skills, cooking, play, and other important skills. These lessons teach students to follow picture directions in sequence, complete activities independently, and recognize sight words

			paired with illustrations (Crissey, 2011).

Table 7. Grades 6-12 and Transitional Students, Curricula Designed for Students with Moderate to Severe Disabilities including Autism Spectrum Disorder

Subject	*Grade Band/Classroom Ratio(s)*	*Title*	*Description*
English Language Arts	6-12 6:1:1, 8:1:1, 12:1:1	Teaching to Standards: English Language Arts	Research and standards-based curriculum with age-appropriate novels, such as *Holes* and *Number the Stars* (Mims et al, 2013). Includes persuasive writing, grammar, vocabulary, literacy comprehension, listening skills, and research. Designed as a multi-year curriculum, aligned with state standards. Research proves a high success for teaching grade-level standards to students with an intellectual disability or autism. Including *Holes* and *Number the Stars,* there are fifteen novels, modified with simplified storylines, repeated text, and symbol support, four theme-based units of study include change, values and decision

			making, social justice, and global awareness, with three literacy levels (Mims et al, 2013).
	6-12 6:1:1, 8:1:1, 12:1:1	Early Literacy Skills Builder for Older Students	This early literacy curriculum was designed using the same scope and sequence as Early Literacy Skills Builder (ELSB), this version was specifically designed to help older students who have not been exposed to foundational reading skills, and features age-appropriate activities to learn them. Seven levels present skills in 14 objectives including the conventions of print, phonemic awareness, letter-sound correspondence, listening comprehension, vocabulary, and writing. Skills increase in difficulty as students progress with seven different levels. The software directs the student, provides feedback, and gathers data on the student's performance. Components to increase student engagement and sustain attention include creating an

			avatar to represent students. Avatars also appear on the screen to provide an interactive and personalized learning experience that allows for turn-taking during classroom lessons. (Browder, 2017).
Writing	6-12 6:1:1, 8:1:1, 12:1:1	Access Language Arts: Write Curriculum.	An extension of the Teaching of Standards: English Language Arts curriculum, includes: ● writing terminology ● Topic ● Introduction ● opinion ● reason ● conclusion ● construction of opinion paragraphs (Zelt et al., 2012) With this writing curriculum, students are provided with a blended approach to writing that integrates systematic instruction, the least intrusive prompts, and specific educator feedback.
Math	6-12 6:1:1, 8:1:1, 12:1:1	Teaching To Standards: Math	Research and standards-based curriculum designed for students with moderate to severe intellectual disability or autism. Included: ● geometry ● algebra

			• data analysis • measurement concepts (Trela et al., 2008) 68 uniquely designed lessons that start with a real-world story, picture cues, graphic organizer with manipulatives or writing using the organizer (Trela et al., 2008). Varying levels of support.
	6-12 6:1:1, 8:1:1, 12:1:1	Access Geometry	Research-based curriculum with a focus on: • geometric figures • proofs • measurements • Representations (Trela et al., 2008) Each lesson is designed for verbal and nonverbal students. Includes: • task analysis • graphic organizers • workbook tasks • manipulative (Jimenez et al., n.d.) Students solve mathematical problems with real-world stories.
	6-12 6:1:1, 8:1:1, 12:1:1	Explore Algebra Curriculum	Aligned with standard-based algebra, includes foundational concepts of algebra. Lessons include pictures to

			enhance engagement, understanding, real-life applications, and hands-on support. Provided with lesson-specific Universal Design for Learning (UDL), charts to differentiate instruction (Izzo, 2012). For students who struggle with abstract concepts, an alternate level is included (Wenger et al., 2022).
Science	6-12 6:1:1, 8:1:1, 12:1:1	Teaching to Standards: Science	Research- and standards-based curriculum with core concepts, including: ● earth, ● biology, ● waters ● chemistry (Courtade et al., 2008) Inquiry-based approach designed with students on the autism spectrum in mind, includes images for nonverbal student's communication device and a hands-on experiment with each lesson (Courtade et al., 2008).
Social Studies	6-12 6:1:1, 8:1:1, 12:1:1	Explore Social Studies	Literature-based, included are two distinct reading levels that explore: ● civics

	6-12 6:1:1, 8:1:1, 12:1:1	Explore American History	• economics • American history • world history, • geography (Nelson et al. 2016) 50 topics include big ideas like the right to vote and pioneers' travel west (Nelson et al. 2016). Standard-based curriculum, students learn key historical events and figures from the year 1600 to the present. Follows a consistent format that includes an anticipatory set, vocabulary, stories, and quizzes. A comprehension component. No minimum reading requirement because of the integration of visual tools like graphs, maps, timelines, and videos to help students of all levels access the content (Kinney, 2010).
Art	K-12th grade and Transitional students	EASE	*(See description in Table 6)*
Social-Emotional	6-12 and Transitional Students 6:1:1, 8:1:1, 12:1:1	Dynamite Emotions	Six-story curriculum for transition students to explore feelings and conflict resolution in

			social and emotional challenges with family, friends, or coworkers. Stories explore character feelings and end with a resolution to the dispute or conflict. WIth engaging colors and graphics, students will learn how emotions affect behaviors and receive strategies to identify emotions and understand the impact (Pearson, 2015).
Activities of Daily Living	6-12 and Transitional Students 6:1:1, 8:1:1, 12:1:1	Look 'N Cook Ready, Set, Cook!	Cookbook provides step-by-step instructions with video models for 62, stove-top and oven recipes. 40 lessons include: ● Kitchen safety, ● cooking techniques ● nutritional facts (Catalano, 2006) Included are videos modeling cooking the recipes. With pictures included in each text for step-by-step visual modeling as well, this curriculum can be used in any self-contained classroom (Catalano, 2006) Picture-based for students to be introduced to the concept of cooking.

	K-12 and Transitional Students 6:1:1, 8:1:1, 12:1:1		Included are 40 step-by-step recipes, including recipes that need a microwave, with categories that include: ● add to it, basic foods ● eat fresh, fresh food self-prepared ● make it a meal, variety of food groups that make a balanced meal ● share it, social aspects of eating ● many servings, to share ● use it and reuse it, cooking one type of food and making many meals in a week (Bastian, 2019) Start by teaching students how to use a color-coded microwave, basic nutrition, and safety skills (Bastian, 2019).
	Transitional Students	Do The Right Thing	25-story language arts curriculum for transition-age students Analyze community-based social situations. Topics discussed are stranger danger, visiting the hospital, and preparing for a

			social event. Each story includes a vocabulary glossary and ends with comprehension questions to check understanding (Stride, 2009).

Using Augmentative and Alternative Communication within the Curricula

The heart of any child is the ability to advocate for themselves and communicate. Part of the goal of creating a new District 75 program for autistic students is creating a blueprint that makes sure every student has a voice. From the sample of D75 schools that are part of this study, there was an overwhelming focus on behavior. With so many District 75 programs for ASD students, the New York City Department of Education should provide a blueprint for every program that makes it mandatory that self-advocacy is developed by fostering communication. District 75 schools can choose scientific-based teaching practices and curricula but one thing that is not a choice is that every child should be able to communicate or advocate for themselves when they leave all District 75 programs. Within the UDL framework, technology is also considered very important because "designing inclusive learning environments using technology creates optimal conditions for accommodating the changing needs" (Izzo, 2012, p 345) of diverse learners.

AAC in Curricula

In a communication program for autism, technology that can be used by students to express themselves should be mandatory. Educators should be aware that slowed speech, attention to prosody, and repetition are needed to make meaning for autistic students, and not all ASD students have the same kinds of receptive language abilities (Bryna, 2003). In research

done by Izzo (2012), literacy programs with AAC incorporated were integrated into instruction. The access to curricular content through AAC integration provided multiple means of representation, engagement, and expression that follow the Universal Design for Learning (UDL) framework for diverse learners by allowing for "designing inclusive learning environments using technology" (Izzo, 2012, p 345). With these AAC features, students were able to participate in the re-telling of a repeated story and participate in all aspects of the literacy programs used. There are consistent findings of positive student outcomes due in part that curricula designed for students with moderate to severe disabilities integrated the use of AAC (Stanger et al., 2016).

There is a profound dearth of research when it comes to students with moderate to severe intellectual disability or autism spectrum disorder (ASD) and phonics or phonemic awareness. A study conducted by Ahlgrim-Delzell et al., (2014), developed a curriculum for intervention and showed that students with ASD can learn phonics and gain phonemic awareness that is functional while using augmentative communication devices. Each participant in this study demonstrated a change in phonological acquisition from the baseline data to data taken after the intervention was done. Overall, "participants demonstrated slow but stable increasing trends" (Ahlgrim-Delzell et al, 2014, p. 528).

Communication difficulties can range but one thing is definite, the signaling systems that are missing need to be built/enhanced to open up the neurological pathways for spoken language. Children with autism need associations and consequences that are meaningful to the child. Educators need to understand how autistic individuals communicate because, as Bryna (2003), points out in research, behaviors are a result of communication needs. Because children with moderate to severe ASD are unable to communicate with either gestures or words, this can result

in, “a variety of frustrations of a child who knows what he wants, but doesn’t know that others understand his intentions or can ‘read his mind’. Tantrums come from the child’s failure to express himself in gestures or words so that others understand him directly and efficiently” (Bryna, 2003, p. 158). So in a communication program for autism, what should be included are picture communication systems, sign language, and AAC technology. It is never too early to give ASD students an alternative way of communicating (Romski, Sevcik, 2005). This is important for educators and administrators, speech providers, and families to understand because often these devices are not the priority. AAC is, at times, thought of as a separate area of practice but it is not and it is important to ASD children that AAC be used in early language and communication acquisition. Augmentative communication should not be looked at as a second or third resort but rather as the first line of communication for ASD children with difficulties in communication, providing interventions that can help develop a foundation for the development of spoken language, comprehension, and production.

Activities of Daily Living and Transitional Services Program Redesigned

Introduction

Activities of Daily Living skills refer to a big range of personal self-care activities throughout a person's daily life, in all aspects of their life (Stabel, 2013), and ASD students need to begin practicing these skills in a structured environment as soon as ASD interventions begin. These can include but are not limited to aspects of a child’s home, school, and community life (Stabel, 2013). Adaptive functioning skills are one of the challenges autism brings and an individual’s ability to care for themselves (Stabel, 2013).

Transition planning is a collaborative effort and is an ongoing process across multiple school years. Based on the New York State Education Department, Office of Special Education

(2017), transition planning is the process of establishing a partnership among students, families, and school districts. As appropriate, other agencies can provide transition activities to help students with disabilities move from school to adult life (New York State Education Department Office of Special Education, 2017). Successful transition planning stems from a student's strengths, preferences, and interests. The planning process focuses its attention on how the student's educational program, including instruction, career, and educational experiences, can be planned to help the student make a successful transition to his or her goals for life after high school.

Beginning with the first IEP in effect when the student turns age 15, or at a younger age if determined appropriate, and updated annually, appropriate postsecondary goals and a statement of needed transition services are stated (New York State Education Department Office of Special Education, 2017). When the Individuals with Disabilities Act (IDEA, 1990) was written, it included postsecondary transition planning for students with disabilities at age 16. An amendment to the law was made in 1997 that made a requirement for transitional services to begin at age 16 or younger if appropriate. An amendment to the law was done in 2004, further refining the requirements for transition students that hold states accountable and changed the start of services to age 15. Based on IDEA (2004), the transition is a results-oriented process that focuses on improving the academic and functional performance of a child with a disability when a child is moving from school to post-school activities.

ADL and Transitional Services Redesigned

In the redesigned District 75 school program for elementary, junior high, and high school students, there will be allotted periods dedicated to activities of daily living skills paired with daily living skills curricula. This curriculum will be introduced in kindergarten and will continue until the student graduates. The curricula used in the activities of the daily living period will be specifically designed for ASD students, as listed in *table 4* and *table 5*.

Transition Services are a "coordinated set of activities for a student with a disability designed to improve his/her academic and functional achievement to facilitate the student's movement from school to post-school activities" (New York State Education Department Office of Special Education, 2017, para 8), included but not limited to:

- postsecondary education
- vocational education
- integrated employment, including supported employment
- continuing and adult education
- adult services
- independent living
- community participation (New York State Education Department Office of Special Education, 2017)

For high school students, transition services will begin at 15 and identify transition needs of ASD students and are considered throughout the IEP development process. Transitional needs are included during discussions of the student's present levels of performance, annual goals, services, accommodations, program modifications, and placement (New York State Education Department Office of Special Education, 2017). This entire process is done in close partnership

with students, families, and members of the community such as organizations, small businesses, and corporations that partner with schools to offer ASD students opportunities to learn within the community. It is important to understand that the transitional process is designed around the wants and interests of the student transitioning. The availability of meaningful and effective transition services requires that District 75 have appropriate instructional, career, work-related, and community experiences available to students based on their interests (New York State Education Department Office of Special Education, 2017). With transitional services, vocational education is required. Vocational education is organized educational programming that is directly related to the preparation of individuals for paid/unpaid employment, and if interested, additional preparation for a career not requiring a baccalaureate or advanced degree (*Sec. 300.39 Special Education*, 2017).

Also required through transitional services is travel training. Travel training is defined as, providing instruction to develop an awareness of the environment in which a student needs to travel (*Sec. 300.39 Special Education*, 2017) around where they live (e.g., in school, at the home, at work, and in the community). Travel training develops skills necessary to move effectively and safely from place to place within the environment they need to travel (*Sec. 300.39 Special Education*, 2017).

Redesigned Family Resources Program

Introduction

It is important that every family with a child that has special needs, has someone in their school community that they can turn to. That point person should have the information to explain the special education process as well as resources available in school and in the community, but caregivers may have no knowledge of them. The new parent-to-school outreach program that is

needed within District 75 will have a point person that provides as many resources as possible to families. If that individual does not have the information on hand, part of their role is to find out the information and help families to the best of their ability. The New York City Department of Education currently has valuable resources for families but as a parent in District 75, those resources are not actively provided; the channels to distribute information to families are inconsistent.

Redesigned Family Program

Within the redesigned family program, parent training, counseling and overall support will be provided. The social worker, school psychologist, or counselor, depending on school staff, will collaborate with the parent coordinator to provide the resources needed. Legally, schools are supposed to provide parents with IEP guidance but that is all. Using the ASD Nest program's framework, the new D75 Family program will build a "strong home-school collaboration" (New York University (NYU), Steinhardt, 2022). The building of that connection would include:

- weekly check-ins
- assure that caregivers are connected to the FACE organization, which offers opportunities for leadership, training, coaching, etc., for families.
- assure that caregivers are connected to the Beyond Access Series of workshops, designed to support families. Workshops include the preparation for IEP meetings and understanding the IEP afterward. Workshops that support families in the special education process, and workshops that help with behaviors (New York City Department of Education, 2022)

- group and individual, monthly counseling sessions, allowing caregivers to have the opportunity to express their feelings and concerns and inquire about different resources
- parent coordinator and other staff members (psychologist, counselor, social worker) collaborate with families, providing community workshops and information about is offered to families of special needs children in New York City.

These resources are set up to allow families to have the opportunity to be as educated as possible and have the ability to advocate for their children and themselves (New York City Department of Education, 2022).

Conclusion

In summary, the DisCrit framework points out the ways in which race and ability are socially constructed and interdependent, as racism and ableism often work together (Annamma et al., 2013). The historical beliefs about race and ability based on white supremacy have bled into our special education system up until our present day. Self-contained, special education classes have always had a higher percentage of what is considered the non-dominant racial or ethnic groups (Annamma et al., 2013); this is borne out by the student demographics in the sample of schools provided in this paper. There is a City-wide population of 34.27% of Black students, 41.63% of Hispanic or Latinx students, and 20.43% of White students (D.O.E, 2019), that attend District 75 schools and proves the DisCrit theory correct. Disabilities are clinically determined and based on professional judgment that is subjective, whether that be physical, cognitive, or sensory needs, it is all subjective and it is a societal interpretation of what signifies a disability (Annamma et al., 2013). These facts alone are evidence that race and perceived ability, or lack thereof, is still connected within our educational system but it is not as evident to society today as it used to be because the educational system today exhibits ableism in more

subtle ways (Annamma et al., 2013, p. 3). The subtle way that inspired this study is the way that children with autism are given a free and appropriate public education (IDEA, 2004) that is not designed with their needs in mind.

Autism spectrum disorder (ASD) is a neurological and developmental disorder (National Institute of Mental Health, 2022), that currently affects 1 in 44 children in the United States today (Braun et al., 2018). Overall, children with ASD have difficulty interacting with others, communicating, learning, and behaving as described by societal norms. Children with ASD also have restricted interests, repetitive behaviors and symptoms that affect their ability to function in school, work, and other areas of life (National Institute of Mental Health, 2022). Although ASD is a lifelong disorder, therapies and services can improve a child's daily functioning (National Institute of Mental Health, 2022).

The purpose of this study was to show the need for program-wide consistency in delivering an appropriate education to students with ASD and to show modifications that can achieve that end. As mentioned earlier, the Supreme Court determined students have the right to meet "challenging objectives" and make progress (Turnbull et al., 2020, p. 20). It is critical to ASD children's quality of life to receive an education that meets all their needs. The class-action lawsuit, filed in 2014, claimed the city's education department systemically failed to comply with state and federal laws that require transitional services for special education students (Cheng, 2014), and the January, 2021 class-action lawsuit that challenged New York City's, "segregated school system for students with disabilities on Staten Island" (Disability Rights Advocates, 2021, para 1), are evidence of some of the changes needed. With, "education and disability advocates continuously seeking reforms to District 75 and the City continuously maintaining the segregated

District 75 system" (Disability Rights Advocates, 2021, para 8), continuous evidence of a need for change is displayed.

These court proceedings mentioned are evidence that reform is needed and a redesign of District 75 is not just an educational need but a social justice need as stated. Another need discussed is, in most District 75 school programs, educators are forced to modify and adapt curricula designed for neurotypical learners but have not been specifically trained to do so. As mentioned in the research provided, ASD students learn best from curricula designed to address their specific learning needs and six recommended curricula were provided. Also included in this redesign, are families of ASD students. ASD families need continuous support and resources but this is not happening throughout all District 75 programs as is evident, based on court proceedings. The New York City Department of Education's central offices have developed the FACE program (2022) and the Beyond Access Series (2022) but there is a lack of outreach and resources provided to families that make this information available so families can take advantage of what is being offered.

Concluding the research, it is evident that the needs of all ASD students are not being met in District 75 schools. In most District 75 schools, educators are modifying curricula designed for neurotypical learners without the professional development to properly do so. Research has shown that moderate to severe ASD students acquire information best when the curricula being used is designed to address their specific learning needs. Evidence also shows that District 75 families are in particular need of support and resources to assure their child with ASD is receiving the services they are legally obligated to receive. With an evaluation of District 75 programs and the ASD Nest Program framework, a redesign was created for students with moderate to severe autism, and their families. Aspects of this redesign and framework include:

- best teaching practices; the use of the Universal Design for Learning (Al-Azawei et al., 2016), a framework for lesson planning, the most highly recommended, scientific, evidence-based, and promising teaching practices for ASD students
- curricula designed for students with moderate to severe ASD (6:1:1 severe ASD, 8:1:1 moderate ASD, 12:1:1 mild to moderate) that include the reading, writing, math, social-emotional learning, art, and activities of daily living; grades k-5, 6-12 and transitional students
- alotted collaboration time each week for team meetings; teachers, paraprofessionals, related service providers, social workers, parent coordinators, and psychologists.
- specialized professional development to support teachers, paraprofessionals, and related service providers in their continuous support of students with ASD
- use of augmentative and alternative communication with curricula; importance of AAC in ASD students educational experiences, curricula for ASD students with AAC aspects specifically included
- activities of daily living (ADL) and transitional services redesigned; ADL and transitional services defined, redesigned framework
- redesigned family resources program

Autistic students have a human right to receive all opportunities to reach their fullest potential when educators continuously reflect on their pedagogy and practices, communicate and support the families of students, and always have the presumption of competence (Biklen & Burke, 2006).

Limitations to this study include a small sample size of what is currently available in the New York City Department of Education, District 75 programs was used. A limited amount of available curricula developed for ASD students gave a limited list of curricula for a limited amount of subjects. Certain curricula presented have not been analyzed for their reliability and validity but were designed by authors who had other curricula analyzed. It is also important to note that, “persons associated with children and youth with autism and autism-related disorders are not exclusive in their struggle to sort between effective and ineffective interventions” (Simpson, 2005, p 142). Future research is needed to investigate the relationship between interventions and ASD (Bal et al., 2015). If some type of change does not occur, the next

generation of ASD students might continue to receive an education that is not designed for them and the interventions used may harm instead of help.

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Appendices

Annotated Bibliography

Ahlgrim-Delzell, L., Browder, D. M., & Wood, L., (2014). Effects of systematic instruction and an augmentative communication device on phonics skills acquisition for students with moderate intellectual disability who are nonverbal. *Education and Training in Autism and Developmental Disabilities, 49* (2), 517–532.

There is profound neglect of research when it comes to students with moderate to severe intellectual disability or autism spectrum disorder (ASD) and phonics or phonemic awareness. Ahlgrim-Delzell et al., (2014) developed a curriculum for intervention that uses instructional materials used in general education for the lower elementary grades and peer-assisted learning strategies. This study shows that students with ASD can learn phonics and gain phonemic awareness that is functional while using an augmentative communication device. Each participant in this study demonstrated a change in phonological acquisition from the baseline

data to data taken after the intervention was done. Overall, “participants demonstrated slow but stable increasing trends” (Ahlgrim-Delzell et al, 2014, p. 528).

This study makes it evident that students with ASD can gain phonological awareness with the use of a communication device. Communication devices are used in classrooms with students who have moderate to severe autism. With educators having the presumption of competence, all students on the spectrum can gain reading skills and gain an understanding of the world through reading.

Al-Azawei, A., Serenelli, F., & Lundqvist, K. (2016). Universal Design for Learning (UDL): A Content Analysis of Peer-Reviewed Journals from 2012 to 2015. *Journal of the Scholarship of Teaching and Learning*, *16*(3), 39–56. Retrieved July 9, 2022, from https://doi.org/10.14434/josotl.v16i3.19295

This resource highlights the ways in which Universal Design for Learning (UDL) is fosters equal access to education for all students. Within the UDL framework are seven principles that include equal use (diversity and ability should be accounted for), flexibility (preferences), simple and intuitive (easily understood), perceptible information (information is understood no matter the ambient condition or sensory needs), tolerance for error, low physical effort, size and space of classroom should respect students size, posture, and mobility (Al-Azawei et al., 2016). With educators using the UDL framework to design lessons, students of all learning capabilities will have the opportunity to access learning from different avenues.

Annamma, S. A., Connor, D., & Ferri, B. (2013). Dis/ability critical race studies (DisCrit): theorizing at the intersections of race and dis/ability. *Race Ethnicity and Education*, *16*(1), 1–31. Retrieved June 10, 2022, from https://doi.org/10.1080/13613324.2012.730511

This paper combines Critical Race Theory (CRT) and Disability Studies (DS) to form a new theoretical framework that analyzes race and ability called Dis/ability Race Studies (DisCrit). This framework stems from the history of scientists attempting to prove that African Americans have lower intelligence than their caucasian counterparts. Throughout the nineteenth century, this notion continued and evolved with a claim that physical attributes were the basis of, "intellectual, social, and moral growth. Black and brown bodies were viewed as less developed than white bodies, more 'primitive', and even considered sub-species of humans…used to justify slavery, segregation, unequal treatment, violence, and even murder" (Annamma et al., 2013, p. 2). The historical beliefs about race and ability based on white supremacy have, over the years, bled into our special education system up until our present day. Self-contained, special education classes have always had a higher percentage of what is considered the non-dominant racial or ethnic groups (Annamma et al., 2013). DisCrit theory is important to this research paper because educators and administrators need to understand that disabilities are clinically determined and based on professional judgment that is subjective whether that be physical, cognitive, or sensory needs, it is all subjective and it is a societal interpretation of what signifies a dis/ability (Annamma et al., 2013). This resource includes statistics that point out bias and inequities in education.

The point of including this framework is, the redesign of District 75 for ASD students is not just about a good special education program but developing a program for the autistic population that assures, "we do not lose sight of the most vulnerable population of dis/abled

students of color. These students have historically been among the first to fall through the cracks, as they do not and cannot fit rigid norms imposed upon them and are now even considered a liability" (Annamma et al., 2013, p. 22).

Bal, V. H., Kim, S. H., Cheong, D., & Lord, C. (2015). Daily living skills in individuals with autism spectrum disorder from 2 to 21 years of age. *Autism: the international journal of research and practice*, *19*(7), 774–784.Retrieved July 18, 2022, from https://doi.org/10.1177/1362361315575840

Within this study, individuals with ASD and their non spectrum counterparts showed progression in daily living skills from the age of 2 to 21 years old. In research from Bal et al. (2015), evidence shows that ASD students developed DLS at a slower progression which was a result of impaired early cognitive and language skills as well as the severity of ASD "symptoms". This data shows that ASD students do not develop daily living skills with automaticity when shown like their peers and this is a significant need in their education from the beginning. It is important to note that further research is needed when discussing specific parts of daily living skills such as personal skills, community skills, and domesticated skills (Bal, Kim, Cheong, and Lord, 2015).

Even though further research is needed, it is clear that daily living skills are what allow humans to be independent and ASD individuals deserve the same opportunities. If it is known to be a struggle then daily living skills should be a priority in their educational plans.

Bastian, D., & Bastian, L. (2019). *Hands-On Math For Early Numeracy Skills*. Attainment Company. Retrieved June 30, 2022, from https://www.attainmentcompany.com/curriculum/math/hands-on-math-for-early-numeracy-skills

A skills-based curriculum for teaching elementary-age students foundational numeracy skills. This curriculum is designed to introduce math concepts using school-based standards with three skill areas: counting and number recognition, sets and categories, symbols and patterns. These curricula are designed for students with moderate to severe disabilities, including autism, and accommodate students with a wide variety of fine motor skills (Bastian, Bastian, 2019).

Bastian and Bastian (2019), designed this curriculum for students to be able to transition from concrete, representational, to abstract learners by beginning with one-to-one correspondence and progressing to complex addition and ABAB patterns. This will allow for prerequisite skills for math to be developed for ASD students to then be able to develop and perform more complex math skills in the future.

Bastian, E. (2019). *Ready, Set, Cook!* Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/ready-set-cook

Ready, Set, Cook!, is a picture-based instructional program for students to be introduced to the concept of cooking. With no grade level specified, I would recommend introducing this curriculum to students who need to learn about cooking in general at the start of any ASD, self-contained, academic program. Included are 40 step-by-step recipes, including recipes that need a microwave, with categories that include add to it (basic foods), eat fresh (fresh food self-prepared), make it a meal (variety of food groups that make a balanced meal), share it (social aspects of eating, many servings to share), and use it and reuse it (cooking one type of food and

making many meals in a week). Lessons plans start by teaching students how to use a color-coded microwave, basic nutrition, and safety skills (Bastian, 2019).

Biklen, D., & Burke, J. (2006). Presuming Competence. *Equity & Excellence in Education*, *39*(2), 166–175. Retrieved July 1 20220, from https://doi.org/10.1080/10665680500540376

This article discusses the importance of presuming the competence of students with disabilities. When a teacher teaches literacy, the teacher assumes that eventually, the children will connect the words and visuals to concepts and objects and that children are capable of developing literacy skills. With autistic students, it is not uncommon to make a link between early communication challenges to a presumption of incompetence and when it comes to special educators, we cannot think that way. Society perceives delays in language as evidence of intellectual impairment in a child with autism but, "in light of the pessimism that surrounds autism and the intellectual abilities of persons so classified, to presume competence is to step outside of conventional theory and practice" (Biklen, Burke, 2006, p. 167). The norm in the American education system is to assume someone is incompetent if they have severe communication deficits and a theme that a student must prove their intelligence in order to be considered able-bodied. In a student's life, if the child cannot communicate the way the world sees as the norm, it is the teacher's choice to either make the judgment of incompetence or realize that you cannot know another's ability unless they can reveal it (Biklen, Burke, 2006). If a student is not provided with an academic program designed for them, how will they be able to reveal their abilities? It is important that all school support staff understand the challenges autism brings but also keep in mind that with those challenges come individuals who are capable.

The presumption of competence is the opposite of an ableist mindset. When working with students on the autistic spectrum, as a teacher or an administrator, the stance and pedagogy need to include the presumption of competence. With the presumption of competence comes to a school community that embraces diversity and celebrates big accomplishments.

Braun, K. V. N., Baio, J., Bilder, D., Charles, J., Christensen, D. L., Constantino, J. N., Daniels, J., Durkin, M. S., Fitzgerald, R. T., Kurzius-Spencer, M., Lee, L. C., Pettygrove, S., Robinson, C., Schulz, E., Wells, C., Wingate, M. S., Zahorodny, W., & Yeargin-Allsopp, M. (2018). Prevalence and Characteristics of Autism Spectrum Disorder Among Children Aged 8 Years — Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2012. *MMWR. Surveillance Summaries*, *65*(13), 1–23. Retrieved July 1, 2022, from https://doi.org/10.15585/mmwr.ss6513a1

This resource highlights the growing prevalence of ASD in children, as well as persistent inequities in the education system. According to the most up-to-date data available, 2018, one in 44 children was estimated to have ASD. Overall ASD prevalence was similar by race and ethnicity but Hispanic children were less likely to be identified as having ASD than White or Black children. The higher proportion of Black children compared with White and Hispanic children classified as having an intellectual disability was consistent with previous data. ASD has increased from 6.7 (one in 150) per 1,000 children aged 8 years from 2000 and 2002 to 18.5 (one in 54) in 2016. A reported decrease in racial and ethnic disparities in ASD individuals was described as, prevalence, “no overall difference in ASD prevalence between non-Hispanic White (White) and non-Hispanic Black (Black) children aged 8 years….however, other disparities have remained unchanged. Black children with ASD were more likely to have intellectual disability

than White children with ASD, Black children with ASD were first evaluated at older ages than White children with ASD, and the overall ASD prevalence among Hispanic children was lower than among Black and White children" (Braun et al., 2018).

These findings show disparities in access to the identification of and services for ASD across Black and Brown communities are still current.

Browder, D., Ahlgrim-Delzell, L., & Wood, L. (2015). *Early Reading Skills Builder - ERSB*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/ersb

This is a research-based curriculum covering all National Reading Panel components, moving students to a second-grade reading level, and is a natural progression from the ELSB curriculum lessons that lead students to a first grade level. Included in this curriculum is identifying, blending, and segmenting sounds, decoding words, reading sight words, connected text, and answering comprehension questions (Browder et al., 2015). With this curriculum, educators will have 26 progressive levels with five structured lessons each. Lessons follow an eight-step activity sequence with a writing journal to reflect on what students learned at each level and each lesson if the lesson is designed in that way (Browder et al., 2015).

With this highly structured curriculum, students with ASD can continue to learn reading skills and gain the core concepts of reading.

Browder, D., Gibbs, S., Ahlgrim-Delzell, L., Courtade, G., & Lee, A. (2016). *Early Literacy Skills Builder (ELSB)*. Attainment Company. Retrieved July 18, 2022, from https://www.attainmentcompany.com/early-literacy-skills-builder

Early Literacy Skills Builder (ELSB), is a curriculum for students with significant developmental disabilities, autism, or who use a variety of communication methods. ELSB

supports students to develop the foundations of literacy (conventions of print, phonemic awareness, letter-sound correspondence, and sight word vocabulary). Based upon the principles of systematic and direct instruction and aligned to standards, this curriculum incorporates least-prompt strategies, teachable objectives, built-in lesson repetition, and ongoing assessments.

This curriculum applies scripted lessons that have been proven to aid in the success of students with moderate to severe autism. The eight ELSB levels contain five structured lessons each. Instruction may be done in small groups or one-on-one for two, 30-minute daily lessons. This curriculum allows educators to focus on educating ASD students with lessons already adapted to how ASD students process information.

Browder, D., Gibbs, S., Alhgrim-Delzell, L., Courtade, G., & Lee, A. (2017). *Early Literacy Skills Builder for Older Students*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/english-language-arts/early-literacy-skills-builder-older-students

Early Literacy Skills Builder for Older Students, a grades 6-12, early literacy curriculum designed using the same scope and sequence as Early Literacy Skills Builder (ELSB), this version was specifically designed to help older students who have not been exposed to foundational reading skills, and age-appropriate activities to learn them. Seven levels present skills in 14 objectives including the conventions of print, phonemic awareness, letter-sound correspondence, listening comprehension, vocabulary, and writing. Skills increase in difficulty as students progress with seven different levels. The software directs the student, provides feedback, and gathers data on the student's performance. Students will be engaged and experience a multisensory learning experience when creating an avatar to represent them. This will also aid in increased engagement and helps to sustain attention. Avatars also appear on the

screen to provide an interactive and personalized learning experience that allows for turn-taking during classroom lessons.

This curriculum will allow for students to gain continuous literacy skills and there is a social component as well.

Browder, D. M., Jimenez, B. A., & Trela, K. (2012). Grade-aligned math instruction for secondary students with moderate intellectual disability. *Education and Training in Autism and Development Disabilities, 47, 373-388.*

This study evaluated if the curriculum designed with grade-aligned math skill acquisition and instruction for students with moderate to severe dis/abilities showed a gain in math skills. The results from this study showed that students with moderate and severe intellectual disabilities can learn new math skills aligned to grade-level content and standards connected to algebra and geometry when designed with their abilities in mind. The curriculum used had short stories for word problems, graphic organizers, and task analytic instruction.

This is extremely important because standard-based instruction is required for alternative assessment students to meet state expectations. Overall, this study provided evidence that students with severe to moderate dis/abilities can learn middle school and above, mathematical standards with stories that help focus the instruction on real-life situations and allows students to apply their math skills to those situations, and make the instruction meaningful (Browder, Jimenez, Trela, 2012).

Browder, D., Mims, P., Spooner, F., Ahlgrim Delzell, L, & Lee, A. (2008), Teaching elementary students with multiple disabilities to participate in shared stories. Research and Practice for Persons with Severe Disabilities, 33: 1-2, pp 3-12.

Using these curricula of shared stories, as an extension for students with multiple disabilities in English Language Arts (ELA) curriculum, this study data showed promising results. Results showed an increase in independent responses. Educators applied principles of Universal Design for Learning (UDL) to increase success. Results provide evidence that this curriculum promotes early literacy and communication skills as well as,"the use of team planning with UDL….an important strategy for ensuring that the students could participate fully in the lesson" (Browder et al., 2008, p. 10).

Educators can use this curriculum to build on students' ELA skills using the UDL framework and designing lessons that focus on students' individual needs.

Bryna S. (2003). *Helping children with autism learn : Treatment approaches for parents and professionals*. Oxford University Press.

This article focuses on how the earliest stages of language development in children with autism spectrum disorder (ASD) are the reasoning for communication-based autistic learning disabilities. Some of the early skills are communicative gaze, gestures, and body language. Children with ASD have difficulty receiving, processing, and sending communication signs. Communication difficulties can range but one thing is definite, the signaling systems that are missing need to be built/enhanced to open up the neurological pathways for spoken language. Educators need to understand how autistic individuals communicate because, as Bryna (2003) stated, an assumption of understanding can occur. Another aspect to take under consideration is,

behaviors are a result of communication needs. Because children with ASD are unable to communicate with either gestures or words, this can result in, “a variety of frustrations of a child who knows what he wants, but doesn’t know that others understand his intentions or can “read his mind”. Tantrums come from the child’s failure to express himself in gestures or words so that others understand him directly and efficiently” (Bryna, 2003, p. 158).

Within school programs that educate students with ASD, there should be a standard for communication. The school community should respect the diverse range of ways to communicate and that is not limited to speech. What will be included are picture communication systems and/or sign language, augmentative communication devices, and any other form of communication that an ASD student prefers. Educators should be aware when communicating to ASD students that slowed speech, prosody, and repetition are needed to make meaning for autistic students.

Catalano, E. S. (2006). *Look ’N Cook*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/look-n-cook-cookbook

Look ‘N Cook is a cookbook that provides step-by-step instructions with video models for 62, stove-top and oven recipes in total. Included in this curriculum are 40 lessons that teach kitchen safety, cooking techniques, and nutritional facts. Included with the lessons is a video model for lessons and cooking the actual recipes. With pictures included in each text for step-by-step visual modeling as well, this curriculum can be used in all self-contained classrooms (Catalano, 2006).

This curriculum can be an added resource for an activities of daily living program that assists educators in teaching students with ASD how to acquire the skills to independently

prepare food with the hope that students will have the opportunity to care for and cook for themselves.

Cheng, P. S. (2014, November 5). *Class Action Lawsuit Alleges City's Department of Education Fails Special Needs Students*. NBC New York. Retrieved June 20, 2022, from https://www.nbcnewyork.com/news/local/new-york-city-department-of-education-lawsuit-students-with-disabilities/2101094/

A class-action lawsuit, filed in 2014, claimed the city's education department systemically failed to comply with state and federal laws that require transitional services for special education students. One of the plaintiffs, according to his parents, was never given a vocational assessment or subsequent training to help him transition after high school. "' The school system never even disclosed something like that to us -- to let us know that he is entitled to vocational assessment or vocational training,' said his father, Hossam Khattab" (Cheng, 2014). The article continues to highlight how the New York City Department of Education's website states, that the, "District 75 Office of Transition Services is committed to ensuring that every student receives the services needed to achieve his or her desired post-secondary outcomes which will allow them to become productive members of the community" but this was not provided and is not provided to every student. (Cheng, 2014).

This information is important because a part of the legal obligation of District 75 schools is to provide autistic students and their families with transitional services that allow for a smooth transition from school life to independent living without the regular school routine involved in daily life.

Courtade, G., Jimenez, B., Trela, K., & Browder, D. (2008). *Teaching to Standards: Science*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/teaching-standards-science

Teaching to Standards, Science is a research- and standards-based curriculum for students in sixth to twelfth grade. With the core concepts, including, earth, biology, waters, and chemistry, students can learn using an inquiry-based approach with a science curriculum designed with students on the autism spectrum in mind. This curriculum includes images to include in a nonverbal student's communication device and a hands-on experiment with each lesson (Courtade et al., 2008).

For grades six to twelve to have hands-on scientific experiences while understanding abstract science concepts, this curriculum is a great asset to an ASD classroom.

Crissey, P. (2011). *Picture Directions*. Attainment Company. Retrieved July 3, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/picture-directions

Picture Directions is a picture-based instructional program for students who need to be introduced to following a sequence of steps, independently, while preparing food. With no grade level specified, I would recommend introducing this curriculum to students in early elementary and beyond as needed based on skill level. With 50-lessons, students practice following a sequence of steps independently, following picture directions (Crissey, 2011).

Designed for students with autism or an intellectual disability, this will allow students to learn and practice life skills, cooking, play, and other important skills. These lessons teach students to follow picture directions in sequence, complete activities independently, and recognize sight words paired with illustrations (Crissey, 2011).

Crozier, S. & Sileo, N. (2005). Encouraging positive behavior with social stories. Teaching Exceptional Children 37(6). (pp. 26-31).

When applying social stories in the classroom, it should be done in ways that complement other interventions and strategies. When an educator sits down to create a social story, a systematic checklist for writing and using social stories should be followed. Six steps are crucial for the effective implementation of social stories. With the six steps, monitoring and evaluating progressive data is also essential. ASD students need repetition to recall information in all aspects of life. Social stories read daily or as needed can provide that information and repetition. When choosing to use social stories, administrators and teachers should keep in mind that the social stories must be written at the student's reading comprehension level. If not, the story will not be effective. Also, multimedia social stories have not yet been proven to be effective so at this point traditional social stories should be the focus. A final thought to consider is that social stories are not designed to address all needs of ASD students but can be implemented as part of a comprehensive educational and behavioral plan.

Disability Rights Advocates. (2021, January 26). *Lawsuit Challenges New York City's Segregation of Staten Island Students with Disabilities*. Retrieved June 20, 2022, from https://dralegal.org/press/lawsuit-challenges-new-york-citys-segregation-of-staten-island-students-with-disabilities/

In the goal of highlighting why change is needed within District 75, highlighting the voice of parents is needed. Highlighted are court proceedings that are currently happening or have happened in the past that proves that parents are not happy with the current District 75

system and that change is needed. A lawsuit was filed in Staten Island, not asking for money, instead, the lawsuit seeks reforms. The reform aims for the Department of Education to provide the necessary so that every Staten Island District 75 student has the opportunity to attend their neighborhood schools if they choose. Another concern in the lawsuit is that a majority of Staten Island District 75 students attend schools outside their communities and spend two hours or more going to school daily. The goal of this lawsuit is for New York City to provide more supportive services in Staten Island community schools, so all students have the opportunity and families have the option of integrated educational placement within community schools. The article further discusses the current deficits, including unequal access or no access to playgrounds, cafeterias, libraries, electives like music and art classes, and extracurricular activities like clubs and sports teams. Even though no statistics are given, the research done by the Disability Rights Advocates (2021), showed that very few District 75 students graduate with a regular diploma**,** and Black students with disabilities are overrepresented in segregated District 75 schools. Parents have shown concern and District 75 has been a controversial topic since, "at least 2008, when the Council for Great City Schools issued its City-commissioned report. According to the report, "the isolation of students [is] more pronounced in the New York City school system than in other major urban school systems known to the team…leaving District 75 alone is not acceptable." New York education and disability advocates have also sought reforms to District 75. But the City has continued to maintain the segregated District 75 system, instead of providing expertise and resources to Staten Island community schools so that they can enroll District 75 students" (Disability Rights Advocates, 2021).

With desegregation most likely not occuring in the future, a redesign of how students are educated and advocated for can help allow for families to be more comfortable with their children receiving an education that is not only legally obligated but also of high quality.

D.O.E. (2019). *School Quality Review*. Department of Education. Retrieved June 18, 2022, from https://www.schools.nyc.gov/about-us/reports/school-quality

From the New York City (NYC), Department of Education (D.O.E.) website, I retrieved data from a small sample of District 75 (D75) schools: one elementary, one junior high, and one high school program from each of the five boroughs, for a total of 15 schools. Data retrieved included their school mission and vision, curricula information, daily schedule, related services available on-site, parent programs/support information, and demographics.

The schools chosen were the result of a diverse point of view in educating students with autism spectrum disorder (ASD). This sample of schools will be used to analyze what is currently being offered to autistic students and their families in self-contained, special education settings across the city, as well as how are schools fostering self-advocacy and communication for further success after ASD students leave D75 public schools.

Duncan, A., Ruble, L. A., Meinzen-Derr, J., Thomas, C., & Stark, L. J. (2018). Preliminary efficacy of a daily living skills intervention for adolescents with a high-functioning autism spectrum disorder. *Autism: the international journal of research and practice*, *22*(8), 983–994. https://doi.org/10.1177/1362361317716606

Deficits in daily living skills (DLS), and negative adult outcomes for individuals with ASD have been shown to go hand in hand. At the time this study was written, it was reported

that there aren't any group interventions targeting daily living skills (Duncan et al., 2018). This study is said to be only a first step in the development and evaluation of a DLS intervention for adolescents with ASD. Results are promising. There is a link between DLS and the outcomes of employment, education after high school, independent living, and community which proves that interventions for DLS are needed profusely (Duncan et al., 2018).

With limited research on DLS and autism, with the research provided, there should be a concern when it comes to the quality of life ASD individuals will have if they do not receive intervention and instruction on DLS. With limited information, to assure that ASD individuals have a positive outcome in their DLS, there should be an activities of daily living program in all District 75 schools that serve ASD students.

Ferraioli, S., Hughes, C., & Smith, T. (2005). A model for problem-solving in discrete trial training for children with autism. Journal of Early and Intensive Behavior Intervention, 2(4), 224–246.

Discrete trial training (DTT) is an intervention for children with ASD that focuses on teaching skills. DTT follows a guideline that shows progress within data collection. With the data, it is determined if there is evidence of skill acquisition or lack of progress within a time frame. With the data collected, a determination of continuation of the skill or reconsideration is needed. Within the DTT intervention, a highly structured teaching approach is needed. Each teaching session consists of five parts. DTT should be paired with curricula that focus on a specific objective.

A con when using this approach is that ASD students may not generalize the skill. This takes place when the student only shows the skill during certain times with certain stimuli and

not across all subjects and throughout the day. With this teaching approach, there should be curricula that are designed for ASD students.

Grigorenko, E.L., Torres, S.B., Lebedeva, E.I., & Bondar, Y.A. (2019). Evidence-Based Interventions For ASD: A Focus On Applied Behavior Analysis (ABA) Interventions

Applied Behavior Analysis (ABA) intervention is a type of therapy for individuals with autism spectrum disorder (ASD). "The USA alone has allocated more than $1.4 billion for research on ASD, and a substantial chunk of this research has focused on intervention. The interventions in the field of ASD range widely scientifically validated procedures to parent-developed, self-help management approaches, to apparently charlatan and fad treatments" (Grigorenko et al., 2019, p. 712). This intervention is used in early intervention and in public schools and teaching practices that stem from ABA is used. The fundamentals of ABA in all forms is the model that occurs using three components. ABA has become the global treatment for ASD and the effectiveness of the ABA family of interventions has resulted in an increase or improvement in IQ scores, language skills, and adaptive behavior and decreases and extinction of the need for support during school inclusion and in challenging behaviors.

Things to consider, though, when contemplating ABA is that there are factors that can affect outcomes such as the mode of delivery, length of therapy, gender or ethnicity, and general cognitive functioning. Another consideration is the effectiveness of ABA interventions and the effectiveness in adults with ASD and the role ABA plays from education and vocational standpoints (Grigorenko et al., 2019). This needs to be considered because there are school programs who base their educational approach on ABA only. ABA needs to be paired with

curricula that allow for students to gain that window into the world while learning the way they learn best, in a structured environment.

Howley, Marie. (2013). Outcomes of structured teaching for children on the autism spectrum: Does the research evidence neglect the bigger picture?. Journal of Research in Special Educational Needs. 15. 10.1111/1471-3802.12040.

Structured teaching is a teaching method that involves creating a classroom environment with a specific physical structure, schedules for the sequence of activities, work systems (individualized information to the learner about what work, how much work, what progress am “I” making, what do “I” do when I'm finished), and visuals highlighting the entire structure and directions. Studies show that structured teaching helps students with autism develop self-determination, self-esteem, control of choice, and independence. It is important to note that the research evidence neglects to include internal states of “well-being” and “happiness” (Howley, 2013, p. 111). Structured teaching should be paired with a proven curriculum. Educators and administrators should use this approach to help students develop skills related to, “engagement, on-task/off-task, on-schedule behaviors, independence, transitions, independently locating activities, attending to activities, organizing tasks and materials, and completing tasks” (Howley, 2013, p. 108).

Within my D75 program, structured teaching would be paired with each subject's curriculum. With curriculums that are developed with the whole child in mind, structured teaching would be included to help each student reach a level of independence that allows them to participate in a word not designed for them.

Hudson, M.E., Zambone, A., & Brickhouse, J. (2016). Teaching Early Numeracy Skills Using Single Switch Voice-Output Devices to Students with Severe Multiple Disabilities. *Journal of Development and Physical Disabilities*, 28:1, 153-175.

A study by Hudson et al., (2016), was conducted to evaluate a math curriculum with systematic components that help students with severe dis/abilities and communication needs to gain early numeracy skills using a math curriculum designed with scripted lessons, math stories, manipulatives, and graphic organizers specially designed for students who are nonverbal as well. The curriculum used is called Early Numeracy, a standards-based curriculum for elementary students to learn number sense and skills aligned with elementary skill standards.

The research conducted by Hudson, et al. (2016), showed that this curriculum adapted for students with moderate to severe dis/abilities can help students learn early numeracy skills with an AAC component and can allow for numeracy skill gains and continuous mathematical concepts acquisition after elementary school.

Hunt, P., Kozleski, E., Lee, J., Mortier, K., Fleming, D., Hicks, T., Balasubramanian, L., Leu, G., Bross, L. A., Munandar, V., Dunlap, K., Stepaniuk, I., Aramburo, C., & Oh, Y. (2020). Implementing Comprehensive Literacy Instruction for Students With Severe Disabilities in General Education Classrooms. Exceptional Children, 86(3), 330–347. Retrieved July 11, 2022, from https://doi.org/10.1177/0014402919880156

This study investigated literacy intervention when implemented by special education teachers in a general education setting with eighty students classified as having a severe disability. In the intervention group Early Literacy Skills Builder (ELSB), was used and other students used the general education literacy instruction. Results showed literacy acquisition was

successful. The results also suggest that ELSB is a valuable resource in designing instruction for nonverbal learners and learners with moderate to severe dis/abilities (Hunt, et al., 2020). Adaptable for individual or small group settings and for grades K-5, educators have a curriculum that allows for ASD students to have equal access and opportunities to learn to read.

International Board of Credentialing and Continuing Education Standards. (2020, May 12). *Interview with Dr. Stephen Shore: Autism Advocate & on the Spectrum*. IBCCES. Retrieved July 16, 2022, from https://ibcces.org/blog/2018/03/23/12748/

An interview was conducted by the International Board of Credentialing and Continuing Education Standards (2020), with Dr. Stephen Shore. Dr. Shore is an autism advocate and has ASD himself. It is important for the individuals who service autistic students to not assume but listen to the needs of ASD individuals. Dr. Stephen Shore stated in this interview (2020), "If you've met one person with autism, you've met one person with autism". Never assume that you know or understand before having the chance to get to know your students interests, needs, backgrounds, family dynamics, and responses to the environment.

While there are often similarities of people on the autism spectrum, it's important to understand that characteristics that might be similar, exhibit themselves differently in each individual on the autistic spectrum.

Jimenez, B., Knight, V., & Browder, D. (2012). *Early Science*. Attainment Company. Retrieved July 1, 2022, from https://www.attainmentcompany.com/early-science-curriculum

Early Science is a science-based, scripted curriculum that was designed for students with moderate to severe disabilities. This research and standard-based curriculum for grades k-5

students follow the core concepts of science that include the five senses, rock cycle, earth and sky, and the life cycle. Includes materials, manipulatives, and provides teachers with the framework they need to be able to teach students on the autistic spectrum the way they learn.

With progress monitoring built in as well, teachers and administrators can receive real-time data to see the positive progression and the acquisition of the world in a science-based way (Jimenez et al, 2012).

Jimenez, B., Trela, K., Saunders, A., & Schreiber, L. (n.d.). *Access Geometry*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/access-geometry

Access Geometry is a research-based math curriculum for high school students in grades nine through 12 for self-contained classroom settings. With the focus on geometric figures, proofs, measurements, and representations, this geometry curriculum will allow students with moderate to severe intellectual disabilities or autism to have access to the same content their typical peers receive.

Each lesson is designed for verbal and nonverbal students and includes task analysis, graphic organizers, workbook tasks, and manipulatives for students to solve mathematical problems with real-world stories (Jimenez et al., n.d.).

Kinney, J. (2010). *Explore American History Curriculum*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/social-studies/explore-american-history

Explore American History Curriculum is a standard-based curriculum for students in sixth to twelfth grade. Students will learn key historical events and figures from the year 1600 to

the present. This curriculum follows a consistent format that includes an anticipatory set, vocabulary, stories, and quizzes. There is also a corresponding comprehension component. With no minimum reading requirement, this curriculum can be used in any self-contained classroom setting (Kinney, 2010).

Kinney, J., & Kinney, T. (2019). *Social Skills At School: Elementary*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/social-skills-at-school-elementary

Social Skills at School is an elementary school, grades kindergarten through 5th grade, skill-based curriculum. This curriculum should be modified based on students' level of cognitive ability and abstract thinking abilities. This curriculum includes social skills for getting ready when going out of the home, transitions, classroom interactions, and social-emotional breaks as needed (Kinney, Kinney, 2019).

With 53 relevant social skills that follow a typical school day, a script for teachers, and engaging materials, this is a resource that can be added as an addition to an adapted daily living school program and in the classroom for social-emotional learning.

Lambert, M. J. (2018). *Adapting Curriculum for Autism in Art Education*. The University of Northern Iowa. Retrieved July 12, 2022, from https://scholarworks.uni.edu/hpt/350

This research paper discusses how art education for students on the autism spectrum is currently and the importance of the inclusion of art. Based on Lambert's (2018)research, students on the autism spectrum can greatly benefit from art being integrated into their academic schedule because when students with autism spectrum disorder (ASD) create art, you're able to see

"amazing levels of creativity and expression" (p.4). What is a concern from surveying art teachers and the integration of art for children on the spectrum is concern that they have a lack of training and curricula to properly teach children on the spectrum of autism. Art educators have the understanding that art entails a range of skills and behaviors and part of art instruction is teaching skills and behaviors that allow art to be created.

An art curriculum for ASD students would allow them to use their natural artistic skills while working through ways of expression. Art curriculum will help build ASD students' expressive skills and allow for positive day-to-day encounters (Lambert, 2018).

Leaf, J. B., Townley-Cochran, D., Taubman, M., Cihon, J. H., Oppenheim-Leaf, M. L., Kassardjian, A., Leaf, R., McEachin, J., & Pentz, T. G. (2015). The Teaching Interaction Procedure and Behavioral Skills Training For Individuals Diagnosed with Autism Spectrum Disorder: a Review and Commentary. *Review Journal of Autism and Developmental Disorders*, *2*(4), 402–413. Retrieved from https://doi.org/10.1007/s40489-015-0060-y

Teaching Interaction Procedure (TIP): It was not until 2009 that the Teaching Interaction Procedure (TIP), was first evaluated for use with students diagnosed with an autism spectrum disorder (ASD). This teaching approach is systematic and has six steps. There have been several studies that show TIP to be an effective teaching strategy for individuals diagnosed with ASD. It is important to note that in studies to analyze TIP, social behaviors of children with ASD were the targets. More specifically, conversational and vocational skills. In the studies analyzed, six showed TIP was effective, one study was determined to be somewhat effective and one was ineffective. These factors are important to take into consideration because the recommendation for this teaching practice is for all content subjects.

After analyzing this study, when considering this teaching approach, it is important to consider the lack of evidence and overall academic research involved. The research only targeted social interactions and skills (Leaf et al., 2015).

Behavioral Skills Training (BTS): It was not until 2004 that Behavioral Skills Training (BTS) was considered an intervention for individuals with autism spectrum disorder (ASD). BTS is a multi-component approach that implements four teaching techniques: instruction, modeling, rehearsal, and feedback. The instructional portion involves providing learners with instructions explaining the components of the skill(s) the student needs to learn. When the student masters the skill, at first or with repetitive instruction, praise, and external reinforcements are used. Results have shown that significant gain occurred. Some gains are increases in conversation skills and behavior. Four of the six studies evaluated in this article that were effective yielded highly effective results.

When administrators and teachers consider BTS, a consideration of the steps needed to teach skills are effective but studies only focused on social-emotional skills and not academic performance and skills (Leaf et al., 2015).

Lee, A., Mims, P., & Browder, D. (2011). *Pathways to Literacy*. Attainment Company. Retrieved July 19, 2022, from https://www.attainmentcompany.com/pathways-to-literacy

This curriculum, Pathways to Literacy, developed by Lee et al., (2011), consists of five levels that use prepared scripts to teach story-based lessons. Beginning levels rely heavily on object use to make connections and to allow for learning to be more concrete. Objects are then paired with pictures and gradually faded with a criteria that students must meet the mastery

requirements to move through the levels (Lee et al., 2011). Concepts that this curriculum addresses are story comprehension, cause and effect, picture symbol use, and reading engagement (Lee et al., 2011). Developed for teaching students with a spectrum of disabilities that include autism and intellectual disabilities, an assistive technology device in the form of a button to assist nonverbal students with communicating, is included.

With engaging resources and a design for all students with ASD, this curriculum can support students with disabilities to make abstract connections to stories. This allows for windows to open and allow for ASD students to experience the world through literature.

Meiners, C., & Johnson, M. (2003). *Learning To Get Along*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/learning-get-along

Learning to Get Along is a social story-based education program that is framed for ages 4-8. Attractively illustrated and well-written stories that are designed to reinforce the importance of social skills that are considered the norm. Some book titles that are included are, Accept and Value Each Person, Be Careful and Stay Safe, Join In and Play, Know and Follow Rules, Listen and Learn, Share and Take Turns, and Cool Down and Work Through Anger (Meiners, Johnson, 2003).

Paired with other curricula, this will enrich a social-emotional school program. This can also be used in group counseling or speech sessions for pull-outs or push-ins.

Mims, P., Lee, A., Zakas, T. L., & Browder, D. (2013). *Teaching to Standards: English Language Arts*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/teaching-standards-english-language-arts

Teaching to Standards English Language Arts is a research and standards-based curriculum for grades 6 to 12 to learn language arts with age-appropriate novels like *Holes* and *Number the Stars* (Mims et al, 2013). This curriculum includes persuasive writing, grammar, vocabulary, literacy comprehension, listening skills, and research. It is designed as a multi-year curriculum that aligns with state standards and national standards. Research proves a high success for teaching grade-level standards to students with an intellectual disability or autism. With fifteen novels, including *Holes* and *Number the Stars,* this curriculum modified novels with simplified storylines, repeated text, and symbol support to allow for an understanding of the text without an overload of information. Four theme-based units of study are included, with eight individual lessons within each unit that includes change, values and decision making, social justice, and global awareness (Mims et al, 2013). Each unit has three literacy levels for least intrusive prompting (Mims et al, 2013).

This curriculum was designed for students with ASD to have the ability to interact with new literature the way that autism allows for the student to process information. With already adapted materials, educators can focus on teaching students effectively.

National Institute of Mental Health. (2022, March). *Autism Spectrum Disorder*. National Institute of Mental Health (NIMH). Retrieved July 10, 2022, from https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd#:%7E:text=Autism%20spectrum%20disorder%20(ASD)%20is,first%20two%20years%20of%20life.

Autism spectrum disorder (ASD) is a neurological and developmental disorder. People who have ASD have difficulty interacting with others, communicating, learning, and behaving to the norm of society. Autism can be diagnosed at any age and is described as a “developmental

disorder" because symptoms generally appear in the first two years of life. Children and adults with ASD also have restricted interests and repetitive behaviors and symptoms that affect their ability to function in school, work, and other areas of life. Autism is known as a "spectrum" disorder because there is wide variation in the type and severity of symptoms people experience. Individuals of all genders, races, ethnicities, and economic backgrounds can be diagnosed with ASD. ASD is a lifelong disorder and does not have a "cure". Therapies and services can improve a person's daily functioning (National Institute of Mental Health, 2022).

Nelson, D., Stratman, C., & Weiland, M. (2016). *Explore Social Studies*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/explore-social-studies

Explore Social Studies is a literature-based curriculum for students in sixth to twelfth grade. Included are two distinct reading levels that explore Civics, Economics, American History, World History, and Geography. With two reading levels, educators can differentiate instruction and this curriculum can be used in different self-contained classroom settings. 50 topics include big ideas like the right to vote and pioneers' travel west (Nelson et al. 2016).

New York City Department of Education. (2022). *Beyond Access Series*. Retrieved June 22, 2022, from https://www.schools.nyc.gov/learning/special-education/family-resources/beyond-access-series

Within the Department of Education, there is a Division of Specialized Instruction and Student Support. Within this team, The Beyond Access Series was created. The Beyond Access Series is a workshop designed to support families of students with disabilities. The topics

discussed are related to special education; for example, there are workshops that prepare families for Individualized Education Plan (IEP) meetings and understanding the IEP afterward. For new families, there are workshops that introduce the special education process as well as workshops to help families with behaviors as well.

These workshops offered are resources that families can receive great benefit from but may not know about. In the redesign of D75 school programs, a school support member would be in charge of informing families and also encouraging families to attend.

New York City Department of Education. (2022). *Family and Community Empowerment (FACE)*. Retrieved June 22, 2022, from https://www.schools.nyc.gov/get-involved/families/family-and-community-empowerment-face

The Department of Education has a team called Family and Community Empowerment (FACE). This team is responsible for developing and supporting parents' voices in New York City (NYC) schools. FACE offers opportunities for leadership, training, coaching, etc., for families. These resources are set up to allow families to have the opportunity to be as educated as possible and have the ability to advocate for their families and themselves (New York City Department of Education, 2022). This program has representatives that oversee every borough in New York City and also for districts 1-32 including, a parent empowerment liaison, a school-based parent leader liaison, and a district-based parent leader liaison. With a school support team for every school district, this program is a great way to bridge the gap between schools and families. FACE also gives schools further assistance in bridging the school and family disconnect that may occur by providing support for parent coordinators, family leadership

coordinators, and school administrators with the goal of empowering families and helping NYC schools help their families feel welcome (Department of Education, 2022).

The discrepancy with this team is that there is no specific parent empowerment, school-based, or district-based liaisons for District 75. To verify, further information was requested directly from the FACE team. An explanation provided was that there is a citywide parent leader liaison and that person works with the Citywide Council for District 75 (CCD75). With this information, I have come to the conclusion that every District and school has a team of liaisons to go to for support except District 75. District 75 is given three support staff for all schools in the five boroughs.

New York City Department of Education. (2022). *Paraprofessionals and Substitute Paraprofessionals*. NYC Department of Education. Retrieved July 16, 2022, from https://www.schools.nyc.gov/careers/other-jobs-in-schools/paraprofessionals-and-substitute-paraprofessionals

Paraprofessionals work one-on-one with students who qualify for that type of support. Responsibilities of a paraprofessional can include, small group instruction, reinforcing behavior through the use of positive behavior support, support in the acquisition of daily living skills, and aiding occupational therapists, physical therapists, and speech therapists.

Under the direct supervision of the special education teacher, paraprofessional are apart of the care team for students with ASD.

New York State Education Department. (2011, April). *Questions and Answers on IEP Form - Recommended Special Education Programs And Services: P-12: NYSED*. New York State Education Department (NYSED). Retrieved July 13, 2022, from

https://www.p12.nysed.gov/specialed/formsnotices/IEP/training/answers-programs.htm#:%7E:text=Related%20services%20means%20developmental%2C%20corrective,services%2C%20including%20rehabilitation%20counseling%20services%2C

Students who receive special education services often receive related services. Related services is for, " developmental, corrective, and other supportive services as are required to assist a student with a disability" (New York State Education Department, 2011) When a student qualifies for a related service, this can include, speech-language pathology, psychological services, physical and/or occupational therapy, counseling services, including rehabilitation counseling services, orientation and mobility services, evaluative and diagnostic medical services, parent counseling/training, school health services, and assistive technology services. This list is not exhaustive and may include other developmental, corrective or supportive services if required"(New York State Education Department, 2011).

If a student is evaluated for a related service and it is found that that student needs this service, the school must provide this service from a school based staff member and if that is not possible, must have someone from outside the school building come in to service the student.

New York University (NYU), Steinhardt. (2022). *NYC Department of Education ASD Nest Program*. Retrieved June 20, 2022, from https://steinhardt.nyu.edu/metrocenter/asdnest/new-york-city

The New York City Department of Education has a program that provides students with ASD with a high-quality, specially designed education. The NYC Department of Education is in partnership with the New York York University (NYU) Steinhardt School of Culture, Education, and Human Development which created the Autism Spectrum Disorder (ASD) Nest Program. The NYC Department of Education and NYU have an ASD Nest Model that states that the

program is fully inclusive and is designed for autistic students who are able to do grade-level academic work when provided with support (New York University (NYU), Steinhardt, 2022). The reasoning stated for developing this program is, “to partner with public schools to establish inclusive cultures and advance the development and implementation of educational practices for autistic learners” (New York University (NYU), Steinhardt, 2022). Within this program, teachers, administrators, and related service providers are provided with training, professional development, on-site consultation, and workshops. These resources provided are designed to educate school support professionals with the most up to date and effective strategies in education and behavior modification for autistic students.

Children who have ASD, can not do grade-level academic work will be denied access to this program. The Nest program uses the New York State Learning Standards as well as the same curriculums offered in DOE schools except for the social-emotional curriculum. ASD Nest teachers use a specialized curriculum for social-emotional development that was designed by NYU called *Social Development Intervention (SDI)* (New York University (NYU), Steinhardt, 2022). SDI is an evidence-based program used by teachers and related service providers to help students improve social functioning skills and is designed to be taught in small groups.

The ASD Nest program has a beneficial framework for ASD students and their families but is non inclusive for ASD students with moderate to severe autism. With the Nest program framework in mind, the development of an inclusive D75 school program will be designed.

NYC Department of Education. (2022). *District 75*. NYC Department of Education. Retrieved July 11, 2022, from https://www.schools.nyc.gov/learning/special-education/school-settings/district-75

This resource explains District 75, New York's citywide special education district. This district provides families with children that exhibit significant challenges, such as autism spectrum disorders, significant cognitive delays, emotional disturbances, sensory impairments, and multiple disabilities with specialized schools that fall under District 75 (D75) (NYC Department of Education, 2022). District 75 provides special classes with ratios of, 12:1:1, 8:1:1, 6:1:1, and 12:1:4 (NYC Department of Education, 2022). There are also other ratios for students in full inclusion. If a child has significant hearing and vision impairments, District 75 also has self-contained classes with specialized equipment and services (NYC Department of Education, 2022). Other services provided by District 75 school programs are, the English as a New Language (ENL) program, Travel Training, Activities of Daily Living (ADLs) program, and Vocational programming (NYC Department of Education, 2022). District 75 also provides services for families whose children are getting ready to graduate high school, called transitional service coordination. For Parents, District 75 offers services that are required to be on a student's Individualized Education Plan (IEP). Parent Counseling and Training help parents understand the special needs of their child (NYC Department of Education, 2022).

NYC Department of Education. (2022). *The IEP*. Retrieved July 11, 2022, from https://www.schools.nyc.gov/learning/special-education/the-iep-process/the-iep

This resource explains the components and regulations of the Individualized Education Program (IEP). An IEP is a written plan to provide a child with a Free and Appropriate Public Education (FAPE) in a Least Restrictive Environment (LRE) (NYC Department of Education, 2022). Included in all IEPs are present levels of performance, measurable annual goals, and progress reports for parents (NYC Department of Education, 2022). Also included are, recommended special education programs and services, participation with students without disabilities, participation in state and district-wide

assessment, and transition services that are included on the first IEP that will be in effect when 15 years old (NYC Department of Education, 2022). Transition services that start at 15 include, “a coordinated set of activities, services, and supports that will support your child's movement from school to post-school life with goals of education, employment, and independent living as appropriate”(NYC Department of Education, 2022).

IEPs must be updated at least once a year in a meeting with parents called an annual review. A reevaluation must be completed once every three years, unless the parent and the DOE agree in writing that it is not necessary. This is called a Mandated Three-Year Reevaluation (NYC Department of Education, 2022).

Pearson, K. (2015). *Dynamite Emotions*. Attainment Company. Retrieved July 3, 2022, from https://www.attainmentcompany.com/curriculum/english-language-arts/dynamite-emotions

Dynamite Emotions is a six-story curriculum for transition students to explore feelings and conflict resolution in social and emotional challenges with family, friends, or coworkers. Each story explores the feelings of the character and ends with a resolution to the dispute or conflict. Each book includes an illustrated mini-dictionary of 28 emotions. With engaging colors and graphics, students will be engaged while learning how emotions affect behaviors and receive strategies to identify emotions and understand the impact (Pearson, 2015).

With ASD students, it can be difficult to interpret emotions and how certain behaviors affect others. This curriculum allows for social norms to be understood and established as a skill.

Pfeiffer, B. A., Koenig, K., Kinnealey, M., Sheppard, M., & Henderson, L. (2011). Effectiveness of sensory integration interventions in children with autism spectrum disorders: a pilot study. *The*

American journal of occupational therapy: official publication of the American Occupational Therapy Association, *65*(1), 76–85. Retrieved July 18, 2022, from https://doi.org/10.5014/ajot.2011.09205

Individuals with autism spectrum disorder (ASD) usually have sensory processing disorder (SPD) as well. Sensory processing disorder is common in students who have ASD. SPD often exhibits behaviors that show difficulty regulating responses to certain sensations and stimuli. Self-stimulation can occur to compensate for a lack of sensory input or to avoid overstimulation (Pfeiffer, Koenig, Kinnealey, Sheppard, Henderson, 2011). Certain behaviors that have been correlated with SPD are stereotypical motor movements, aimless running, aggression, and self-injurious behaviors.

The goal of including this information in the redesign of District 75 is to make educators, administrators, related service providers, and families aware of the benefit of sensory interventions when used with the students' individual needs in mind. Sensory interventions should be based on each ASD student's sensory needs as every child with ASD processes sensory information differently.

Prince, A. M. T., Katsiyannis, A., & Farmer, J. (2013). Postsecondary Transition Under IDEA 2004. *Intervention in School and Clinic*, *48*(5), 286–293. Retrieved July 17, 2022, from https://doi.org/10.1177/1053451212472233

Individuals With Disabilities Education Act, 20 U.S.C. §1401 *et seq*. (1990).

Individuals With Disabilities Education Act, 20 U.S.C. §1401 *et seq*. (1997).

Individuals With Disabilities Education Improvement Act, 20 U.S.C. §1401 *et seq*. (2004).

In research by Prince et al. (2013), young adults with a diagnosis are more likely to drop out of high school and/or be unemployed than their non-diagnosed peers. When the Individuals with Disabilities Act (IDEA, 1990) was written, it included postsecondary transition planning for students with disabilities and this had to start at age 16. An amendment to the law was made in 1997 that made a requirement for transitional services to begin at age 14 and then at 16 or younger, a need for transition services with a connection to outside organizations. When an amendment to the law was done in 2004, it further refined the requirements for transition students that hold states accountable. Based on IDEA (2004), the transition is a results-oriented process that focuses on improving the academic and functional performance of a child with a disability when a child is moving from school to post-school activities. These activities can include postsecondary education, vocational training, integrated employment, continuing education, independent living, and community participation (IDEA, 2004).

With schools having a legal obligation to provide these services to students transitioning out of public school, it is up to school to make school to community partnerships while keeping in mind the interests and desires of the student transitioning.

Prince, A. M. T., Katsiyannis, A., & Farmer, J. (2013). Postsecondary Transition Under IDEA 2004. *Intervention in School and Clinic*, *48*(5), 286–293. Retrieved July 17, 2022, from https://doi.org/10.1177/1053451212472233

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Romski, M.A., & Sevcik, R.A. (2005). Augmentative Communication and Early Intervention: Myths and Realities. *Infants & Young Children, 18*, 174–185.

This journal article highlights how important augmentative communication is and that it is never too early to incorporate an alternative form of communication like an AAC device into a young child's intervention program (Romski, Sevcik, 2005). An inability to communicate will make a child with ASD feel frustrated and without the understanding of how to communicate, the child can develop challenging behaviors.

This is important for educators and administrators as well as speech providers to understand because often these devices are not the priority. AAC is, at times, thought of as a separate area of practice but it is not and it is important to ASD children that AAC be used in early language and communication acquisition. Augmentative communication should not be looked at as a second or third resort but rather as the first line of communication for ASD children with difficulties in communication, providing interventions that can help develop a foundation for the development of spoken language, comprehension, and production (Romski, Sevcik, 2005).

Saunders, A., Root, J., & Browder, D. (2017). *Math Skills Builder*. Attainment Company. Retrieved June 30, 2022, from https://www.attainmentcompany.com/curriculum/math/math-skills-builder

This math curriculum is a problem-solving skills curriculum that uses real-world math problems. This curriculum will allow students on the autistic spectrum to learn when and why to use their math skills with authentic story problems as the focus of instructional lessons. This curriculum includes eight units, five lessons each with over 500 story real-world problems with themes (Saunders et al., 2017). The eight units guide and instruct students to solve addition (sums to 10), subtraction story problems (differences to 9), and the use of three problem-solving strategies (group, change, and compare) (Saunders et al., 2017).

This curriculum was designed with students and teachers in mind with scripted lessons to suggest feedback responses for prompting, error correction, and praise. The math story problems are shown using a multisensory approach. Students with mild (12:1:1) disabilities will advance through the curriculum in a year's time and be ready for higher-level math concepts. Students

with moderate-to-severe disabilities (8:1:1, 6:1:1), may need repetition and multiple years of instruction. The curriculum has early numeracy foundational skills, then advances to solving math story problems.

School of Education - American University. (2022, February 14). *Why Teachers Teach at Low-Performing Schools: Representation Matters*. American University School of Education. Retrieved July 16, 2022, from https://soeonline.american.edu/blog/why-representation-matters-in-low-performing-schools#:%7E:text=Representation%20means%20that%20teachers%2C%20principals,in%20the%20schools%20they%20serve.&text=One%20strategy%20of%20academic%20leaders,students'%20racial%20and%20cultural%20identities.

One important way to improve outcomes for students in District 75 schools is to increase the number of teachers of color. (School of Education American University, 2022, Para 1). Representation helps strengthen communities and improve student outcomes in elementary, middle, and high schools. It is important for the individuals who hire those who teach children on the spectrum to keep in mind that the leaders who lead ASD students should be able to connect with them on some level. To have the ability to look at them as another human being who needs support and the ability to uplift them to there highest potential.

Schwartz, I. M., & Best, M. (2022). *Stepping Out Into The Community*. Attainment Company. Retrieved July 1, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/stepping-out-into-the-community

No grade range specified- Stepping Out Into The Community is a community-based instructional program for students to achieve independence outside of school with 18 community-based outings and units. These outings include grocery shopping, eating at a restaurant, using the bank, and going to the movie theater (Schwartz, Best, 2022). Included in the curricula is practice for prerequisite skills that are done in the classroom before students go into the community.

With single and multi-step tasks, this instructional program would be great to add to an adapted daily living program. This can be used as a blueprint for community walks and establishing an understanding of the community that ASD students live in.

Schwartz, I. M., & Best, M. (n.d.). *Stepping Out Into the Community*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/stepping-out-into-the-community

Stepping Out Into The Community is a community-based instructional program for students to achieve independence outside of school. With no grade level specified, I would recommend introducing this curriculum in upper elementary and beyond. It includes 18 community-based outings that include grocery shopping, eating at restaurants, using the bank, and going to the movie theater. Educators can guide students using outing checklists and data monitoring progress sheets. With the outing checklists, students can learn to self-monitor as well. This curriculum includes scripted teaching cues for long-term adaptations or faded prompts as students develop skills (Schwartz, n.d.).

Sec. 300.114 LRE requirements. (2017, May 3). Individuals with Disabilities Education Act. https://sites.ed.gov/idea/regs/b/b/300.114

Each public agency must ensure that, to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (Sec. 300.114 LRE requirements, 2017).

Sec. 300.39 Special education. (2017, May 3). Individuals with Disabilities Education Act (IDEA). Retrieved July 17, 2022, from https://sites.ed.gov/idea/regs/b/a/300.39#:%7E:text=(5)%20Vocational%20education%20means%20organized,a%20baccalaureate%20or%20advanced%20degree.

This resource discusses two important transition services for students preparing for high school graduation. Vocational education means organized educational programs that are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career not requiring a baccalaureate or advanced degree. (*Sec. 300.39 Special Education*, 2017)

Travel training means providing instruction, as appropriate, to children with significant cognitive disabilities, and any other children with disabilities who require this instruction, to enable them to— develop an awareness of the environment in which they live; and Learn the skills necessary to move effectively and safely from place to place within that environment (e.g., in school, in the home, at work, and in the community). (*Sec. 300.39 Special Education*, 2017)

Siegel, D., Flemen-Tung, M., & Kirkman, K. (2020, September). *Toward Effective Inclusion for Students with an Emotional Disturbance Classification*. Metropolitan Center for Research on Equity and the Transformation of Schools.

In this article, you find a breakdown of the current ASD Nest program framework and all the components involved in this program. To have a successful program that effectively teaches students, the Universal Design for Learning (UDL) planning technique (Al-Azawei et al., 2016), and evidence-based instructional methods for students with disabilities is what is needed and included. The key features of this program include: a whole-school model for ASD students, evidence-based components and strategies, child-centered, teachers work using an ICT framework approach, Social Development Integration is the primary intervention used, and teachers and related service providers receive the same training on autism, collaboration, and family engagement (Siegel et al., 2020).

The Nest program framework combined with the use of UDL is proven to be an effective way of educating children with ASD and providing them with a student-centered education.

Siegel, D. & ASD Nest Program. (2016). *ASD Nest Model Framework*. ASD Nest Program Project, NYU Steinhardt. https://drive.google.com/file/d/1uDxV1rPdDCggxT4UntftCa7B3amRf9cv/view?usp=sharing

This document discusses how the ASD Nest program is developed, the core beliefs, and practices. This framework is ideal for how District 75 schools should develop each of their school programs. This program was developed for “high functioning” autistic students but leaves out students with moderate to severe autism. Starting with *classroom supports*, the framework includes class-wide strategies, integrated therapeutic supports, landmark documents, and social

development intervention. Then, *under collaborative structures,* the framework includes, co-teaching and co-planning, team meetings, Nest coaches, ASD Nest cluster teachers, home-school connection, and outside support. After collaborative structures within the framework are *system-wide structures* that involve reduced class size with appropriate ratios, training, professional development, committed administration, and inclusive classrooms. Lastly, the ASD Nest program framework is a philosophical foundation that includes true inclusion, collaboration, understanding of ASD, focusing on strengths, individual support, therapeutic environment, social development, positive behavior support, and family involvement (Siegel & ASD Nest Program, 2016).

This resource also highlights how this Nest program is needed because of the New York State data of high school graduation rates. As of 2020 , only 31 percent of students with disabilities graduated from high school. When looking at the data for students who are educated in a self-contained classroom, the graduation rate has been as low as 4.4 percent in past years (Siegel & ASD Nest Program, 2016). With these rates, it is clear that students in self-contained classrooms are not receiving the same experiences as their nondisabled peers.

Simpson, R. L. (2005). Evidence-based practices and students with autism spectrum disorders. *Focus on autism and other developmental disabilities*, *20*(3), 140-149.

This article highlights evidence-based practices for students with an autism spectrum disorder (ASD). The evidence-based practices are grounded in scientific-based research (SBR) and describe SBR practices as validated by a means of research that uses random samples and controls, and experimental groups. With a description of what SBR entails, there are

recommendations of best practices of teaching ASD students with SBR to back the practices highlighted.

With this in mind, positive outcomes can occur when knowledgeable educators collaborate with parents and families and use verified strategies. When correctly applied, three scientifically-based practices are recommended. Applied Behavior Analysis, Discrete Trial Teaching, and Pivotal Response Training.

Smith, B. R., Spooner, F., Jimenez, B. A., & Browder, D. (2013). Using an early science curriculum to teach science vocabulary and concepts to students with severe developmental disabilities. *Education & Treatment of Children, 36*, 1-31.

This study highlights the effects of scripted lessons on the content area of science. The Individuals with Disabilities Education Improvement Act (IDEA) and the No Child Left Behind Act (NCLB) were put into place so that students with disabilities have the opportunity to learn, and be held with to the same standards as their peers that do not have diagnoses, and so that special educators can go beyond simply teaching self-help and life skills (Smith et al., 2013).

The Early Science curriculum is designed for elementary students. Science education is extremely important because it offers an understanding of science that allows students the ability to "question their own lives and formulate thinking to make informed decisions. Scientific thinking will enhance the capability of all students to hold meaningful and productive jobs in the future, with the ability to learn, reason, think creatively, make decisions, and solve problems" (Smith et al., 2013, p. 231). Validity, fidelity, and reliability have been tested. Results show that the Early Science curriculum is valid, reliable, and is designed for students with special needs.

This study is a part of a very limited set of research on science instruction for students with moderate to severe students disabilities. This study also pointed out that teachers in self-contained classrooms may not be experts in the academic areas they teach so scripted lessons provide the support teachers need to include research-based strategies in their classroom. Data showed an increase in understanding of science content across all studies (Smith et al., 2013).

Stabel A. (2013) Daily Living Skills. In: Volkmar F.R. (eds) Encyclopedia of Autism Spectrum Disorders. Springer, New York, NY. Retrieved July 11, 2022, from https://doi.org/10.1007/978-1-4419-1698-3_1417

Activities of Daily Living skills refer to a big range of personal self-care activities throughout a person's daily life in all aspects of their life (home, school, work, and community). Important daily skills that will allow anyone to be independent and take care of themselves like food preparation and personal hygiene, need to be performed on a regular basis and these skills can be difficult for an individual with autism to gain.

For this reason, it is extremely important for schools to adopt an ADL program to teach and help students graduate with sufficient “adaptive functioning, or an individual’s ability to care for self and function independently” (Stabel, 2013, para 2).

Stanger, C., Mims, P., Wood, L., & Ahlgrim-Delzell, L., (2016). Supporting Literacy Achievements for Students with Intellectual Disability and Autism through Curricular Programs that Incorporate Assistive Technology. *Assistive Technology Outcomes and Benefits, 10* (1).

In this study, five literacy programs with assistive technology (AT) were designed and integrated into instruction. The access to curricular content through AT integration provides multiple means of representation, engagement, and expression, that follow the Universal Design for Learning (UDL) framework for diverse learners by allowing for "designing inclusive learning environments using technology" (Izzo, 2012, p 345), including but not limited to, alternate response modes. With these AT features, students were able to participate in the re-telling of a repeated story and participate in all aspects of the curricula. There are consistent findings of positive student outcomes due in part that curricula designed for students with moderate to severe disabilities integrated the use of AT.

This study is important in establishing the need for educators to use curricula and design lessons that integrate AT. Students with ASD have an ability to process and learn information, as well as communicate things learned if given the opportunity to.

Stride, J. (2009). *Do The Right Thing*. Attainment Company. Retrieved July 3, 2022, from https://www.attainmentcompany.com/curriculum/english-language-arts/do-right-thing

Do The Right Thing is a 25-story language arts curriculum for transition-age students to analyze community-based social situations. Topics discussed include stranger danger, visiting the hospital, and preparing for a social event. Each story includes a vocabulary glossary and ends with comprehension questions to check understanding (Stride, 2009).

This curriculum, paired with an activities of daily living skills program can allow students transitioning out of public school to gain the skills necessary to independently interact with their community.

Sudol, E. (2011). *Look 'N Cook Microwave*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/life-skills/look-n-cook-microwave-cookbook

Look 'N Cook Microwave is a cookbook that provides step-by-step instructions for 68 packaged and from-scratch recipes that can be cooked in the microwave. Included in this curriculum are 32 lessons that teach safety, nutrition, meal planning, and microwave techniques. With each recipe, there are illustrations, modeling each step including visual modeling in picture form. With these multisensory curricula, all self-contained classrooms can enjoy learning to cook (Sudol, 2011).

Adding this curriculum to an activities of daily living program will allow for ASD students to gain confidence and independence.

Trela, K., Jimenez, B., & Browder, D. (2008). *Teaching To Standards: Math*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/teaching-standards-math

This math curriculum is a research and standards-based curriculum designed for grades six through twelve, and for students with moderate to severe intellectual disability or autism. Students will learn geometry, algebra, data analysis, and measurement concepts that are aligned to the state standards. With 68 uniquely designed lessons that start with a real-world story, with picture cues, each story uses a graphic organizer with manipulatives or writing using the organizer (Trela et al., 2008).

With varying levels of support, this curriculum can be used with differentiated instruction for students with different academic needs that have ASD. This can include students in 12:1:1, 8:1:1, and/or 6:1:1.

United Federation of Teachers. (2020). *Fulfilling Your CTLE Requirements*. Retrieved June 20, 2022, from https://www.uft.org/news/you-should-know/qa-on-issues/fulfilling-your-ctle-requirements

This article discusses the professional development offered for continuous learning through the NYC Department of Education. There is one Continuing Teacher and Leader Education (CTLE) requirement per educator (e.g., 100 clock hours), regardless of the number of certificates held that are subject to CTLE. For educators who teach in an NYC DOE school, every 5-year period must complete 100 clock hours of acceptable CTLE. What is surprising, though, is that every educator does not need to complete this. It all depends on your certification level. Meaning, that only teachers who hold professional teaching certificates and paraprofessionals who hold Level III teaching assistant certificates need to collect CTLE hours. If you achieve certification from the National Board for Professional Teaching Standards, you will be deemed to have met the CTLE requirement for that five-year cycle. Teachers who hold other certificates (initial, conditional initial, Transitional A, Transitional B, internship, or permanent) and paraprofessionals who hold Level I or II teaching certificates do not need to collect CTLE hours. These certifications that do not need CTLE hours are teachers early in their careers (United Federation of Teachers, 2020).

Urban Arts Partnership. (n.d.). *EASE Urban Arts Partnership*. Retrieved July 4, 2022, from http://easelms.urbanarts.org/#

Everyday Arts for Special Education (EASE), is an integrated arts program. This program was designed for students with moderate to severe disabilities and with this curriculum,

educators have the opportunity to strengthen their student's academic and behavioral individual education plan (IEP) goals. With social-emotional learning, culturally responsive pedagogy, and inclusive but differentiated instruction, educators and students will find success using this art-integrated, social-emotional curriculum (Urban Arts Partnership, n.d.). This curriculum meets goals for activities of daily living and social-emotional skills.

Horowitz, R. (2016). *District 75, New York City Department of Education Everyday Arts for Special Education Impact Evaluation*. ArtsResearch. https://www.artsresearch.net

Through a development grant given to District 75 the Everyday Arts for Special Education (EASE) curriculum was created. This research paper evaluates the impact this art curriculum had on students within District 75. Students who participated in this study had a disability category of either autism, intellectual, emotional disturbance or multiple disabilities with a range of severity. The program EASE implemented involved professional development, collaborative classroom modeling, and classroom instruction. To measure progress with the EASE curriculum samples of students New York State Alternative Assessment (NYSAA), and Students Annual Needs Determination Inventory (SANDI), were used.

The finding showed the effectiveness of the program on reading and social-emotional achievement. The improvement was seen in reading and social-emotional development, “may be due to the increased engagement of students with disabilities…activities were inherently interactive, involving peer-to-peer and teacher-student communication in verbal, artistic and kinesthetic domains” (Horowitz, 2016, p. 11). It is important to note that the support provided by District 75, with workshops and coaching, when implementing this curriculum was noted as the likely reason this curriculum was so successful with educators and students. With that being

stated, it makes it evident that continuous learning and support needs to provided to assure that ASD students are being provided with high quality education.

Verschuur, R., Didden, R., Lang, R., Sigafoos, J., & Huskens, B. (2014). Pivotal response treatment for children with autism spectrum disorders: A systematic review. *Review-Journal of Autism and Developmental Disorders*, *1*(1), 34-61.

Pivotal Response Training (PRT), is described as an intervention model that stems from Applied Behavior Analysis (ABA) therapy. The goal of PRT is to teach children with autism behaviors that improve their functioning in the world. This intervention focuses on four aspects of functioning: motivation, self-initiations, responding to multiple cues, and self-management. To motivate children and help engage them in tasks, teachers are supposed to follow the child's lead and offer choices, gaining the child's attention, then provide opportunities for responses that include shared control and turn-taking. A variation of tasks, natural reinforcements, and repetition of the targeted skill is also needed. After reviewing the studies done on this approach, evidence shows the effectiveness of PRT but it is important to keep in mind that based on this research (2014), the majority of studies show only suggestive evidence due to limitations.

With limited research, this approach to teaching ASD students should be used on a need to need basis. With an increase in areas like, communication and play skills and a decrease in maladaptive behaviors, students with these needs can benefit from interventions using this approach.

Welch, S. (n.d.). *Augmentative and Alternative Communication for Autism*. PennState Health. Retrieved July 4, 2022, from

https://www.pennstatehealth.org/services-treatments/speech-language-pathology/augmentative-alternative-communication-autism

Augmentative and Alternative Communication (AAC) is any technological device or system that can help adults and children with autism communicate, often using speech-generating devices (SGDs) that can be operated with the hands, eyes or even a tilt of the head. SGD technology has advanced to the point that many individuals with autism and other severe speech impediments are now able to more easily communicate and connect with others. Having an alternative way of communicating allows individuals with autism to have different ways of learning, paying attention and reacting or responding to others. Research has shown that about 30% of people with ASD don't learn to speak more than a few words but as educators and administrators of autistic students, it is important to know that nonspeaking does not mean truly nonverbal. Children on the autistic spectrum can recognize and respond to words in writing, and respond to icons, symbols, and gestures which can all be incorporated into an AAC plan. When communicating to parents about AAC devices and plans, it is important to understand that some caregivers worry that the use of AAC will discourage typical speech development, but the opposite is true.

With a sensitive approach, educators and administrators can communicate to caregivers that AAC helps nonspeaking children associate words with their meanings, express feelings, ask and answer questions, and make requests. An ability to communicate can also help children on the spectrum reduce stress and frustration and prevent undesirable behaviors (Welch, n.d.).

Wenger, K., Eacret, J., & Garza, A. (2022). *Explore Algebra Curriculum*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/curriculum/math/explore-algebra

Explore Algebra Curriculum is a math curriculum for grades six through twelve. This curriculum is aligned with standard-based algebra and also includes foundational concepts of algebra. Lessons include pictures to enhance engagement understanding, real-life applications, and hands-on support. With this curriculum, educators are provided with lesson-specific Universal Design for Learning (UDL), charts to differentiate instruction (Izzo, 2012). For students who struggle with abstract concepts, an alternate level is included (Wenger et al., 2022).

Western Governors University. (2020, January 29). *The Benefits of Teachers of Color In P-12 Classrooms*. Retrieved July 10, 2022, from https://www.wgu.edu/blog/the-benefits-teachers-color-p-12-classrooms2001.html#close

This article discusses how, in the public school system, the percentage of students of color to teachers of color is growing. Many states are working towards addressing this inequity because it is statistically proven that teachers of color make an impact on black, brown, and white chidrens lives. Teachers of color boost overall academic performance, improve graduation rates, and reduce the number of absences. It is beneficial for all students if there is more of an effort in closes the gap in students of color to teachers of color (Western Governors University, 2020).

Wolf-Schein, E. G. (1995). Structured Methods in Language Education: SMILE.

Structured Methods in Language Education (SMILE), is a literacy curriculum designed for students with severe language disabilities such as autistic spectrum disorder (ASD). SMILE

is designed to develop skills in a hierarchical format. Starting with the smallest unit of language, phonemes are immediately paired with grapheme skills and then a progression in reading abilities. Each progression is built on the other and is structured to provide as many cues as possible. With this program, a home and school connection is built-in as books are prepared by the teacher based on what the students learned, and a home and school connection forms with books sent home for continuous learning. The SMILE curricula also incorporate a component that helps develop attention, specific and consistent teaching methodology, structure and routine, reinforcement that is immediate, approximations that lead to exact repetition, patterns, drills, and ongoing attention to generalization skills (Wolf-Schein, 1995).

Zelt, R., Mims, P., & Browder, D. (2019). *Access Language Arts: Write Curriculum*. Attainment Company. Retrieved July 2, 2022, from https://www.attainmentcompany.com/access-language-arts-write-curriculum

The Access Language Arts: Write curriculum is an extension of the Teaching of Standards: English Language Arts curriculum. This curriculum teaches ASD students writing terminology, topic writing, and the writing process. With the writing process, this curriculum teaches skills of writing an introduction, an opinion, including reasoning, and how to write a conclusion. Another component is, how to construct an opinion paragraphs (Zelt et al., 2012).

With this writing curriculum, students are provided with a blended approach to writing that integrates systematic instruction, built in prompts, and specific educator feedback. This allows for educators to have a framework for how to teach ASD students writing skills with the ability to follow scripted lessons and adapt as needed.