

UNDERSTANDING THE LEARNING EXPERIENCES AND ATTITUDES RELATED TO  
THE ACADEMIC PERFORMANCE AND SUCCESS OF HIGH SCHOOL STUDENTS WITH  
DISABILITIES: A PHENOMENOLOGICAL STUDY

by

Delavar Basha

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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## Abstract

The purpose of this phenomenological study was to understand the academic performance and progress of students with disabilities at a high school in the Northeastern United States. The theory guiding this study was Maslow's hierarchy of needs since it captures the benefits of meeting all learners' fundamental and unique set of needs to motivate them to self-actualize or realize their full potential. A transcendental phenomenology method was used for this study. Twelve students with disabilities served as participants, and data were collected through interviews, a focus group, and an open-ended questionnaire. The study utilized qualitative data analysis techniques to gain a deep understanding of how the school supports disabled students in the high school setting. This involved examining, theorizing, situating, and integrating the data to establish a comprehensive understanding of the school's strategies for motivating disabled students. Four themes emerged through data analysis using Moustakas's modified method of analysis in this study and include (a) impact of accommodations on learning, (b) challenges and barriers to effective accommodation, (c) role of self-advocacy and independence, and (d) social and emotional well-being. These themes corresponded to the theoretical framework of the study. This study confirmed Maslow's theory through participants' lived experiences as students learning with disabilities. Students experienced success when their needs were met through support and accommodations.

*Keywords:* academic performance, accommodation, disability, learners' needs, learning support, lived experiences, self-advocacy, social well-being, students with disabilities

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## **Dedication**

I dedicate this to my father, who inspired me to pursue higher education.

I dedicate this to my mother, who inspired me to work hard.

I dedicate this to my wife, who inspired me to serve others.

I dedicate this to my kids, who inspired me to be creative.

### **Acknowledgments**

I would like to acknowledge my committee chair Dr. Ziegler who patiently reviewed my drafts, provided valuable feedback, and offered continual support throughout the process.

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### **List of Abbreviations**

Americans with Disabilities Act (ADA)

Digital Age Teaching Scale (DATS)

Free Appropriate Public Education for Students with Disabilities (FAPE)

Individualized Education Program (IEP)

Individuals with Disabilities Education Act (IDEA)

International Society for Technology in Education (ISTE)

National School Boards Association (NSBA)

United States (U.S.)

## CHAPTER ONE: INTRODUCTION

### Overview

Students with various learning aptitudes, disabilities, and socio-economic barriers are entitled to equal educational opportunities. This is a promise made by the United States Congress via the Free Appropriate Public Education for Students with Disabilities (FAPE) found in the Rehabilitation Act of 1973. In addition, International Society for Technology in Education (ISTE) standards aim to ensure equitable access to educational technologies and digital content for all learners. Research by Vucaj (2020) investigates how ISTE standards for educators can be implemented using the Digital Age Teaching Scale (DATS). This assessment tool evaluates teachers by providing data on their alignment with ISTE standards and further identifies areas of instructional gaps. Educating students with unique learning needs and personal challenges can be more complex for teachers. The data confirms the seriousness of this issue. In an article published by the National School Boards Association (NSBA) in 2019, researchers found that students served under the Individuals with Disabilities Education Act (IDEA) were much less likely to graduate from high school on time compared to their peers — 67.1 % to 84.6 % (NSBA, 2019). It should remain a top priority to offer all types of students a quality education they can benefit from by establishing learning environments that will empower them as they continue on their educational path. In this chapter, I present the problem related to the graduation rates of high school students with disabilities. I also explain the background, significance, and purpose of the study as well as the gap in literature relating to the problem. Research questions, definitions, and a summary make up the rest of the chapter.



## **Background**

This section presents a summary of the different learning challenges that students with various disabilities may face. The section also explores the evolution of the challenges and accommodations specific to learners with disabilities. In addition, an analysis of the social context of these issues, as well as theoretical concepts underpinning the research on this topic, will be summarized to represent core ideas and concepts.

### **Historical Context**

Access to quality education for learners with disabilities has significantly improved over the past several decades due to rigorous legislation and interest groups pushing for equal rights in different sectors of society. However, fully meeting the needs of students with disabilities, such as the provision of necessary accommodations to ensure they can access quality education, remains a challenge that needs to be better supported (Vincent & Chiwandire, 2019). An extensive literature search indicated that ensuring an inclusive and safe learning environment for individuals with disabilities has been a challenge since the 18th and 19th centuries (Vincent & Chiwandire, 2019). These include disabilities such as visual impairment, blindness, deafness, and autism.

In a monograph developed by Merry (1933), the researchers noted that blind and visually impaired Americans struggled to access education because special schools for the blind did not exist until 1900. A review of policy perspectives by Ahmad (1917) also found that the United States government was not committed to creating inclusive educational environments and failed to provide a reorientation that the policymakers could use as a starting point. In a survey conducted by Zigmond and Baker (1995) on the current and future practices in inclusive schooling, the researchers discovered that the United States had made significant achievements

in developing a system of supports and services for students with disabilities over the past few decades. According to Zigmond and Baker (1995), such developments helped to ensure that special needs learners were able to access mainstream curricula, but the researchers also recommended future efforts to focus on ensuring equality. For example, in an article by Brennan and Peña (2016), the authors noted that autism was a major barrier to good academic performance for American children because the American Disabilities Education Act had not set adequate groundwork for the inclusion of students with disabilities.

### **Social Context**

Various sectors of society can be affected when there is poor academic performance and progress by students with disabilities at the high school level. This is because the population group can become unproductive and a burden to the economy without a clear path after schooling (Barros et al., 2019). While exploring the quality of life and burden of caregivers of children with disabilities, Barros et al. (2019) noted that learners with disabilities have the capacity to perform better and progress through their academic journey to become productive contributing members of society with the appropriate support systems in place. Therefore, research that provides an understanding of the academic performance and progress of students with disabilities at the high school level can benefit the key stakeholders in the education system to ensure they provide the proper support and accommodations for learners with disabilities. However, if learners with disabilities were not provided with a learning environment that effectively accommodates their special needs, Barros et al. (2019) pointed out that their academic progress and performance were affected.

Challenges faced by students with disabilities extends beyond school, also in the communities where they live playing a significant role. Leaders and stakeholders in the

education field have not paid close attention to the learning pathways for students with disabilities and some learning institutions lack the most basic accommodations like braille for blind students (Abbas, 2020). Ferreira-Meyers and Pitikoe (2021) also pointed out that learners with disabilities often face challenges such as segregation and discrimination in society and are sensitive to bias or unequal treatment in learning institutions. Therefore, studies that provide empirical data present a better understanding of challenges facing learners with disabilities and offer possible solutions for those barriers are critical. This data can help to ensure that special needs students complete their education. Researchers should consider systemic challenges impacting people with disabilities as the basis to build comprehensive solutions that make this population group remain productive and engaged members of society.

### **Theoretical Context**

Academic performance, academic progress, and academic accommodations of learners with disabilities have been widely studied in different research fields. Several theoretical concepts have been explored to understand challenges and ways to support learners with disabilities. For instance, Rapp and Corral-Granados (2021) and Sempowicz et al. (2018) explored the social constructionist theory and noted that developing standard measures for accommodating students with disabilities can be challenging because knowledge and different aspects of society are socially constructed. Since people develop meanings through social interaction, Rapp and Corral-Granados (2021) concluded that the best learning environment for learners with disabilities is an inclusive environment. Sempowicz et al. (2018) confirmed that such an environment allows learners with disabilities to interact with their peers and fosters a smooth transition to the outside world.

Archambault and Milone (2020) and McKay (2018) also explored Allport's contact

theory (1954) in understanding the experiences and perceptions of learners with and without disabilities about different accommodations provided to individuals with disabilities. Allport's contact theory argued that interpersonal contact between groups can reduce prejudice, especially if the groups are accorded cooperation, equal status, institutional support, and common goals (Archambault & Milone, 2020). Apart from supporting inclusive learning, Allport's theory proposed that inclusivity and competitiveness was gained when different groups felt they received equal treatment. Archambault and Milone (2020) and McKay (2018) found in their studies that the present environment defines one's experience through interaction with other people and events; this can explain how school environments and available facilities impact the experience of learners with disabilities. The proposed research extends the existing knowledge in the area under study by proposing Maslow's hierarchy of needs as a theoretical framework that can help understand how to best support and motivate learners with disabilities to perform and compete with their peers.

### **Problem Statement**

The problem was that students with disabilities were much less likely to graduate from high school on time compared to their peers (Aguirre et al., 2021; Li et al., 2020; Lopez-Gavira et al., 2021; Smith et al., 2021). According to the National School Boards Association (2019), the difference is 67.1 % compared to 84.6 %. This disparity between the academic achievement of students with disabilities compared to students without disabilities means that schools need to assess, understand, and address this problem, to better establish equitable academic support plans. Learning institutions should provide students with disabilities with educational pathways that include customized accommodations, such as assistive technology solutions. All students, regardless of ability, should have a free and appropriate education as stipulated by United States

legislation in the Free Appropriate Public Education for Students with Disabilities (FAPE) (1973). Schools should ensure that there are learning models which allow for special needs students to be accommodated. In addition, schools should have qualified educators on staff who have completed the requisite specialized training to be able to teach students with disabilities.

According to Pelegrin (2017), many schools are still slow to meet updated accommodation requests from students with special needs. Schools must train teachers to be ready to support special needs students with classroom environments that include customized learning modalities driven by evidence-based best practices. All students of various learning aptitudes, disabilities, and socio-economic barriers are entitled to equal educational opportunities according to the Free Appropriate Public Education for Students with Disabilities (FAPE) found in the Rehabilitation Act of 1973 and Individuals with Disabilities Act (IDEA) (1990).

### **Purpose Statement**

The purpose of this phenomenological study was to understand the academic performance and progress of students with disabilities at a high school in the Northeastern United States. At this stage in the research, the academic performance of students with disabilities was generally defined as performance in class aligned with the core curriculum standards established by the school system. The theory guiding this study is Maslow's hierarchy of needs.

### **Significance of the Study**

Education is a basic right afforded to every single learner through FAPE and IDEA. All students with special needs, regardless of disability, deserve access to high-quality special education. In addition, any other characteristics of special needs students, such as their background, race, or ethnicity, should not be factors that negatively impact access to quality

academic supports. The study explored the learning experiences, academic performance metrics, and academic progress of students with disabilities at the high school level. Understanding the learning experiences of learners with disabilities can offer education stakeholders with insights on what accommodations to implement for learners with disabilities, to promote a positive learning experience. Learning experience directly impacts the academic performance and progress of learners with disabilities. As a result, understanding how to improve the learning experience of this cohort is likely to improve their academic performance and progress.

### **Theoretical**

Maslow's hierarchy of needs (1943) was the theoretical framework that can help understand how to best support learners with disabilities to perform and compete with their peers who do not have disabilities. This study contributed to the viability of this framework by perhaps revealing gaps within the psychological needs section of Maslow's hierarchy of needs. These psychological needs are described as belongingness and love. Students with disabilities may not feel like they belong in the classroom because of the customized and separate learning models they have to follow. In addition, there may be other difficulties that some special needs learners have to manage. For instance Morgan et al. (2017) explained that there was a critical racial disparity when it came to diagnosing disability and incorporating disabled minority students into the classroom. This aligns with the belongingness and love section within Maslow's hierarchy of needs. Morgan et al. (2017) found that when comparing children with similar backgrounds, including poverty, gender, academic grades, and English language learner status, children of color were less likely than white children to be diagnosed with a learning disability. This was prevalent across every grade in education, across racially diverse groups, and across specific disabilities. Grindal et al. (2019) also found that African American and Hispanic children with

any type of disability diagnosis were more likely to be segregated from their peers than Caucasian and Asian children, which falls out of line with FAPE and IDEA. This type of isolation of certain types of students also matches with the belongingness section of Maslow's hierarchy of needs which can cause these students to have their critical needs unmet.

### **Empirical**

My study was related to other similar studies in many ways. For example, Thapliyal et al. (2022) examined how a differentiated learning environment impacts the learning experience of students with disabilities. The authors demonstrated that learners with disabilities require differentiated instruction models in a preferential learning environment. My study researched students with disabilities to identify those students' critical learning domains and the impacts on their academic performance and progress when the learning environment does not meet their unique special needs. In another study, a meta-analytic review by Thapliyal and Ahuja (2023), the researchers examined how different assistive technologies and tools impacted the academic performance and progress of learners with disabilities. The study findings highlighted the need for assistive tools that were learning disability specific and could comprehensively address different learning difficulties. The data I gathered through this study added to this topic to inform the design of assistive technologies to meet the needs of learners with disabilities.

### **Practical**

This study summarized key findings about students with disabilities, their academic performance, the impact of customized learning models, and the results of classroom accommodations. The findings were useful for participants and their parents or guardians as they sought to understand their students' current academic level and also plan for future learning paths. Besides the participants, the site benefitted as well from this research. Pelegrin (2017)

argued that many schools fail to meet the accommodation requests from students with special needs. This study assisted schoolteachers and administrators to better understand any gaps for their special needs students, as well as areas for improvement. According to Smith et al. (2021), learners with disabilities have unique educational needs that schools must fulfill with custom learning pathways designed for such students. This study presented valuable metrics about students with disabilities which can serve to promote school wide recognition of needed supports and potential policy changes. On a wider scale, the findings from research can be used to help inform organizations that work with special needs students or individuals with disabilities. Such groups can use the findings to make policy changes, introduce initiatives, or make other plans.

## **Research Questions**

### **Central Research Question**

What are the learning experiences, attitudes, and academic performance of students with disabilities at the high school level as they prepare for graduation?

### **Sub-Question One**

What are the learning experiences of students with disabilities at the high school level who received customized and individualized accommodations, including tools such as assistive technology?

### **Sub-Question Two**

What are the attitudes of students with disabilities at the high school level who received appropriate accommodations, including assistive technology solutions and supplemental one-on-one instruction from specialized disability consultants and/or instructors?

### **Sub-Question Three**



What is the academic performance of students with disabilities at the high school level who did not receive necessary academic accommodations?

### **Definitions**

1. *Academic Performance* – a measurement of student achievement using standardized tests (Li & Carroll, 2020).
2. *Academic Progress* – comparison of individual student assessment performance scores and rate of transition from one level to another (Heyward & Gill, 2021).
3. *Accommodations* – provisions to aid learners with disabilities access and interaction with curriculum for competitive academic performance (Ogundokun & Hamel, 2020).
4. *Disability* – a physical, mental, or sensory condition that restricts participation or makes it more difficult for an individual to do a certain activity (Moriña & Biagiotti, 2022).
5. *Equity* – the quality of being fair by providing necessary accommodations and supplemental academic support that meet the special needs of learners to make them competitive (Lambert, 2020).
6. *Supplemental Academic Support* – free academic assistance or tutoring programs for eligible students (McNicholl et al., 2021).

### **Summary**

The problem was that students with disabilities were much less likely to graduate from high school on time compared to their peers (Aguirre et al., 2021; Li et al., 2020; Lopez-Gavira

et al., 2021; Smith et al., 2021). According to NSBA (2019), the difference is 67.1% of students with disabilities graduated from high school on time compared to 84.6 % of their peers. Learning institutions should provide students with disabilities with educational pathways that include customized accommodations such as assistive technology solutions. The purpose of this phenomenological study was to understand the academic performance and progress of students with disabilities at a high school in the Northeastern United States.

Education is a basic right afforded to every single child through ISTE, FAPE, and IDEA. Teachers should be prepared to engage with learners of disparate skill sets, cognitive abilities, various socio-economic backgrounds, and disabilities. Different students need a number of diverse learning supports to be in place. This can vary depending on the disability, unique academic path, learning goals, and current educational level. Teachers must take time and understand their students. They should be ready to offer pre-assessments, conduct mid-assessments, and include customized lesson plans. This quality of engaged student-centered instruction can create a more equitable learning environment for students.

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

The second chapter explores the current literature on the learning experiences, academic performance, and academic progress of students with disabilities at the secondary school levels of education within the United States. In addition, this chapter describes the study's theoretical framework: Maslow's hierarchy of needs. Analysis of the literature and the theoretical framework will help to identify insights on the current state, gaps in the support systems, and can reveal potential plans for improvement of the current state of education for learners with disabilities. Some core areas that are covered in the literature review section include the following: current accommodations in high schools for students with disabilities, the use of or absence of assistive technologies, the implementation of curriculum redesigns, and the execution of modified assessments. The chapter also focuses on the use of alternate teaching strategies, the use of customized learning plans and their effectiveness in preparing students for post high-school goals.

### **Theoretical Framework**

A theoretical framework is integral to a study because it clarifies the purpose of the study focus and establishes a foundation that guides and organizes the study (Varpio et al., 2020). A theory that informs the literature on the study topic is Maslow's (1954) hierarchy of needs (Noltemeyer et al., 2021). Therefore, Maslow's hierarchy of needs was the theoretical framework that effectively guided the study and provided a context for explaining the study findings.

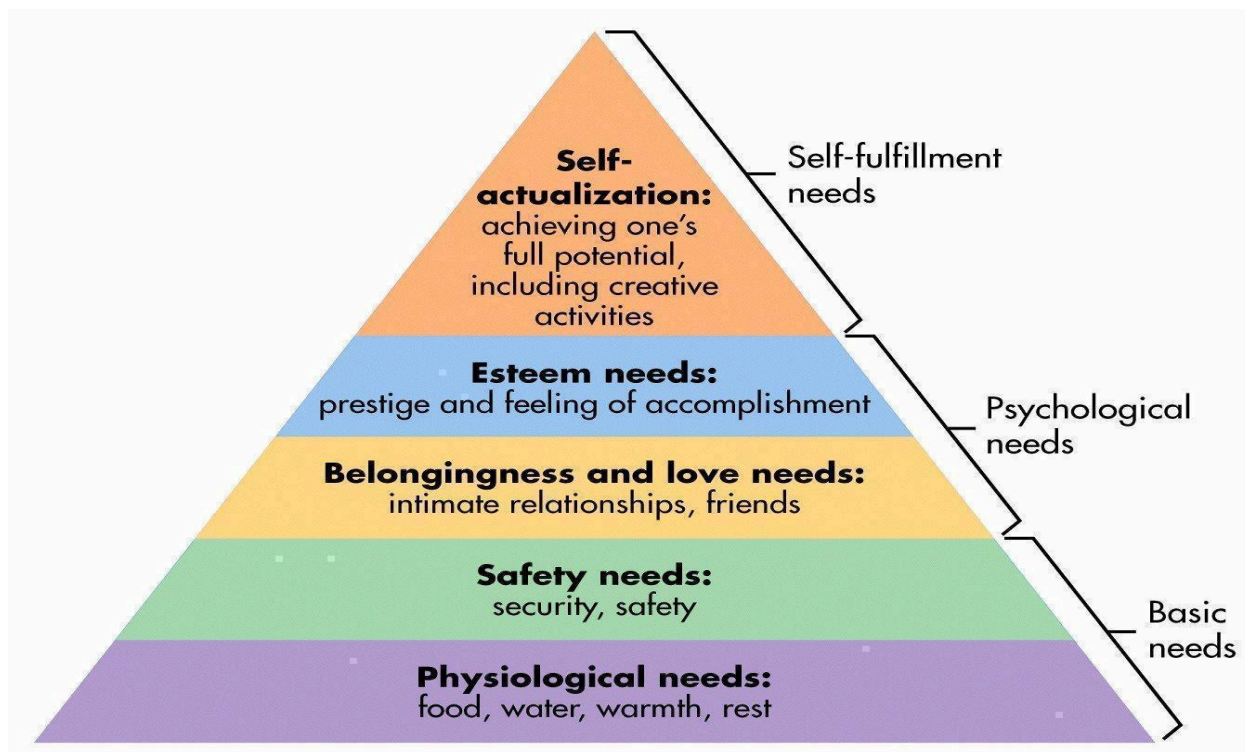
#### **Maslow's Hierarchy of Needs**

Maslow (1954) proposed that human beings possess deficiency needs and growth needs. Deficiency needs include physiological and safety needs and motivate people when they are

unmet because they relate to human beings survival (Noltemeyer et al., 2021). Growth needs are psychological and motivate people with a desire to self-actualize their full potential (Noltemeyer et al., 2021). According to Maslow's model, individuals can move on to the higher-level after first fulfilling basic survival needs at the bottom of the pyramid. McLeod (2023) explained that Maslow theorized that human decision-making and functioning was defined by a hierarchy of needs that he grouped in a pyramid shape as illustrated below. This theory of motivation proposed that five categorical levels of human needs, namely physiological, safety, love and belonging, esteem, and self-actualization, together dictated a person's behavior (Rojas et al., 2023). (See Figure 1).

**Figure 1**

*Maslow's Hierarchy of Needs*



*Note.* The different types of needs and their descriptions are shown.

At the bottom of the pyramid are physiological needs, which are basic human survival needs such as water, shelter, and nourishment. An individual must first address these essential needs before attending to the second level of needs, namely safety needs. This level includes health, employment, and financial security (Navy, 2020). Next, needs such as love and belonging are the last lower-level factors addressed through social interactions, including intimacy and family. Also included are friendship bonds, which can create a sense of connection (McLeod, 2023). The higher needs include esteem needs like respect, self-confidence, strength, freedom, and self-actualization needs and occupies the highest level on Maslow's pyramid (Navy, 2020). Meeting the higher-level needs ensures realization of one's full potential, such as skill development and personal growth. Some examples of higher include achievement of formal credentials, recognition for accomplishments, or mastering difficult skills. Permission received from McLeod (See Appendix D).

### **Relevance of Maslow's Hierarchy of Needs to Study Topic**

Apart from basic survival needs, human beings require growth needs to realize their full potential. Growth needs are unique to every person due to individual differences and personal goals. Similarly, every student has basic needs that must be met for learning. For learners to realize their full potential in academic performance areas, their unique set of needs must first be met. If these needs are not satisfied, students will not be able to focus on the greater learning objectives. Farimani and Shahri (2020) assert that when all levels of Maslow's hierarchy of needs are met in the learning environment, learners can show their ability and eagerness to learn. Therefore, the more resources and measures that learning institutions put in place to meet their students' needs, the more likely those students will learn and realize their full potential.

Maslow's model can be used to understand how critical it is to meet both the basic needs of learners and also their other unique set of needs. This structure is best to help promote motivation to learn. The needs of learners can be met through a model which can ensure that all students have the capacity to access information like the other learners in their academic environment. This can motivate the students to utilize their full potential. For example, one of the lower-level needs for a deaf student is an educator who can teach sign language. However, sign language alone cannot create an environment conducive for deaf students to compete fairly with their counterparts who do not have learning disabilities (Gross et al., 2022). Deaf learners require assistive listening devices, captioned media, scribes for dictated responses, sign language interpreters, and other accommodations that will ensure deaf students receive educational messages and materials effectively as their counterparts without any learning disability (Ott et al., 2020).

Maslow's hierarchy of needs was used to understand the learning needs of students with disabilities. The theory clarified that meeting those needs of students would improve the learning experience, academic performance, and academic progress (Gross et al., 2022). Once a level in Maslow's pyramid was met with proper support, it then allowed the student the ability and motivation to learn and move up in the hierarchy (Abbas, 2020). If the study demonstrated that improving the learning experiences of individuals with disabilities through the provision of necessary accommodations could improve their academic performance, Maslow's argument for motivation would be validated (Farimani & Shahri, 2020). According to Li et al. (2020) and Smith et al. (2021), developing a system which ensured that basic needs were met would facilitate attainment of higher-level goals. Educators who saw the value of this framework could

recognize both the lower-level and higher-level needs that their students may have (Aguirre et al., 2021).

### **Related Literature**

For years, the factors that led to the success of students with disabilities have been widely studied in special schools and blended school settings (Castro, 2019; Ferreira-Meyers & Pitikoe, 2021). The overall learning experience for students was an important factor that determined their academic performance and academic progress (Osborne, 2019; Smith et al., 2021). The learning experience for students with disabilities differed from their counterparts who did not have disabilities. This was due to the unique learning requirements that students with disabilities had and schools could address this through the specialized education pathways they design for learners with disabilities (Smith et al., 2021). Although schools followed legislation and had plans to instruct special needs students, there could be deficiencies in the level of support being offered. According to Aguirre et al. (2021), it is critical to overcome any barriers within the education system for learners with disabilities. This may include individualized accommodations based on assessments conducted by specialists instead of using one assistive technology tool for all students with disabilities. Schools should follow a formal process to train their own special education teachers and better educate their students with disabilities. Without updated training for staff, educators may not fully understand how to support special needs students. These types of strategic educational plans can help to improve the learning experience, academic performance, and educational progress of the special needs student population.

In a systematic literature review by Brown and Prendergast (2020), the researchers argued that developing and regularly reviewing a curriculum for learners with disabilities could improve their academic performance because it was tailored to the learners' changing needs. In

another study by Knickenberg et al. (2020), the authors supported the need to tailor the curriculum for learners with disabilities to their specific needs by integrating the views and contributions of learners with disabilities. The approach by Knickenberg et al. (2020) was ideal for learners with disabilities because it motivated the learners, borrowing from their input and commitment. In a qualitative study by Schwartz et al. (2021), the researchers discovered that special education effectively provided learners with disabilities all the necessary accommodations but denied them an opportunity to interact with their peers, which led to challenges when transitioning to the outside world.

### **Concept of Special Needs and Special Education Needs**

The United Nations Convention on the Equal Rights of Persons with Disabilities defines students with disabilities as learners who have sensory, physical, or chronic health impairment or exceptional talents or gifts that hinder them from full, active participation in academic activities and society on an equal basis with the others (Van Mieghem et al., 2020). Moriña and Biagiotti (2022) proposed that special needs students could not fully benefit from standard classroom settings because of their various disabilities unless there were appropriate modifications and adaptations to customize the mode of delivery and curriculum content. Moriña and Biagiotti (2022) defined modifications and adaptations as educational accommodations for special education needs that enable students with disabilities to participate in and benefit fully from the school curriculum. In order to improve the learning experience for students with disabilities, DeMatthews et al. (2020) asserted that the educator or institution must provide these unique learners with individualized special education supports that enable them to benefit fully from the curriculum and realize their full potential in academic performance. It is critical that these



supports are developed based on objective formal assessments of the students with disabilities. In addition, the support must be tailored for the students, class material, and grade level.

### **Theories from Literature Relevant to Motivation for Individuals**

The main argument in Maslow's hierarchy of needs was that people do not reach their full potential or self-actualization due to different hindrances placed in their lives by society. As a humanist psychologist, Maslow argued that people are motivated by feelings of fulfillment, and proposed that individuals' motivational strivings aim at achieving higher levels of needs (Genkova, 2021). Since it is in the nature of human beings to strive for self-actualization, but one must fulfill lower needs to some degree before moving higher in the pyramid, people are likely to get frustrated or lead a low quality of life (Genkova, 2021). The majority of people living with disabilities have struggled to achieve their needs or live a less-than-quality lifestyle because society denies them opportunities to meet their needs. Furthermore, the efforts of the government to support people with disabilities cannot be successful if the community is not involved in making this population group feel appreciated and accepted in society (Yusof et al., 2020). Using an example of refugees and immigrants, Goede and Boshuizen-van Burken (2019) explained that the majority of people with low self-esteem often do not feel a sense of belonging to a particular group, even if they are part of it due to factors such as underrepresentation and not being part of decision making. As a result, their unique needs and interests that must be addressed to enable them to achieve their full potential are not met.

In addition to Maslow's hierarchy of needs, there were several theories that were discussed in the literature to explain the trends and patterns in academic performance of different learners. For example, Albert Bandura's (1986) social cognitive theory (SCT) emphasized that human behavior is shaped by a dynamic interaction between internal dispositions and

environmental factors. Bandura (1986) proposed four major cognitive processes in the SCT – attention, retention, reproduction, and motivation. According to Schunk and DiBenedetto (2020), human functioning involves reciprocal interactions between personal variables like beliefs, goals, perceptions, actions, and intentions, behavioral variables, and environmental variables.

Depending on how society views learners with disabilities and what individuals with disabilities observe through achievements and challenges their peers to encounter, one can develop self-belief and confidence in their capacity to attain certain performances (Schunk & DiBenedetto, 2020). Self-efficacy is a concept grounded in SCT, and it explains how the social environment can shape the confidence and determination of learners with disabilities to progress through academics and overcome any obstacles.

Another model that has been explored in the literature to understand the academic performance and progress of learners with disabilities is Jean Piaget's constructivist theory (Piaget, 1954). The constructivist theory stated that humans create knowledge and understanding through the interaction of ideas and experiences (Suhendi et al., 2021). Learning is an active experience, so the educational engagement should be meaningful and drawn from real-life situations that learners can understand or may have experienced. Suhendi et al. (2021) stated that constructivist theory could benefit learners with disabilities because educators following the theory begin teaching learners from what they already know to build a foundation for introducing new concepts. Sometimes because of repeated failure and low self-esteem, the majority of learners with disabilities struggle to apply general concepts learned in class into practice. When learners build on core ideas they are familiar with, the transition process may not be so overwhelming, particularly for students with disabilities. The students can connect with experiences in their lives, especially in challenging subjects (Suhendi et al., 2021). Therefore,

teachers need to prioritize simple concepts that learners are familiar with and build on to complex concepts using examples relevant to the students' social environment to foster academic performance and academic progress for learners with disabilities.

An inclusive learning environment is one of the areas in education that has been widely explored when considering academic performance and progress for learners with disabilities (Krischler et al., 2019). However, as explained in Allport's contact theory, inclusive learning environments apply the intergroup contact hypothesis (Allport, 1954). Learners with and without disabilities interact throughout the learning environment, which reduces prejudices and stereotypical biases on preconceived inadequacies of students with disabilities (Christ & Kauff, 2019). Therefore, when graduates meet their peers with disabilities in the job market, they would not discriminate against them because of the meaningful relationships they have established and lived experiences of the potential of this population group contrary to societal perceptions. Brownell et al. (2020) argued that the quality of the learning experience had a major impact on the motivation of the student. This motivation aided students with disabilities immensely throughout their lives by giving them support to achieve goals. Apart from the challenges that learners with disabilities face in academics, they also may encounter challenges transitioning into the job market due to personal and societal factors such as discrimination and prejudice.

### **Learning Experience for Students with Disabilities**

A student's learning experience is an important consideration in any educational setting because it determines the academic performance and progress of the learner. Brownell et al. (2020) believed that the learning experience determines whether a student will be motivated to work hard, progress through the academic journey, or choose instead to drop out of school. In the United States, legislation and development of federal and state-funded programs such as the

Individuals with Disabilities Education Act (IDEA) and Individualized Education Program (IEP) are supporting frameworks that will be critical in improving overall learner experience (Yell et al., 2020). However, a study by Florian (2019) demonstrated that achieving a positive learning experience for students with disabilities goes beyond programs and policies. Florian (2019) argued that faculty attitudes and awareness of the needs of learners with disabilities are also integral factors that affect the learning experience for special needs students. The interactions that students with disabilities have with their educators and their learning institution are essential to helping the students to learn effectively. Likewise, parents and guardians of special needs students must be aware of their rights and responsibilities, be familiar with the individualized learning plans developed by the teacher, and be aware of the customized accommodations that will be implemented.

Most learning institutions that have students with disabilities lack knowledge about reasonable accommodations for different categories of learners with special needs (Al-Shammari et al., 2019; Hsiao et al., 2019). For instance, there is a need for customized programs to ensure appropriate accommodations (Kushalnagar, 2019). Blind and visually impaired students have a different set of requirements compared to the supports that learners with hearing impairments need, or those with other chronic health conditions. While most learning institutions may have organizational goals that aim to provide classroom educational accommodations to different categories of learners with disabilities, Kushalnagar (2019) argued that the overall learning experience for these special needs students is still less than optimal because they do not receive support within and beyond the confines of the classroom. It is imperative schools implement policies that best accommodate students with disabilities so they can fully partake in the learning process, which can then help them to continue studying past high school and become

independent contributing members of society.

As noted by Chiu et al. (2019) in a study that examined the impact of disability services on academic achievement, the researchers found a significant disparity in academic progress, with about 85% of learners without disabilities graduating compared to 67% of learners with disabilities. This data revealed the inequality between the two groups of learners and highlights the need for further analysis of the underlying issues. The observation made by Chiu et al. (2019) was further supported by Goroshit and Hen (2021), who concluded that negative experiences contribute to high dropout rates among learners with disabilities, directly accounting for the differences in graduation rates. This also illustrates the need for learning institutions to understand their students with disabilities better. Schools may feel they are meeting legislation requirements with the inclusion of a special education unit in their institutions, but research shows that other related factors need to be reviewed to ensure adequate support is offered to students with disabilities.

### ***Inclusive Education System***

Failure to provide learners with disabilities with the appropriate customized supports within and beyond the classroom setting results in disability discrimination, which Osborne (2019) argued stemmed from ignorance and negligence on the part of education stakeholders. Osborne (2019) provided examples of learning institutions that incorporate assistive technology solutions that are unfit for the purpose. Furthermore, in many cases, students have not received appropriate levels of training and guidance on how to use those assistive technology solutions. Based on a review by Yusof et al. (2020), different accommodations not only impact the academic performance of students with disabilities but also their overall experience of the learning process. Accommodations are broader than technology solutions and can include

providing students with disabilities adequate time to move from one class to another, offering additional examination completion time, creating alternate assessments, or allowing for extensions to finish academic work. Knickenberg et al. (2020) explain that American legislation has not been effectively implemented with provisions of laws such as the Americans with Disabilities Act Amendments Act of 2008. Knickenberg et al. (2020) argue that ADA may have served to increase admission of students with disabilities to secondary school levels, but it did not provide a system to help establish appropriate accommodations that would effectively support these special needs students.

The creation of an inclusive education system where all learners can compete fairly and realize their full potential irrespective of their inadequacies requires a dynamic environment (Krischler et al., 2019). Such a setting needs to be built on frameworks that ensure all students are valued and participate fully in academic activities. According to Yusof et al. (2020), disabilities pose wide-ranging complexities which need to be reviewed carefully and addressed with individualized solutions. Aguirre et al. (2021) argue that this requires making additional adjustments beyond educational accommodations. Similarly, Smith et al. (2021) assert that improving the learning experience of learners with disabilities necessitates the need for collaboration between various departments to foster a supportive environment. Arguably, ensuring non-discriminatory practices that will create a comprehensive and supportive environment for learners with disabilities requires that the various stakeholders are aligned and supportive. These decision-makers must be ready to implement inclusive policies that can address institutional barriers such as lack of faculty knowledge, lack of resources, and lack of training.

According to Maslow's hierarchy of needs, a sense of belonging is a basic human need that creates satisfaction and encourages competition (Pesonen et al., 2020). Apart from providing accommodations for students with disabilities, ensuring effective competition with their peers in academics and the job market requires creating competition within schools by establishing an inclusive learning environment (Pesonen et al., 2020). Unlike the self-contained classroom models, Nadeau (2022) argued that inclusive learning environments put learners with and without disabilities in the same learning environment, encouraging competition and a smooth transition into the community. As the third level of Maslow's hierarchy of needs, students with disabilities require special considerations that give them certain advantages to compensate for their learning or physical disabilities that set them apart from peers (Pesonen et al., 2020). Students' need for belonging, result in the need to create inclusive learning environments as opposed to segregated special schools for learners with disabilities to not only create a sense of belonging but also encourage motivation. As captured by Nadeau (2022), special schools might provide learners with disabilities with all the necessary support, but due to the restricted environment and limited interaction with the outside world, learners with disabilities record slow progress rates. Restricted learning environment denies learners with disabilities the opportunity to practice their acquired skills and face the challenges in the community (Pesonen et al., 2020). Therefore, even though students with disabilities might feel valued and well accommodated in special schools, Nadeau (2022) further explained that their self-esteem, the fourth level of Maslow's hierarchy of needs, is affected. This impacts the students with disabilities' ability to pursue their inner talents and achieve self-actualization in the contemporary world which is marked by competition.

### **Academic Performance and Academic Progress**

Some research findings reveal mixed results as to whether learners with disabilities register equivalent academic performance to their peers without disabilities (Goroshit & Hen, 2021; Li & Carroll, 2020). The conflicting findings between different studies are due to variations in the definition of academic performance and measures used to assess academic performance (Goroshit & Hen, 2021). For instance, Goroshit and Hen (2021) compared three studies that explored different dimensions of academic performance. However, a study that compared performance in mathematics and English found comparative performance among learners with and without disabilities. However, studies that compared graduation rates and the period spent to complete post-secondary education found learners without disabilities performing better than their counterparts with disabilities (Goroshit & Hen, 2021). These variations explain why research and data collection concerning the academic performance and success of learners with disabilities is sparse (Lopez-Gavira et al., 2021). Therefore, having a standard definition for academic performance, such as Success Index or Grade Point Average (GPA), is crucial to guide future studies in building upon the literature on this topic. These measures will help to establish standards that allow for more objective study. Subsequently, data gathered for the research can be more systematic.

### ***Academic Accommodation***

A variety of complex interplay of factors influence the academic performance of learners with disabilities. This can include the type of disability, the subject matter, grade level, and other considerations. However, Knickenberg et al. (2020) assert that access to appropriate accommodations is the critical component to academic success for students with disabilities. McNicholl et al. (2021) explain that globally there is increased enrollment of learners with disabilities in educational institutions as countries implement legislations to encourage disabled



individuals to pursue academic goals. At the same time, the challenge of high enrollment of learners with disabilities is that many learning institutions are not prepared to accommodate all learners with disabilities (McNicholl et al., 2021). One reason is that the institutions have not had adequate training or completed the strategic planning needed to support students with disabilities (Vincent & Chiwandire, 2019).

The recommended academic accommodations that the Americans with Disabilities Act outlines for schools are multifaceted (Slee, 2019). This includes student assessments, alterations to academic materials in the classroom as well as for examinations, and modifications to the learning environment with the use of assistive technologies as needed. It also involves the implementation of other creative learning approaches and curriculum modification to enable students with disabilities to participate equally in academic activities similar to their peers who do not have disabilities (Ogundokun & Hamel, 2020). However, research by Pinion (2022) revealed that the unpreparedness of stakeholders like faculty instructors, legislators, and disability offices hinders students with disabilities from accessing and utilizing accommodations within the learning institutions. This highlights a major problem: lack of knowledge on the part of the decision makers and subject matter experts. Students, parents, and guardians who look to these educational leaders for guidance may be misguided or provided with inadequate support. Ogundokun and Hamel (2020) added that a lack of access to appropriate academic accommodations, such as institutional support, can pose disadvantages to learners with disabilities. Inadequate accommodations can cause students with disabilities to not benefit from the learning pathway or class curriculum, and they may be unable to fully understand the academic material. This can hinder them from meeting course requirements and leaves them at a disadvantage (Ogundokun & Hamel, 2020). Barriers such as these can ultimately negatively

impact the progress and academic performance of students with disabilities. Learning institutions and their leaders must carefully review their internal processes and policies, as well as the skills of their teaching staff.

### ***Influence of Attitudes on Student's Academic Performance***

Due to the high influx of students with disabilities to learning institutions, (McNicholl et al., 2021), Li and Carroll (2020) noted that there was an emerging problem of a lack of adequately trained educational staff and those with the requisite experience to effectively accommodate or meet the learning needs of students with disabilities. As a result of a lack of experience, the teaching staff and faculty instructors do not possess the knowledge, resources, practical examples, and skills to properly support learners with disabilities; inexperienced teachers may also not hold encouraging attitudes toward learners with disabilities (Li & Carroll, 2020; Lopez-Gavira et al., 2021). In addition, Li and Carroll (2020) propose that attitudes to disability can be major barriers to learners with disabilities and can prevent these alternate learners from realizing their full potential. Historically, Akin and Huang (2019) asserted that there had been a persistent negative attitude and social rejection of individuals with disabilities in different communities. Therefore, students with disabilities are sensitive to negativity or rejection and might not seek support or utilize academic accommodations that allow them to complete course requirements.

Some faculty instructors have a negative attitude towards accommodations due to ignorance that the provision of accommodation is burdensome. However, Krischler et al. (2019) pointed out that providing accommodation does not involve modifying essential requirements of the curriculum, like objectives, academic standards, or the rigor of the course. Therefore, the negative attitudes of education stakeholders are misinformed or affected by myths,

misconceptions, or stereotypes held by individuals. Krischler et al. (2019) added that academic accommodations provide alternative methods to remove barriers hindering learners with disabilities from completing course requirements and competing fairly with their peers with disabilities (Edwards et al., 2022). Coupled with stigma from society and negative attitudes from the learning environment, Li and Carroll (2020) explain that students with disabilities are usually vulnerable and are likely to lose the confidence or can-do attitude required of learners to realize their full potential. When students have more difficulty learning or feel less accepted in the general culture of the institution due to their low confidence and self-esteem, they are more likely to drop out (Los Santos et al., 2019). In addition, such unfavorable attitudes may reduce these special needs students' motivation to work hard and negatively affect their academic performance (Los Santos et al., 2019). Arguably, individuals with disabilities deal with substantial pressure and negativity from society. Such less positive mindsets within the learning environment might inadvertently compound the problem.

Parents' perception of students with disabilities has consistently aligned with societal perceptions. According to Staunton et al. (2020), parents with children living with disabilities live in shame and fear of societal stigma and often do not treat their children with disabilities like the other children. Negative attitude of parents has been shown to instill negative attitudes in their children, which in turn negatively affects their confidence in academics. Due to negative attitudes from parents, children with disabilities often lack material support from the family that is crucial to their academics (Staunton et al., 2020). Consequently, the children feel neglected and unmotivated to pursue their academic goals, which results in poor academic performance and high dropout rates. Taber (2020) argued that children with disabilities may be excluded from the core cultural experiences that form the basis of higher cognitive functioning. Taber (2020)

explains that the goal should be to identify the alternate tools that help promote development. Examples provided include braille as an alternative to print. Los Santos et al. (2019) proposes that when students feel less accepted in the culture of the institution due to low self-esteem, they are more likely to drop out (Los Santos et al., 2019).

### ***Influence of Instructional Strategies on Academic Performance***

There are a number of instructional strategies that educators use depending on the content, grade level, target audience, setting, and intended outcome. Examples include active learning, customized curricula, and assessing the understanding of the learner. Some of these instructional strategies include direct instruction through lectures and storytelling; interactive instruction such as problem-solving, didactic questioning, concept mapping, simulations, peer instruction, group discussions, and role-playing; experiential learning through demonstrations, drill and practice, project-based learning, case studies; and independent study such as essays and journaling (Castro, 2019). The level of understanding students gain is dependent on the type of instructional method. Without customized accommodations, learners with disabilities may struggle to grasp core concepts.

Differences in academic performance between learners with disabilities and those without disabilities may reflect on persistent underlying disabilities of the learners but also ineffective instructional strategies and services (Schwartz et al., 2021). The key to success in classroom work primarily relies on the educators introducing appropriate modifications and adaptations to ensure the learner can get and can understand the curriculum (Lopez-Gavira et al., 2021; Schwartz et al., 2021). Unlike students without disabilities, learners with disabilities require sensitive and trained educators aware of their unique needs to ensure they achieve educational milestones similar to their peers. Schwartz et al. (2021) pointed out that students with disabilities

will struggle to learn in mainstream classes without modifications in the delivery of instructions and learning content customized to maximize their participation. The role of the learning institution and the classroom teacher is pivotal; to offer an interactive setting that promotes learning for students with disabilities.

Schwartz et al. (2021) further noted that differentiated classrooms ideal for learners with disabilities to ensure equitable access to learning materials include a modified curriculum and assistive technologies. McNicholl et al. (2021) also acknowledge that assistive technology can promote psychological, educational, and social benefits for learners with disabilities, but most instructors are not adequately trained to offer guidance to students with disabilities on how to appropriately utilize the devices and technologies for better engagement in the learning environment. McNicholl et al. (2021) and Schwartz et al. (2021) agree that without individualized instructional strategies, learners with disabilities cannot effectively engage in academic activities, negatively impacting their learning process and subsequently affecting their academic performance and progress.

### ***Influence of Curriculum on Academic Performance***

Learners with disabilities often experience challenges in certain academic areas over others. Brown and Prendergast (2020) propose that core academic subjects such as reading, writing, language, and mathematics are the main areas where most learners with different disabilities experience problems. According to Brown and Prendergast (2020), an effectively designed curriculum has a significant effect on student learning because it can clarify the learning outcomes, standards and core competencies that students must demonstrate before progressing. In most inclusive schools, Gilmour et al. (2019) pointed out that curriculum developers, faculty instructors, or education stakeholders have not developed a curriculum

customized to the needs of learners with disabilities. As a result, Gilmour et al. (2019) concluded that educators depend on a regular school curriculum that does not include modified materials to cater to the needs of learners with disabilities.

The various steps needed to plan, design, and implement academic course curriculum are complex delicate processes that must consider a range of factors in the learning environment. When developing a curriculum for students, Brown and Prendergast (2020) stated that the developers often forget to consider the learner as the central figure. This perspective can lead to future problems for the learner. Kangas and Cook (2020) identified teachers, resource materials and facilities, ideology and culture, school environment, and assessments as key considerations that must be integrated into the curriculum development process. In the case of learners with disabilities, curriculum developers should possess a deeper understanding of the special needs of their students to adapt the curriculum to those unique needs (Gilmour et al., 2019). Failure to consider factors such as the technologies present, the multicultural society where the curriculum is going to be used, and expected classroom management strategies results in development of a curriculum that does capture learners' diverse needs and backgrounds (Brown & Prendergast, 2020). If the curriculum development and implementation process is centered on learners, it will better address the challenges faced by students with special needs and tap into their unique interests and talents.

Student curricula should be flexible to respond to the diverse needs and abilities of the learners. According to Brown and Prendergast (2020), a curriculum is a living document that must be evaluated and revised to ensure continuous improvement in the learning experiences of the students. An ideal curriculum should define appropriate learning objectives, establish useful learning experiences, and establish a framework for evaluating the curriculum to have a

maximum cumulative effect (Gilmour et al., 2019). Krischler et al. (2019) explained that teachers often play a key role in developing, implementing, assessing, and modifying the curriculum to provide insights that curriculum developers can utilize to make necessary adjustments that fit learners' needs. Curriculum rigidity due to failure to evaluate and revise it on the basis of need, negatively impacts the performance of learners, especially those with disabilities that have unique needs (Krischler et al., 2019). Therefore, teachers must have adequate knowledge about the curriculum because they are integral to keeping the curriculum flexible and responsive to the diverse abilities of the learners.

### ***Influence of Physical Facilities and Technologies on Academic Performance***

Jeannis et al. (2020) define a disability as a physical, mental, or sensory condition that restricts participation or makes it more difficult for an individual to do a certain activity. Most studies have indicated that learners with disabilities express concerns about physical barriers within the learning environment (Knickenberg et al., 2020; Lopez-Gavira et al., 2021). Inadequate provision of facilities and materials is a major challenge in schools. As noted by Lopez-Gavira et al. (2021), the lack of adequate facilities disproportionately impacts the academic performance of learners with disabilities compared to those without special needs. Conducive learning environments are defined by availability of required physical facilities ranging from physical access to different learning stations, adequate human resource support, special tools and materials to aid reading, writing, or hearing, and necessary technologies that aid in effective learning (Jeannis et al., 2020; Knickenberg et al., 2020). Physical facilities determine the comfort and ability of learners with disabilities to compete with their peers, especially in terms of accessing all the required learning resources in expected metrics. Therefore, if the necessary physical facilities are not available, learners with disabilities will likely struggle to

access the curriculum, assessments, course materials, and assignments, affecting their academic performance and progress.

Learners with disabilities can have both visible and invisible special needs which may be affected by physical barriers such as poor lighting and staircases (Akin & Huang, 2019). If learners with disabilities cannot access certain learning areas, they are denied opportunities to utilize certain learning materials. The barriers for students with disabilities to participate in specific learning activities can put them at a disadvantage compared to their peers without disabilities and prevent them from competing fairly in academics (Ogundokun & Hamel, 2020). Depending on the type of disability, students with disabilities may require supports including assistive technology devices, specialized equipment, reading material in alternate format, and customized curricula that address their unique learning needs (Krischler et al. (2019). The supports that learners with disabilities require may vary from one individual to another, and the ability to understand concepts taught and compete with peers depends on providing accommodations that address the specific needs. Therefore, carefully examining the learning areas, including individualized assessment based on every learner's needs, is paramount to ensure all learning areas are accessible and safe to every student.

### ***Influence of Technologies on Academic Performance***

Technology has immense benefits in special education programs for learners with disabilities, particularly in breaking barriers to access to educational programs. Some of the positive impacts of inclusion of technology in the learning environment for learners with disabilities include creation of a personalized learning experience, aiding in student interaction through virtual and interactive technologies, and improving access to educational materials (McNicholl et al., 2021). Bouck et al. (2020) stated that special technologies like touch screens,



screen readers, text-to-speech, braille embossers, wheelchairs, ramps, automatic doors, and adapted car seats increase the independence of learners with disabilities, thus reducing the constant need of having to depend on someone. Web-based solutions such as online assessment apps and intuitive video chat aid in distance learning, which can be ideal for learners with physical disabilities (Svensson et al., 2021). Other technologies like adaptive computing allow for user-friendly access by students with disabilities. This empowers special needs students to manage challenging tasks better. Similarly, augmentative communication systems can overcome communication barriers for learners with speech impediments (Svensson et al., 2021). In the academic environment, technologies have the capacity to enhance the quality of the learning experience for learners with disabilities and enable these students to better compete with their peers who may not have disabilities.

### **Areas of Controversy and Contested Claims**

The aptitude assessments, learning pathways, educational experiences, and academic performance of students with disabilities are topics that can be heavily debated. Some policies hinder equity and academic progress of learners with disabilities. This can include inadequate support systems, emphasis on uniformity in resource distribution, as well as school choice programs which interfere with inclusive learning (Peng & Kievit, 2020). Another issue is that schools do not take necessary measures to understand their alternate learners. Gilmour et al. (2019) explain that it is critical for educators to have a deeper understanding of the special needs of their students to adapt the curricula to those unique needs. The section explores controversial educational policies that result in social exclusion and highly contested concepts of special and inclusive classes.

### ***Social Exclusion and Controversial Policies***

The concept of learning experiences, academic performance, and academic progress of students with disabilities requires equal participation of all learners in the educational system. However, equity and quality in education remain highly contested issues, especially regarding providing adequate support for learners with disabilities. According to Slee (2019), social exclusion remains one of the most controversial issues negatively impacting access to quality education for learners with disabilities. Slee (2019) further explained that the formulation and implementation of appropriate schooling policies are undermined by competitive individualism and deeply conservative forces that foster exclusion. Arguably, ideal school-based policies and practices that can support effective academic performance and academic progress for learners with disabilities combine equity with quality to give all learners opportunities for good quality education.

Academic policies should promote social inclusion and remove socially generated barriers in education settings because learners with disabilities often have some physical, emotional, social, or mental disabilities that create a barrier to the ability to interact with society (Juvonen et al., 2019). In every academic setting, the goal of all educational practices and efforts of stakeholders should be towards connecting and uniting diverse students (Juvonen et al., 2019). On the contrary, the current education system in most nations, including the U.S., creates contextual conditions and group dynamics that foster vices such as friendlessness, rejection, and peer victimization (Slee, 2019). This group dynamic may involve separate classrooms, different group assignments, and smaller exclusive student partnerships. These factors contribute to exclusion, poor learning experiences, academic performance, and academic progress of students with disabilities.

A student's success is a measure of their academic performance and progress (Sulasmi & Akrim, 2019), but with a comprehensive set of policies hindering equity in education and access to syllabi, the academic journey of students with disabilities is bound to be affected. Some of the policies hindering equity and academic progress of learners with disabilities include poor supports leading to repetition of school year, early student selection based on academic performance via early tracking, school choice programs interfering with inclusive learning, emphasis on uniformity in resource distribution, and a high school education system that does not respond to student needs (Peng & Kievit, 2020). Consequently, Peng and Kievit (2020) proposed early learning support systems, comprehensive assessment of learners with disabilities, and promotion to the next level with support, to limit grade repetition. For education systems using tracking to group students based on performance, Peng and Kievit (2020) argued that learners with disabilities often end up in lower levels that negatively impact their socioemotional life. Therefore, Peng and Kievit (2020) propose delaying selection and adopting comprehensive schooling for learners with disabilities until senior high school and eliminating low-level tracks to avoid negative effects of segregation of learners. Peng and Kievit (2020) also argue that distribution of resources to schools should consider student composition and not student population, explaining that providing quality education to learners with disabilities can be more costly to cater to their unique needs.

When formulating school policies and organizational practices, Juvonen et al. (2019) stated that it is vital for stakeholders to comprehend factors that might reinforce negative stereotypes and foster divisions and student segregation. Recognition of these issues can prepare school administration to prepare and promote a student-centered environment. For a learning environment to foster academic performance and progression, Lambert (2020) affirmed that it

must ensure the unique needs of every learner are respected by providing equal freedoms tailored to the learner's needs instead of pushing for uniformity. Arguably, policies that recognize the diversity of learners with disabilities will enable this population group to have preferential access to specific treatments to ensure they enjoy all freedoms that their peers without disabilities are open to receiving. Juvonen et al. (2019) highlighted that adopting a rights-based approach in formulating school policies will achieve inclusivity and ensure proactive practices are integrated into the learning environment to increase the social inclusion of learners with disabilities into mainstream learning.

### ***Special Classes***

Special classes can have different meanings in different contexts, but in understanding the experience and challenges of students with disabilities, Hymel and Katz (2019) defined “special classes” as arrangements where learners with disabilities attend classes with their peers that do not have disabilities but they receive separate education. Arguably, special classes are standard practice in many schools across the U.S. as stakeholders strive to create an inclusive learning system that can improve the chances of learners with disabilities to secure competitive jobs and integrate into society (Hymel & Katz, 2019). However, divisions evident during class sessions create labels of “special needs,” which raises challenges for faculty instructors in understanding and responding to the unique needs of every learner to ensure active and meaningful participation in class and academic success.

According to Patterson et al. (2023), the theory of choice states that student needs can be categorized into the need for survival, the need to belong, the need for power and importance, the need for freedom and independence, and the need to have fun. These choices are influenced by personal experience and are unique to an individual, which makes it challenging for educators

and curriculum developers, especially when dealing with students with disabilities because this research area has not been widely explored for this population group. Additionally, studies have shown that teachers in inclusive classes often lack adequate resources or training to develop positive attitudes and implement measures that enable full inclusion of learners with disabilities. The net effect is poor academic performance and progress of learners with disabilities because they are not actively engaged in teaching and learning (Taub & Foster, 2020). Due to poor performance and repeated comparison to the performance of their peers without disabilities, learners with disabilities do not feel they belong to that class, do not experience a sense of belonging, and are likely to become less engaged. Therefore, instead of inclusive “special classes” creating a safe and competitive learning environment for learners with disabilities, it perpetuates the “special needs” label due to special needs accorded to learners with disabilities and a preconceived poor performance held by their peers and faculty members without disabilities.

### ***Inclusive Learning Disrupts Education System***

The goal of education is the provision of opportunities for the fullest development of individual talents and personality. In an attempt to achieve the ultimate goal of education for students with disabilities, most stakeholders are shifting the education system for learners with disabilities from special needs schools to inclusive schools where individuals with disabilities learn with their peers without disabilities in the same setting (Hymel & Katz, 2019). The overarching reason behind the transition is that inclusive education opens access to educational and social opportunities for learners with disabilities to interact with their peers and positively influence their perceptions about individuals with disabilities (Taub & Foster, 2020). However, the process has faced significant opposition from scholars, educators, political class, and other

interest groups. According to some scholars, inclusive education not only worsens the issue of segregation but also comes at a cost to students without disabilities because learners with disabilities are relatively slow in grasping concepts (Bešić, 2020). Therefore, educators in inclusive learning environments are forced to cover the syllabus at a lower rate than when teaching a class without learners with disabilities. Bešić (2020) also pointed out that in some nations like Austria, the transition to inclusive education has reinforced inequality due to overemphasis on the needs and accommodations for learners with disabilities at the expense of those without disabilities.

Most educators insist that inclusive education creates a significant challenge for them, especially “choosing appropriate strategy and motivation, challenging but fulfilling, acceptance and patience, identifying individual needs, and respecting one’s right” (Juvonen et al., 2019). Meeting the needs of learners with disabilities can be a complicated and time consuming exercise for schools and their educators. Teachers may need to spend additional time completing assessments, preparing modified curricula, and creating customized lesson plans. They may also be required to implement creative teaching strategies to explain complex concepts to students with disabilities. Educators may consider these activities to be additional workloads to an already burdening system. In addition, leaders have also not invested heavily in their support and dedication to the success of students with disabilities in their academic performance and progress (Love & Horn, 2021). Most political leaders still hold on to the societal premise that individuals with disabilities are incapable of performing to their full potential; this leads to reluctance to redirect funds and allocation of resource allocation to learning institutions for students with disabilities (Love & Horn, 2021). Overall, there is a need for a multidisciplinary team to engage different sectors and develop an inclusive education framework that can balance the needs of

learners with and without disabilities to address current issues and claims impacting the inclusive education system.

### **Gaps in Existing Research**

Education is one of the sectors that has been widely and comprehensively explored in research. However, research on students with disabilities, especially their academic performance, academic progress, and learning experiences remains an area that needs more investigation. According to Al-Qadri et al. (2021), issues affecting students with disabilities cannot be effectively addressed using current technologies. The various tools that integrate these technological innovations to examine issues affecting learners with disabilities have not been effectively developed. For instance, factors like how gender and age affect academic performance and progress have not been conclusively explored. Leaders in the field of pedagogy including curriculum designers and other key educational stakeholders, lack empirical data to use in customizing syllabi to the needs of students with disabilities (Al-Qadri et al., 2021). Similarly, Al-Qadri et al. (2021) noted that research on the prevalence of academic learning difficulties for this population group is still inconclusive, yet the information is crucial for government planning, policymaking, and resource allocation.

Variables attributing to academic success and progress of learners with disabilities are another area that needs further research to understand how factors such as the background of a student with a disability, the attitude of parents and educators, student demographics, disability type, and learning environment impact the student's experience (Bills, 2019). According to Bills (2019), the impact of different types of accommodations on the learning experience and academic performance of learners with disabilities is an area that requires extensive research to understand how different services can be integrated into the learning environment of learners

with disabilities to improve their success. Inclusive education is a promising strategy to ensure learners with disabilities learn in a competitive environment and successfully integrate into society, especially when seeking employment (Heyward & Gill, 2021). However, more research is required to identify areas that need to be prioritized by education stakeholders to improve academic success and learners' experience, especially relationship-building with students and parents (Heyward & Gill, 2021). Faculty instructors also require more data and guidance on how to accelerate learning for students with disabilities and create an institutional culture that values every learner (Heyward & Gill, 2021). Overall, there are significant gaps in research on how to improve academic performance and address issues impacting students with disabilities that should inform future studies.

### **Summary**

Students with disabilities are much less likely to graduate from high school on time than their peers—67.1% to 84.6% (NSBA, 2019). This research conducted a deeper study on students with disabilities and investigated the implementation of learning accommodations that are set up to support students with disabilities, along with the impact of these accommodations on GPA and related academic outcomes for these unique learners. The research focused on American students with disabilities at the high school level. According to Massafra et al. (2020), there is a lack of training for teachers as well as for paraprofessionals who support learners with disabilities. Current curriculum is not tailored to meet the needs of learners with disabilities, and special education has been disproportionately underfunded, leaving students with disabilities unable to compete favorably with their counterparts without disabilities. This study narrowed the gap and looked beyond the high school graduation rate of students with disabilities. The paper explored the academic performance of students with disabilities who received individualized support



compared to students with disabilities who did not receive similar support. The paper studied the impact of instruction led by qualified special education teachers compared to when unskilled special education teachers-led instruction. The practical value of this research is that it revealed data on the effectiveness of appropriate accommodations for students with disabilities. This data highlighted the value of support for special needs students and informed learning institutions about key best practices which should be implemented to educate alternate learners.

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of this qualitative phenomenological study was to understand the learning experiences, attitudes, and academic performance of students with disabilities in a high school in the Northeastern United States. According to NSBA (2019), students with disabilities are much less likely to graduate from high school on time compared to their peers—67.1 % to 84.6 %. Another related issue is a lack of training for teachers and paraprofessionals who support learners with disabilities (Massafra et al., 2020).

This chapter describes the research design and its appropriateness for the study purpose and question. Next, the chapter lists the research questions from chapter one with a central research question and the sub-questions. This chapter also explains the study setting in sufficient detail and the chosen participants, including the number and demographic information of the participants. This chapter continues by articulating the motivation to conduct the study by detailing the interpretive framework through which the study will be implemented, philosophical assumptions, and the researcher's role as the human instrument in the study. In addition, the chapter includes the procedures section, which provides detailed steps used to conduct the study, such as the process of seeking appropriate permissions as well as the recruitment plan of the participants. Following this, the data collection plan section of this chapter explains data collection strategies as well as data synthesis approaches. This chapter concludes with an explanation of how the researcher achieved trustworthiness in the study and also includes a summary providing a succinct restatement of the chapter.

### **Research Design**

A qualitative study offers advantages over quantitative methods that may not allow the

researcher to research the participants' experience fully. In addition, the qualitative research design addressed the "why" and "how" types of research questions, which enabled the researcher to gain a deeper understanding of the topic or concept being studied (Johnson et al., 2020). This natural approach examines human behavior, how people perceive the world, and why they behave in certain manners, thus providing an understanding of context, phenomena, and experiences (Flick, 2022). A qualitative study uses open-ended questions and collects data on human experiences that cannot be easily categorized in numerical format (Flick, 2022; Johnson et al., 2020). According to Flick (2022), qualitative study design explored experiences, ideas, and opinions using data collection methods such as text responses as well as audio recordings. With an emphasis on behaviors and language, qualitative researchers looked to develop relevant and impactful narrative stories that incorporated the natural language of the participants impacted by the research topic.

According to Moustakas (1994), there are five qualitative approaches to inquiry in human science research: ethnography, grounded theory, hermeneutics, empirical phenomenological research, and heuristic research. My research design was based on phenomenology because this design can be used effectively to describe the meaning of experiences, including what exactly was experienced and how it was experienced. The research design adopted in this study to answer the research question is a phenomenological approach ideal for exploring the essence of a phenomenon and describing the collective meaning of many individuals' lived experiences (Jobin & Turale, 2019). A central goal of phenomenology is to describe the meaning of experiences, including what was experienced and how it was experienced. There are two types of phenomenological studies – descriptive and interpretive, and this study follows descriptive or transcendental phenomenology. Transcendental phenomenology adds value to the research of

people's experiences because the researchers do not impose their interpretations or preconceptions (Jobin & Turale, 2019). It also provides integration with theories of decision-making (Heotis, 2020; Ndate, 2023).

Transcendental or descriptive phenomenology has its origins in Edmund Husserl, who defined phenomenology in the early 20th Century (Heotis, 2020). It assumes that reality is internal to the knower. Consequently, researchers must be bias-free and suspend their attitudes to focus on the participants' experiences (Heotis, 2020). My research on students with disabilities examined their academic performance and learning experiences. The emphasis transcendental phenomenology places on understanding experiences and meanings made it an ideal approach for this research study, which explored students' lived experiences (Heotis, 2020; Ndate, 2023). In addition, transcendental phenomenology focused on the why and how of experiences. This is precisely what this research explored during the analysis of the learning experiences of students with disabilities. This research design was appropriate for this study centered on students with disabilities because the research specifically examined these students' unique needs, academic performance, and learning capacities in school. Related to this, it was critical for the research to reveal and understand the distinctive experiences faced by these students with disabilities, along with the meanings they assigned to those experiences. For this reason, transcendental phenomenology was used because it can help to capture and report participants' experiences.

## **Research Questions**

### **Central Research Question**

What are the learning experiences, attitudes, and academic performance of students with disabilities at the high school level as they prepare for graduation?

### **Sub-Question One**

What are the learning experiences of students with disabilities at the high school level who received customized and individualized accommodations, including tools such as assistive technology?

### **Sub-Question Two**

What are the attitudes of students with disabilities at the high school level who received appropriate accommodations, including assistive technology solutions and supplemental one-on-one instruction from specialized disability consultants and/or instructors?

### **Sub-Question Three**

What is the academic performance of students with disabilities at the high school level who did not receive necessary academic accommodations?

## **Setting and Participants**

To gather data for this research, the setting and participants were chosen carefully. I reached out to schools to work with their students. The objective was to select a group of participants in the learning institution who have a range of disabilities.

### **Setting**

The study's setting was high schools within an inclusive education system in the Northeast region of the United States. These schools offered standardized levels of education and testing, including technical and career assessments, and enrolled students with and without disabilities. My research focused on schools in the region I have identified, which had learners from different backgrounds. It is important to note that students with disabilities may have received similar accommodations that foster fair competition. The organizational structure and leadership makeup of many schools in the United States is made up of members of the administration, including the school principal and a board of governance. This is composed of

licensed and unlicensed support staff, as well as teaching staff. Seeking and obtaining appropriate permission from the administration and support and cooperation from the rest of the staff was paramount to the success of the study.

### **Participants**

The participants in this study were students enrolled in high schools (grades 9-12) in the Northeast region of the United States who have been diagnosed with disabilities. These included behavioral disabilities, cognitive disabilities, learning disabilities, blindness, visual impairments, hearing impairments, or other disabilities. The participants were classified based on the type of disability and the nature of accommodations they were receiving. The study participants included in the study were from a range of income levels, different genders, and multiple ethnicities and were dependent on accommodations implemented by the learning institutions. Covering students from all backgrounds was important for a phenomenological study to understand the study topic from different perspectives, which was ideal to help draw comprehensive and more conclusive recommendations that can be applied in different settings (Jobin & Turale, 2019).

### **Researcher Positionality**

My motivation to conduct this phenomenological study came from the decades long experience I gained working with students who had a wide range of disabilities. I saw the value of using best practices and standard processes to evaluate, gather data, plan, and then implement customized accommodations for students with disabilities. Additional details on the interpretive framework and philosophical assumptions are outlined below.

### **Interpretive Framework**

The interpretive framework through which this study was conducted is social constructivism. According to Bogna et al. (2020), social constructivism focuses on the

collaborative nature of learning, where knowledge develops from the interaction of people with each other, culture, and society at large. Social constructivist theorists view qualitative research as an active involvement and interaction of a researcher with study participants to understand their lived experiences (Bogna et al., 2020). This study involved a researcher interacting closely with students with disabilities to understand their learning experiences. Similarly, I sought to reveal the students' learning challenges as well as academic progress. For this purpose, the social constructivism framework was the ideal lens to conduct this study.

### **Philosophical Assumptions**

The philosophical assumptions addressed in this dissertation to shape the direction of the study were ontological, epistemological, and axiological (Moroi, 2021). According to Moroi (2021), philosophical assumptions serve as a basis for study evaluation by influencing how researchers seek information to answer the research question. Ontology is the study of reality (Walach, 2020). Everyone defines their own reality, so what one person may be content with may not be adequate for another person, even if they have similar physical needs. This is because reality is specific to each person. Epistemology is the study of knowledge (Creswell & Poth, 2018). The epistemological assumption addresses what counts as knowledge, how knowledge claims are justified, and what the relationship is between the topic being researched and the researcher (Creswell & Poth, 2018). The axiological assumption describes the extent to which researchers' values are known and brought into a study (Riedener, 2020). From an axiological assumption, implicit biases significantly impact how someone understands something.

#### ***Ontological Assumption***

The ontological assumption involves the researcher's beliefs on the nature of reality. Walach (2020) proposed that there is no single, true universal reality because an individual's

experience and beliefs construct reality. What is real can differ from one individual to another and is defined by one's ideas, knowledge, and unique circumstances. My ontological assumption is that I hold my own views of the world but also understand that the participants may hold a different reality. I studied the learning experiences under the reality that accommodations are successful in supporting students with disabilities. I feel that such support systems should meet the problem of this group's lower high school graduation rates compared to their non-disabled peers. However, different schools provide students with disabilities with different forms of accommodation, which may be insufficient. Al-Ababneh (2020) argued that inner experience defines an individual's reality and should guide stakeholders in defining the needs of learners with disabilities. I feel that schools must seek to understand the experiences of their unique special needs learners and then engage in deeper analysis to be able to make key planning and policy decisions.

### ***Epistemological Assumption***

My epistemological assumption is that I have my own knowledge of how to best accommodate learners with disabilities. However, it is critical that I explore the knowledge that others hold to gain additional insight into the problem. Cuthbertson et al. (2020) suggest that knowledge of epistemological assumptions is gained through an empathic understanding of the participants' lived social realities. My epistemological assumption is that I believe that knowledge is gained from what one learns from another person and also from their observations. For an individual to gain knowledge, it is critical for that person to understand the core concepts that have been developed toward understanding the topic. For this purpose, it was critical to perform this research in the participants' settings where they directly engage in their activities. This will allow me, as a researcher, to better understand the participants' viewpoints on the



system. I do not know the participants of this study personally, but I do have a personal experience with the problem of this study. For a major portion of my career, I supported individuals with disabilities, mainly through technology solutions.

### ***Axiological Assumption***

For quantitative research, the values of researchers ideally are neither known nor do they influence the study (Riedener, 2020). However, in a mixed method or qualitative study like this one, the researcher can make their values known in the study, and it can influence the interpretation of the findings (Shan, 2022). My axiological assumption is that I support individuals with disabilities and have an understanding of their needs and preferences. This study was not just built on my own values but based on values held by other dedicated special education leaders. I also appreciate the values of the Americans with Disabilities (ADA) Act and the Individuals with Disabilities Education (IDEA), which empower individuals with disabilities. I have motivated students with disabilities to overcome barriers and take advantage of resources to meet their goals. I believe in the potential of all students to succeed, given the appropriate support systems, tools, and accommodations. I am interested in seeing individuals with disabilities treated in an equitable manner, so they can live their lives fully. I have witnessed the positive effects of customized accommodations and the advantages those accommodations offer to individuals with disabilities.

### **Researcher's Role**

The role of the researcher is to serve as the human instrument and plan for the successful execution of the research. I identified the schools that participated in the study, sent requisition letters to those sites, and sought approval from relevant stakeholders. Upon approval, I received assistance from the faculty instructors, to inform the potential participants about the study and

their roles. I acknowledge that I have no authority over the participants. For participants who were willing to take part in the research and met the inclusion criteria, I sent a letter to their respective parents seeking their permission to allow their children to participate in the study. Details of the expected roles and responsibilities of participants was also outlined. Only participants whose parents approved the requisition took part in the study.

During the study, I continually assessed the thoughts and feelings of the study participants using the proposed data collection approaches. I asked study participants to share their experiences about their learning environment and how accommodations or lack of accommodations affect their academic progress and performance. I recorded the participants' experience and briefed them at the end of the study on how the findings will be communicated to them upon analysis.

### **Procedures**

To complete this research, I developed a proposal that clearly defined the purpose and problem statement. Next, I sought and acquired appropriate IRB approval to conduct the study. Then I reached out to several potential sites for initial interest and to explain the value of the research.

### **Permissions**

I used permission requests that are included in the Appendices. IRB approval was obtained as well (see Appendix B). For this study, I obtained site permission from the schools and partner learning institutions (see Appendix C) to engage with study participants. I found participants through the use of surveys, the use of professional networks, school sources, and the use of appropriate online communities. I sought appropriate permissions as required. Through the school, I obtained documentation of permissions in order to engage with participants from

schools. This included consent from parents or parental representatives (See Appendix D) and assent from students. I submitted the documentation of permission with school approval and parent consent to the IRB to obtain the final permission to conduct the study.

### **Recruitment Plan**

The pool for this study is the total number of disabled students in the United States at the high school level. The sample size for this study was 12 high school participants between the ages of 14-19. The type of sample was a combination of snowball and convenience. Snowball allowed for easier identification of individuals with certain traits that might be challenging. The participants for this study were students who have learning or cognitive disabilities, are visually impaired or blind, or have hearing impairments. This approach helped to identify these specific traits. Convenience also offered some key advantages and allowed for easier access to the researcher. From the schools approved to conduct the study, some key staff members were helpful in facilitating the study. The selected faculties' instructors also explained to the participants willing to engage in the study their rights to comply with all ethical research principles. The participants of the study and their parents also signed a consent form (Appendix C). This form outlined the purpose of the research, expectations of participants, and clarifies how personal information will be protected.

### **Data Collection Plan**

For this study, I used three data collection approaches, interviews, a focus group, and questionnaires. The value of multiple collection methods is that the data were gathered in a systematically organized manner, and participants had the opportunity to respond in various ways. This helped to produce quality data and ensured that best practices were implemented.

### **Individual Interviews Data Collection Approach**

Individual interviews are qualitative research techniques that entail exploring the perspectives of a small number of respondents on a particular situation, idea, or program. Alshenqeeti (2014) argued that there are three types of individual interviews: structured, semi-structured, and unstructured. Structured interviews are composed of predetermined questions ranked in a certain order (Phellas et al., 2011). All respondents were issued with the same questions in the same order. Semi-structured interviews involved asking open-ended questions and following up with probe questions to explore further their response and the topic of interest (Phellas et al., 2011). Semi structured interviews were valuable to my research, focusing on the learning experiences of students with disabilities. Interviews were the ideal methodology to gather direct feedback and gain insight into the learning path those students with disabilities complete. The interviews offered an opportunity for students with disabilities to explain the challenges they faced and the accomplishments they achieved. In addition, the participants had a chance to highlight the learning systems that worked well for them. Individual interviews served as a valuable data collection approach for my study. I conducted the interviews via Zoom. I also recorded using the built-in iPhone recorder. The interviews lasted approximately 20-30 minutes.

### ***Individual Interview Questions***

1. Describe and discuss your learning experiences, educational background, and your plans for graduation. CRQ
2. Describe and discuss your disability. CRQ
3. Describe and discuss any disability support you are receiving. What has your learning experience been like, as you prepare for graduation? CRQ

4. Describe and discuss your learning experiences and progress of course completion coursework when assistive technology applications were implemented in the classroom.  
SQ1
5. Describe and discuss any other accommodations provided to you. SQ1
6. Describe and discuss the role you played in helping to select the specific accommodations for your learning needs and to prepare for graduation. SQ1
7. Describe and discuss the supplemental support that was provided and share details about the process. SQ2
8. Describe and discuss your learning experiences and completion of subjects in school when assistive technology solutions and accommodations were not used in the classroom.  
SQ3
9. Describe and discuss the reasons accommodations were not implemented. SQ3

**Explanation.** These questions were included in my interview protocol because they are relevant, address the core problem statement, and can best help to elicit responses from participants. The first and second questions seek to identify individual differences among learners with disabilities that might be impacting their performance apart from their disabilities. Considering these factors will eliminate variables to improve the credibility of the study (Grindal et al., 2019). The fourth and seventh questions explore the role of assistive technology solutions in facilitating classroom learning for students with disabilities. Insights gained from responses to this question informed whether assistive technology solutions are ideal, need improvement, or should be removed from classroom learning for students with disabilities (Bouck et al., 2020). The seventh and eighth questions explore whether one-on-one supplemental academic support fosters positive experiences for students with disabilities. Insights gained from responses to this

question informed whether one-on-one supplemental academic support can further improve the learning experience and performance of students with disabilities alongside other accommodations. The ninth question explores the challenges faced by learners with disabilities who were not supported with assistive technology solutions (Svensson et al., 2021). Responses to the question further informed the researcher of the importance of assistive technology solutions.

### ***Individual Interview Data Analysis Plan***

For the individual interview data collection approach, the audio was first transcribed. Then, participants were given their interview data to review. The data that were collected were analyzed using the thematic analysis approach, which is ideal for analyzing and interpreting patterns in qualitative data (Braun et al., 2023; Moustakas, 1994). After collecting qualitative data on the learning experiences of students with disabilities, I analyzed the data by reading and re-reading the interview transcripts line by line and organized them into meaningful and systematic datasets using inductive reasoning to generate initial codes (Moustakas, 1994). Next, I read and developed codes from recurring words and phrases; I combined codes to look for emerging themes (Robinson et al., 2022). The final step was reviewing, modifying, and developing the themes (Moustakas, 1994). The defined themes were refined to identify an overarching theme and possible sub-themes; this iterative process ensured the themes correlated and made sense.

### **Focus Groups Data Collection Approach**

A focus group provides an opportunity for researchers to collect descriptive data. According to Hennink et al. (2019), a focus group is viable when seeking in-depth information on attitudes, beliefs, perceptions, experiences, and insights. To establish the nexus between an individual's perception and inherent socio-cultural situation, the focus group approach holds that

people derive their mental constructions, interpretations, and notions from their immediate environment (Nyumba et al., 2018). The focus group approach was helpful to my research because it included multiple participants simultaneously. This allowed for meaningful interactions and dialogues with and among the participants. This type of communication framework led to the output of valuable data. Since my research focused on the experiences of students with disabilities, it was particularly helpful to have another methodology to gather direct input from these participants. Students with disabilities in a focus group were able to share common experiences and help the researcher identify trends. I started by developing the focus group guide (a series of prompts/questions) and proceeded to coordinate the scheduling with the participants. I conducted the interview via Zoom. I also recorded using the built in iPhone recorder. The focus group meeting lasted approximately 30-45 minutes.

### ***Focus Group Questions***

1. Describe and discuss how long you have been at this school. Describe or discuss your attitudes about your learning experiences. CRQ
2. Describe and discuss any challenges you have faced in school when completing assignments. Describe and discuss challenges you feel may affect your graduation. CRQ
3. Describe and discuss how effective it was to have group activities in class as part of completion of projects or assignments. CRQ
4. Describe and discuss the strategies used in the classroom or by the teacher that were helpful to you. What, if any, input did you have into the development of those strategies? SQ1
5. Describe and discuss the subjects you have the most difficult experience with and the subjects you have the easiest experience with. SQ1

6. Describe and discuss how you complete homework assignments and projects at home. What, if any, technologies or adaptive applications do you use? SQ1
7. Describe and discuss how you received one-on-one support or assistance from an aide and the experience. SQ2
8. Describe and discuss how well-prepared you feel for your next phase of life after graduation. How do you feel your current school system and support systems that you received prepared you for graduation? CRQ
9. Describe and discuss any situations where you were not provided any accommodations. How were your grades affected and what was the impact on your graduation? SQ3

**Explanation.** The first question is an icebreaker, allowing the students to share their backgrounds. The second question provided insights into the challenges that students with disabilities may be experiencing in the classroom (Juvonen et al., 2019). The third question focused on the usefulness of group work compared to individual work. The fourth question helped to reveal the strategies that the teacher and the process involved used. The fifth question yielded data on the subjects where the participants perform well or poorly. The sixth question clarified how students perform outside of school and how they complete their work at home (Sempowicz et al., 2018). The seventh question allowed the students to provide input about any support services they received and how their performance was affected. The eighth question prompted students to think about their future and next steps (Zigmond & Baker, 1995). The ninth question allowed students to describe and explain any examples where accommodations were not in place.

### ***Focus Group Data Analysis Plan***



I used the same data analysis approach as I did for the interview data. This helped me to manage the data from the focus group (Williams & Moser, 2019). I captured the experiences shared by the participants during a focus group meeting while ensuring the confidentiality of the data and the security of information (Hennink et al., 2019; Sim & Waterfield, 2019). After getting transcripts for all recordings, a thematic analysis approach was used to identify major themes, organize data, and interpret themes and ideas in context (Robinson et al., 2022; Sundler et al., 2019). Then, the thematic analysis identified patterns within the data (Xu & Zammit, 2020), and the data coding process identified key concepts (Wilkinson, 2015). The research interpreted the coded data by drawing viable conclusions and making recommendations.

### **Questionnaires Data Collection Approach**

Questionnaires are viable data collection tools researchers use to question a selected sample of individuals or examine a process. Data collection surveys, as examined by Dalati and Gómez (2018), entail collecting information from a specific group of individuals about their knowledge, opinions, or behavior. Common types of questionnaires include electronic (e-mail or website) surveys, telephone surveys, and face-to-face surveys. This approach was critical to my study because it produced meaningful data from the participants. Using open-response questionnaires, I collected critical information, which was then interpreted to add value to the study. This plan offered another opportunity for participants who did not readily engage in the interviews or the focus group. The approach also added structure to the data collection process and encouraged the participants to be more engaged. Self-administered questionnaires were issued to the respondents, who filled them with appropriate information.

This approach involved the use of self-administered questionnaires and also other creative alternative approaches to creatively work with special needs students. For example, I

offered participants the option to submit pictures, memes, or audio files as responses that may better describe the phenomenon. The participant responses provided transcripts that were analyzed using a thematic analysis approach.

### ***Questionnaire Questions***

1. What is your grade level and class placement (e.g., standard, honors, AP classes)?  
Responses can be in written or audio format. CRQ
2. Describe and discuss your learning experiences and academic performance during the past two years. Responses can be in written or audio format. CRQ
3. Please write a ½-page letter to a school leader (administrator, counselor, support person) to let them know the challenges you faced related to path to graduation and how those challenges were helped or hindered. Responses can be in written or audio format. SQ1
4. Please share a song or meme that represents your learning experiences, attitudes, and academic performance. Describe and discuss why you made the selection. SQ2

**Explanation.** The first question was essential in categorizing the students based on their learning level. The second question was essential to understand learning capacity in categorizing students based on academic performance. The third question was used to identify challenges faced by the students in accessing accommodations. The fourth question was used to determine the effectiveness of the academic support provided by teachers when instructing students with disabilities to succeed in academics (Brownell et al., 2020).

### ***Questionnaire Data Analysis Plan***

The responses from the questionnaire were organized, to create a database upon which the data will be reviewed and checked for inconsistencies. First, I read through a few open-response questionnaires to “know the data” or get a sense of what the participants were

saying. Next, I mapped general categories based on the responses and then created subcategories to provide a deeper and more detailed analysis. Finally, I double-checked the categories, modified, and redefined them into themes that supported or answered the research question. The questionnaire responses were summarized using a thematic analysis approach to identify major themes, organize data, and interpret the themes and ideas in context (Robinson et al., 2022). The themes and ideas were compared using a constant comparison analysis approach to identify patterns that were further refined to generate overarching themes and sub-themes. Some basic charts were used to summarize the questionnaire results in a report and presentable format (Wu et al., 2020). This plan helped to structure the data in a format that was easy to understand and review, which facilitated a thorough analysis.

### **Data Synthesis**

The data analyzed separately from the three sources was organized into a synthesis matrix where each row was labeled with a specific theme that recurred from the three data sources (Bourou et al., 2021). For themes identified in every data collection source, a thematic analysis was applied. First, I familiarized myself with the participant responses by reading and re-reading the transcripts of the interview extract (Kiger & Varpio, 2020). Second, I generated initial codes by organizing data meaningfully and systematically to get initial ideas about the codes. Third, I searched for themes by examining the codes identified in the second step and fitting them into broader themes (Kiger & Varpio, 2020). Fourth, I reviewed the themes by modifying and developing the preliminary themes identified in step three to ensure the themes work in the context of the entire data set, are coherent, and are distinct from each other (Kiger & Varpio, 2020). Finally, I defined the themes to understand what they say, how possible sub-themes interact with the main theme, and how the themes are related. The themes and key points

identified from the thematic analysis done separately for the three data sources were summarized under every identified theme recurring across the three sources, as presented in Table 2.

The synthesis matrix table identified the connections and points of divergence from the three data sources based on the study topic as the focus (Moustakas, 1994). Using the research topic as the thesis sentence, the identified themes were discussed using the key points and key ideas associated with each data source as supporting points (Bourou et al., 2021; Moustakas, 1994). The themes that recur across the three data sources from the synthesis matrix formed topic sentences (Moustakas, 1994). Likewise, the key points from each source provided supporting ideas that built a base. This base added to the researcher's thoughts, applications, and reactions (Robinson et al., 2022). This thorough, objective, and systematic process helped to develop well-informed conclusions based on the research question or topic. This data synthesis plan which aligns with best practices helped to validate the quality of the research.

### **Trustworthiness**

This section describes proactive measures taken to ensure that a high-quality and rigorous qualitative study is conducted. The value of this section is that it confirms that a process based on ethics and integrity is followed during the research. Research studies are guided by ethical and legal principles that must be integrated into the study design to achieve quality findings (Johnson et al., 2020). The implementation of evidence-based best practices for research studies will accomplish this. This will include the following core components of trustworthiness: credibility, transferability, dependability, confirmability, and ethical considerations (Kyngäs et al., 2020). As noted by Kyngäs et al (2020). These different components ensure that a study abides by the stringent criteria of qualitative research. Trustworthiness improves the likelihood of research findings being accepted by different scholars and institutions.

**Credibility**

The credibility of a research study is a measure of the accuracy or correctness of study findings, and it relies on the credibility of the researchers and research methods. An approach I implemented to ensure the credibility of the study was the triangulation of data collection methods and sources to explore the lived experiences of learners with disabilities (Bans-Akutey & Tiimub, 2021). Triangulation of data collection methods was achieved by using individual interviews, a focus group, and open questionnaires. These data strategies helped to explore the learning experiences of students with disabilities. In qualitative studies, the triangulation method increased the findings' validity, reliability, and accuracy (Moon, 2019). Data sources triangulation was achieved by using learners with disabilities, educators, and other relevant stakeholders to collect data.

**Transferability**

Transferability demonstrates how the study findings can be used in another context, which researchers realized through thick descriptions of the research findings (Kynğäs et al., 2020). When describing the lived experiences of the learners with disabilities, data were collected from several participants in different learning institutions and provided a description that painted a robust picture of the learning path for students with disabilities. This broad perspective was prevalent across different institutions. In qualitative studies, using a large and diverse sample size is important to improve the generalizability of the study and the transferability of the findings to different contexts (Maxwell, 2021). As noted by Maxwell (2021), qualitative methods and results are integral to the reader's generalizability of a study, which is central to the transferability of findings. Therefore, using broad sampling methods that

achieve a sample representation of the general population is paramount when collecting views for a qualitative study exploring an issue or solutions important to a diverse population.

### **Dependability**

Dependability is an important aspect of the trustworthiness of a study because it establishes if the findings of a study are repeatable and consistent. Johnson et al. (2020) defined dependability as the quality of findings being consistent and repeatable. The researcher achieved dependability in this study by providing an elaborate and straightforward description of the study methodologies and procedures (Johnson et al., 2020; Singh et al., 2021). These were then further reviewed by the project supervisor to validate accuracy. In a qualitative study, the aim of researchers when conducting a study analysis is to verify that the findings are consistent with the collected data (Singh et al., 2021). Dependability improves the applicability of a study because it builds trust among potential users or target audiences.

### **Confirmability**

Confirmability refers to the extent to which a study is defined by participant responses, not researcher interests, biases, and motivations (Kynge et al., 2020). In my study, I ensured the confirmability of the study findings by employing an effective qualitative study design and abiding by its principles. Other measures followed included triangulating data sources and collection methods and creating an audit trail for my study procedures, data, analysis, and findings (Sumrin & Gupta, 2021). It is important to note that qualitative researchers can ensure the confirmability of a study by checking and rechecking data at every point of the data collection and analysis process and documenting every step to ensure the results can be repeatable by others (Sumrin & Gupta, 2021). Explaining various decisions made in the study is

the easiest way of meeting the confirmability criterion of a qualitative study because it provides readers with insights into how themes emerged from the collected data.

### **Ethical Considerations**

The study abided by all ethical considerations when conducting scientific research studies. Foremost, I sought site approval from relevant authorities, obtained consent letters from the participants' parents, and obtained assent forms from the participants before conducting the study. Secondly, I designed the study in a manner that participation was voluntary and informed every participant of their right to withdraw from the study at any time. I clarified that, if a participant withdrew from the study, all their information would be destroyed. In the case of the focus group, the recording would not be destroyed, but no data from that participant would be used in any data analysis. The study used pseudonyms or identifiers that conceal the true identity of the participants, instructors, and their schools to ensure confidentiality. In addition, I also took extra measures to secure electronic data with passwords, encryptions, and physical data under locked and secured cabinets until the data are destroyed, according to Liberty IRB regulations. Since the study involved human participants, I employed the bioethical principles and basic principles of scientific research throughout the study methodology. For example, the study design followed the bioethical principles of beneficence and nonmaleficence to evaluate possible risks to participants and provided mitigation strategies to prevent possible harm. Lastly, I informed the participants of all developments throughout the study without concealing any important information. Pseudonyms were used for all participants and sites; data were saved in encrypted password-locked online folders. Any physical data were locked in cabinets in a private office room. Data would be retained for three years only.

## Summary

A qualitative research design was used to effectively determine the learning experiences, academic performance, and academic progress of students with disabilities. The participants for this study were students with disabilities enrolled in high school (grades 9-12) in the United States. The research was founded on social constructivism as an interpretive framework. Ontological, epistemological, and axiological philosophical assumptions served to reveal who the researcher was. I used various data collection approaches, including individual interviews, a focus group, and surveys/questionnaires. These methods were implemented to gather data systematically. The research used a synthesis matrix to summarize the key points obtained from the thematic analysis. The research enhanced the trustworthiness of the study by establishing credibility, transferability, dependability, confirmability, and accounting for ethical considerations. Considering all the components of trustworthiness in a qualitative study improves its value, applicability, and relevance in the field of interest.



## CHAPTER FOUR: FINDINGS

### Overview

The results chapter of the research proposal synthesizes data gathered from 12 participants using three primary methods - interviews, a focus group, and questionnaires. The purpose of this qualitative phenomenological study was to understand the learning experiences, attitudes, and academic performance of students with disabilities in a high school in the Northeastern United States. Findings were analyzed and identified by theme to reveal central ideas and experiences.

Manual thematic analysis of the questionnaire and written responses uncovered recurring themes and challenges related to the research topic. Specifically, participant responses were read thoroughly to identify common ideas, feelings, and experiences. As part of the data analysis, the data findings were coded. These were then grouped into overarching themes aligned with the study's research questions, elucidating the problem under investigation. The individual interviews were analyzed using Moustakas's (1994) method. This involved identifying significant statements, grouping these statements into meaning units, and distilling these meaning units into textual and structural descriptions of the phenomenon. The end result was a comprehensive understanding of the lived experiences of participants as they relate to the research topic.

Ultimately, the themes and meanings derived from the three data collection methods were consolidated to develop a cohesive and integrated set of findings. These elements captured the fundamental facets of participants' experiences that remained consistent across various data sources. The results section documents these findings through a detailed outline of the major themes and challenges that emerged from the focus group, interviews, and questionnaires.

Connections were drawn between the various data sources to construct an integrated presentation of the study's key results. The results provide a robust development of the study's findings, rooted in thematic analysis techniques that ensure a valid and insightful interpretation of participants' perspectives vis-a-vis the research questions under examination.

### Participants

Profiles of the 12 student participants summarize background details, including academic status, diagnosed disability, age, and current grade level. Table 1 presents and compares these attributes across cases to contextualize the sample, as descriptions provide vignettes explaining participants' distinct situations shaping shared phenomena.

**Table 1**

#### *Student Participants*

<b>Student Participant</b>	<b>Age</b>	<b>Disability</b>	<b>Accommodations</b>	<b>Grade</b>
Aidan	14	Hearing Impaired	Yes	9th
Ali	16	Autism	None	10th
Amy	15	Visually Impaired	Yes	9th
Brian	15	Cognitive	None	10th
Charles	15	Multiple Sclerosis	Yes	10th
Ellen	14	Hearing Impairment	None	9th
Gary	14	Cerebral Palsy	Yes	9th
Greg	17	Visually Impaired	Yes	12th
Jen	16	Learning Disorder	None	11th
Nancy	17	Epilepsy	Yes	12th
Rob	16	Cognitive	Yes	11th
Sean	16	Dyslexia	None	11th

**Aidan**

Aidan is a 14-year-old student in ninth-grade with a hearing impairment that significantly affects his ability to hear and understand spoken language. He has been in the school district for four years. He has been receiving customized accommodations and support tailored to his needs for the past five years. Aidan's disability support includes preferential seating, note-taking assistance, and closed captioning during lessons. The implementation of assistive technology has played a pivotal role in improving his learning experience and making coursework more accessible. Despite the challenges he faces, Aidan's determination to overcome them is evident, and he has shown remarkable progress. With the support he has received, Aidan feels well-prepared for life after graduation, and he feels ready to deal with upcoming challenges.

**Ali**

Ali is a 16-year-old student in 10th grade who is autistic, and he stated that he has not received appropriate customized accommodations. He has been in the school district for two years. Autism significantly impacts Ali's social interactions, communication, and sensory sensitivities, which in turn affects his academic performance and prospects for graduation. The absence of support has made his educational journey particularly difficult. As a result, Ali's preparation for graduation is currently uncertain without this support and accommodations. His difficulties in social interactions and sensory sensitivities are areas where targeted assistance could make a significant difference, helping him not only academically but also in building the skills necessary for life after high school.

**Amy**

Amy is a 15-year-old ninth-grader who has a visual impairment. Amy has been part of the school district for the past four years, and her journey has been greatly supported by customized accommodations. Her visual impairment presents challenges in seeing and reading standard materials. She shared that she has been provided with customized support from the school. Her accommodations include Braille materials, screen readers, and extra time for assignments, which significantly enhance her coursework accessibility. Additionally, the use of assistive technology, larger print textbooks, and audio descriptions of visual content further empowers Amy to overcome her challenges. Amy feels that she enjoys equal access to education, and her consistent grades reflect her well-preparedness for graduation.

### **Brian**

Brian, a 15-year-old student currently in 10th grade, has been a part of the school district for approximately four years. He shared that he was diagnosed with his disability, a developmental delay, five years ago. It does affect his learning pace and comprehension. Brian stated that he has not yet received adequate accommodations that are tailored to his specific disability. This lack of support has made the preparation for graduation a challenging and uncertain journey for him. The absence of accommodations has resulted in difficulties in learning, confusion with assignments, and a lack of customized teacher strategies. Brian approaches his studies with a mix of determination and frustration, and the challenges he faces in understanding and completing assignments may have an impact on his prospects for graduation.

### **Charles**

Charles, a 15-year-old 10th grader, has been a part of the school district for the past five years. He said he has a diagnosis of multiple sclerosis, which has been impacting his mobility, causing pain and fatigue. Charles shared that he has received customized accommodations

tailored to his disability. These accommodations, which include extra time for assignments and a comfortable chair, have been instrumental in assisting him in managing the challenges posed by arthritis. As he prepares for graduation with these accommodations, the journey feels more manageable, and the implementation of assistive technology has further enhanced the accessibility of his coursework. Charles maintains a positive attitude towards learning, even as he grapples with the challenges of pain and fatigue. With the support of accommodations, his academic progress has significantly improved, and he feels well-prepared for life after graduation.

### **Ellen**

Ellen, a 14-year-old ninth-grader, has been a part of the school district for approximately five years. She has been coping with a hearing impairment for the past six years, affecting her ability to understand spoken language. Ellen shared that she has not received customized accommodations tailored to her hearing impairment. This absence of support has made her path towards graduation uncertain. Without any experience with assistive technology or other accommodations, Ellen faces difficulties in communication and has limited access to information, which hinders her learning. Furthermore, she has had no input into customized learning plans, making her academic journey even more challenging. The lack of accommodations has taken a toll on Ellen's grades, and she feels that she is not fully prepared for graduation.

### **Gary**

Gary, a 14-year-old ninth grader, has been part of the school district for the past five years and has been managing his condition of cerebral palsy throughout his life. His condition affects his mobility and writing skills, but he has received tailored accommodations to support him in

his academic journey. With the help of assistive technology and extra time for assignments, Gary has found graduation to be more achievable than in previous years. The implementation of assistive technology and classroom modifications has significantly improved the accessibility of his coursework. In addition, the support from teachers and assistance from an aide have contributed to a positive and inclusive learning experience. Gary's work ethic, along with the support he received from the school, has been instrumental in his progress. As he looks ahead to life after graduation, Gary shared that he is looking forward to new experiences.

### **Greg**

Greg, a 17-year-old 12th grader, has been in the school district for the past eight years. He is visually impaired, and he shared that he has been visually impaired since he was very young. Greg's condition poses challenges to reading and accessing materials, but he has received customized accommodations to support his academic journey effectively. With the accessible resources and assistive technology, Greg feels that graduation is more achievable. His accommodations include preferential seating, enlarged materials, and note-taking support, all of which have significantly enhanced the accessibility of his coursework. The school's support systems have had a positive impact on Greg's learning experience, making preparation for graduation more likely and tailored to his unique needs. As he approaches life after graduation, Greg stated that he is ready for college life.

### **Jen**

Jen, a 16-year-old 11th grader, has been a student in the district for approximately seven years and was diagnosed with a learning disorder three years ago. The learning disorder significantly affects her information processing and assignment completion. Jen stated that she has not received customized accommodations to address her specific needs. She shared that she

is working with the school on a plan but feels the process is going slow. Because of the current situation, Jen said that preparing for graduation has become a challenging and uncertain journey for her. One example of a challenge Jen faces in school is that she often struggles to process and organize information from class lectures and textbooks, which affects her ability to complete assignments effectively. Jen expressed interest in having customized accommodations but worries that she will need to learn new learning processes. She does feel that accommodations would help to overcome obstacles and improve her academic progress.

### **Nancy**

Nancy, a 17-year-old 12th grader, has been in the school district for the past four years and has been dealing with epilepsy for six years. Her condition of epilepsy occasionally leads to seizures, causing disruptions in class. Nancy shared that she does receive customized accommodations tailored to her specific needs. These accommodations include extra time, flexible deadlines, and awareness training for her teachers, which have proven to be highly effective. Assistive technology also plays a useful role, allowing her to access materials during seizures. Additionally, Nancy benefits from other accommodations, such as having access to a private room and an alert system. These accommodations have made a significant difference in her academic progress and graduation prospects. Nancy shared that the unpredictability of seizures can lead to missed class time, making it crucial to have a supportive environment. Her determination, along with the support she has received from the school community, has prepared her well for life after graduation. Nancy said she feels prepared for upcoming challenges.

### **Rob**

Rob, a 16-year-old 11th-grader, has been in the school district for the past five years, managing a learning disorder for six years. Rob is determined to successfully complete high

school. He shared that he does have customized accommodations in place, including extended time for assignments, preferential seating, and assistive technology applications. He said he played a role in selecting these accommodations and worked closely with the school's disability support team to tailor them to his specific needs. Rob is proud that he excelled in history and English, effectively managing his assignments and seeking help when needed. He stated that he does have concerns about the transition to a post-graduation environment without accommodations, and instances of missing accommodations have sometimes negatively affected his grades. One challenge Rob highlighted is the need to allocate extra time and effort to stay on par with peers.

### **Sean**

Sean, a 16-year-old 11th grader, has been a student in the school district for five years and was diagnosed with dyslexia over six years ago. His dyslexia significantly affects his reading, writing, and processing of written information. He shared that he has not received any customized accommodations to address his specific needs. The lack of disability support has presented challenges in his academic performance, causing him some concerns about preparation for graduation. Sean has not had the opportunity to experience assistive technology or other accommodations in the classroom. He stated that he does believe that tailored accommodations would significantly improve his academic progress and graduation prospects. One example of a challenge Sean faces is that he often struggles to decipher written text quickly, which hinders his ability to keep up with reading assignments and then results in lower comprehension of course materials.



## Results

In this section, the outcomes of the data analysis are presented. These results have been grouped into four major themes; each has several sub-themes. The data were corroborated using three distinct data collection methods, including, interviews, a focus group, and questionnaires. Individual interviews were conducted with each of the participants, dedicating approximately 20-30 minutes to each session. The interview questions were intentionally open-ended, allowing participants to freely provide any information they deemed pertinent to the questions posed. Through these interviews, the objective of gaining insight from the participants was realized. The participants were given an opportunity to share details of their learning pathways, challenges, and the roles they played.

The research participants were actively engaged in the focus group and completed questionnaires as part of the study. Thorough notes were recorded and allowed for a clear identification of the overarching themes and sub-themes that emerged throughout the process. Furthermore, the participants provided invaluable insights based on their own experiences. Their responses were subjected to in-depth analysis, not only to uncover potential new themes but also to reinforce the themes already identified. The key themes that emerged are subsequently elaborated upon: the impact of accommodations on learning, the challenges and barriers to effective accommodation, the role of self-advocacy and independence, and social and emotional well-being.

**Table 2**

*Theme Development*

Open-Codes	Enumeration of open-code appearance across data sets	Themes	Sub-themes
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Change	12	Impact of Accommodations on Learning	Accessibility and Inclusion Academic Performance and Confidence
Help	17		
Belief	8		
Ease	6		
Grades	14		
Technology	18	Challenges and Barriers to Effective Accommodation	Lack of Awareness and Understanding Inconsistency in Accommodation Implementation
Ignorance	5		
Understanding	15		
Differences	19		
Action	9		
Innovation	26		
Plans	4	Role of Self-Advocacy and Independence	Developing Self-Advocacy Skills Building Independence
Freedom	12		
Strength	13		
Stress	7	Social and Emotional Well-Being	Peer Support Emotional Impact of Inadequate Accommodations
Friendship	9		
Belonging	21		
Activities	8		

### **Impact of Accommodations on Learning**

The participants identified the impact of accommodations on learning and mentioned the crucial role accommodations play in shaping their lived experiences. Participants consistently highlighted that appropriate accommodations were instrumental in providing equal access to educational content, enabling full participation in the learning process. During the focus group discussions, Amy, a ninth-grader with a visual impairment, clarified, “Large print really helped

me more than I thought. Before, I would just squint or take so much time, but like now, I can use my umm magnifier or blow up the screen on my computer.”

The accommodations acted as catalysts, breaking down barriers that might otherwise hinder the academic progress of students with disabilities. The responses from participants illuminated how accommodations contributed to creating an inclusive learning environment, where students are not defined by their disabilities but are instead provided with the tools and support necessary to showcase their true potential. Aidan, a ninth-grader with a hearing impairment, confirmed this when he shared in the interview, “I guess I’m more umm prepared when I got the tech and stuff I need in class like uhhh OCR and visual not audio.” In essence, this theme captures the transformative power of accommodations in leveling the playing field, ensuring that all students, regardless of their disabilities, have the opportunity to succeed academically and thrive in their educational pursuits.

The impact of accommodations is profound and highlights the significant role that educators and institutions play in ensuring the successful implementation of accommodations. Participants emphasized that educators who understood the diverse needs of students were pivotal in creating an inclusive learning environment. Gary, a ninth-grader with cerebral palsy, shared in his interview, “My teacher this year has been great, better than before. She gets what helps me and just makes things easy. I feel less stressed.” Furthermore, the importance of timely and proactive communication between students, educators, and support staff is key and helps to determine the most suitable accommodations for individual students. "Nancy, a 12th grader, shared in her interview, “When teachers really listen and understand what’s needed, it makes a big deal in how we learn.” It became evident that when educators were well-versed in the

available accommodations and were responsive to the unique needs of their students, the impact on learning was more substantial.

### ***Accessibility and Inclusion***

A predominant sub-theme that emerged from the data was the importance of accessibility and inclusion within the classroom environment. Many participants spoke about the need for accommodations to facilitate meaningful participation. For example, Greg, a 17-year-old student with a visual impairment, highlighted how assistive resources like enlarged materials and note-taking assistance enabled him to actively engage in classroom activities on par with his peers. As Greg stated in his questionnaire, "With the enlarged materials and note-taking support, I can be part of class more and learn better. I've been getting stuff easier too now, compared to before." His perspective shed light on how proper accommodations can profoundly transform learning experiences for students with disabilities by dismantling barriers and promoting equity. The narratives shared by Greg and others underscored the value of cultivating accessible, inclusive spaces where all students feel recognized, represented, and able to thrive academically alongside their non-disabled peers. These findings revealed that accessibility and inclusion were key necessities that participants emphasized.

Amy, a student with a visual impairment, emphasized the critical link between accessibility and inclusion in the classroom. She shared how her learning experience was markedly enhanced when the classroom environment embraced accessibility. Amy said during the interview, "After I got the assistance I needed, class felt much easier, and I was able to keep up with assignments. I have a few options like digital and large print." The provision of digital texts, Braille materials, and screen-reading software allowed her to engage with the curriculum effectively. Students' responses showed that the willingness of schools and teachers to embrace

accommodations would be helpful in fostering a sense of empowerment for students with disabilities.

### ***Academic Performance and Confidence***

The data related to the impact of accommodations revealed a sub-theme: academic performance and confidence. Aidan, a 14-year-old with a hearing impairment, spoke to this point in the interview: "With some special software that turned speech into text, I could follow along with the teacher and understand the lesson more. I could participate more in class." Aidan's perspective underscores how assistive accommodations can remove barriers to learning and enable students with disabilities to reach their academic potential. His improved grades and classroom engagement demonstrate the tangible benefits of appropriate accommodations. Further, Aidan's statement conveys an enhanced sense of self-efficacy and belief in his own abilities fostered by the accommodations. His story powerfully illustrates how access to accommodations allows students with disabilities to excel academically and develop greater confidence in their skills and promise. Amy, a ninth-grader said in the focus group, "I used to struggle a lot, but with more support, I'm starting to believe in myself more and know I can do better."

### **Challenges and Barriers to Effective Accommodation**

Participants emphasized that there are challenges to effective accommodations, such as inconsistency, lack of available options, and insufficient qualified staff. The challenges voiced by participants underscored the multifaceted nature of effectively implementing accommodations in various settings. Inconsistency within accommodation practices points to a lack of standardized approaches across organizations, resulting in unequal access for individuals. Brian, a 10th grader, said, "When I needed extra time for my tests, it was kind of tough because every teacher had

their own way. Some would give me the time no problem, but others made it more complicated." Similarly, Nancy explained, "In one of my classes, it's real easy because of the supports but in another one, the class doesn't have the same setup." Also, the lack of available options highlights systemic gaps in the infrastructure necessary to accommodate different needs. This shortage not only limits the range of accommodations that can be provided but also places additional strain on existing support systems. The inadequacy of qualified staff indicated that there may be a bottleneck in the accommodation process. Greg, a 12th grader, shared, "There's only about one or two teachers in our school who got trained to work with blind students."

Additionally, many participants mentioned a lack of educator awareness regarding disability needs and accommodations best practices. This lack of awareness contributes to a misalignment between the accommodations provided and the specific requirements of students with disabilities. Jen, an 11th grader shared during the focus group, "I wish my teachers understood that sometimes it's like I just need more time on tests or written instructions instead of verbal. They don't always get that." The emergence of this gap underscored a systemic issue rooted in the inadequacy of staff training programs concerning accommodation strategies. Amy, a ninth-grader, explained, "It's definitely tough when teachers don't know how to help me. I need materials in large print or digital, but it's not always ready." The failure to adequately address learning needs impeded students' ability to fully engage in the academic environment, thereby hindering their academic success and potential. Sean, an 11th grader stated, "I struggle with reading and writing, but not all my teachers know how to support. They're asking me, and I'm thinking, wow, they should make it easy for me cuz I don't know always what's going to work."

Along with the challenges and barriers to effective accommodation, the research also delved into the importance of fostering a supportive and inclusive learning environment. One of

the key findings was the profound impact of social inclusion on the overall well-being of students with disabilities. The study revealed that when students with disabilities felt socially accepted and integrated into the classroom, they were more likely to engage in their education and experience higher levels of self-esteem. Charles, a 10th grader with multiple sclerosis, shared during the focus group discussions, “In the class where the teacher is real helpful, I’ve been more active in class because I feel more relaxed and have less pain. The class kind of feels like we’re all learning together.” This underscored the need not only for appropriate accommodations but also for efforts to create an inclusive classroom culture that encourages peer support and empathy.

Furthermore, a critical aspect explored in the study was the role of technology in addressing accommodation challenges. The findings indicated that technology can play a significant role in leveling the playing field for students with disabilities. The availability of assistive technologies, such as text-to-speech software, screen readers, and adaptive learning platforms, greatly enhanced the learning experience for students with various disabilities. For example, Greg, a 12th grader with a visual impairment stated in the interview, “I have different tech that helps me. Sometimes I use the magnifier, sometimes I use Zoomtext. Yeah, it’s definitely good that I can choose and find what’s good.” In sum, this research underscored that addressing challenges and barriers to accommodation for students with disabilities is a multifaceted endeavor that requires addressing issues in accommodation implementation, promotion of social inclusion, and leveraging technology to enhance educational equity.

### ***Lack of Awareness and Understanding***

A major challenge raised by participants was the lack of awareness and understanding among educators about disability needs and appropriate accommodations. As Rob, a 16-year-old

with a learning disability, described in his questionnaire response, "Sometimes teachers don't really get what I need, it makes things harder. But my one class is good, setup is great, and I get different choices to help with tests." Rob's experience highlights the significant difficulties that arise when teachers lack proper knowledge of accommodations and supporting diverse learning requirements. As Rob expressed, this knowledge gap actively obstructs learning and achievement for students with disabilities. Gary, a ninth-grader with cerebral palsy, also stated, "Sometimes it feels like I'm on my own; teachers don't get what I really need, to do the work." Another student Brian, a 10th grader with developmental delay, explained, "It's kind of hard when teachers don't understand how I learn. I get the feeling they think I should do it with extra time, but I still can't sometimes." Similarly, Nancy, a 12th grader shared, "I struggle with reading and feel real slow. Most of the teachers do want to help. I just don't feel like they know the best way."

A prominent challenge brought to light by participants is the deficiency in educators' awareness and comprehension of disability needs and appropriate accommodations. As expressed by Sean on the questionnaire, a 16-year-old with dyslexia, "Some teachers don't really understand what I need. It's like they're asking me what works, and I'm not even sure. It would be great to have lessons that make it simpler for me to read and get things done." This student's experience underscores the significant difficulties that arise when teachers lack a proper understanding of accommodations and the support required for diverse learning needs.

### ***Inconsistency in Accommodation Implementation***

In addition to lack of awareness, participants surfaced the issue of inconsistency in how accommodations are actually implemented across different educational contexts. As Jen, a 16-year-old with a learning disability, described her experience during the interview, "In some



classes, I get the help I need, but in others, it's not so great. Yeah, it would be awesome if I went into different classes and still had a lot of help." Jen's experience exemplifies how the implementation of accommodations can vary widely depending on the class and teacher.

Similarly, Ellen's experience as a 14-year-old ninth-grader with a hearing impairment highlights the significance of this challenge. She has struggled to obtain customized accommodations tailored to her specific hearing impairment, which has left her in a state of academic uncertainty. Ellen said during the focus group discussions, "I got some assessments done by the...ummm, but then nothing really came out of it, I think. I have to do a lot of work at home, and it takes me a long time." Ellen's situation underscores the profound impact of inconsistent accommodation practices within the school environment.

### **Role of Self-Advocacy and Independence**

Participants discussed the role of self-advocacy and independence and talked about the importance of voicing their rights and needs within the education system. Ellen, a ninth-grader with a hearing impairment, explained during the interview, "After I got into high school, I started to explain to teachers, and it helped a lot. I didn't just wait. My parents had told me to speak up. So, I basically would say what I need." Other participants also provided responses that underscored the value of fostering self-advocacy skills, which enabled students to actively participate in decisions related to their accommodations and learning processes. Charles, a 10th grader explained, "Learning to talk about what I need really helped me handle stuff better and I guess it boosted my confidence and it made school better." This theme highlighted that building self-advocacy skills enabled students with disabilities to articulate their needs and mobilize accommodations effectively. Sean, a 11th grader clarified, "Before, I didn't really ask for help

from teachers but I got better at speaking up and it actually did help. I got more support and my grades I think got better.”

It also became clear that the journey toward self-advocacy is not without its challenges. Participants in the study emphasized that the process of developing self-advocacy skills often required considerable support and guidance. Some students struggled at first to identify their needs and express them effectively. For example, Ali, a 10th grader with autism, stated in his questionnaire, “I wasn’t sure what help I needed, or really like what type, and so I just kind of waited for the teacher.” Nancy, a 12th grader shared in the focus group, “I sometimes can’t really figure out what I need. I know there’s help that I’m supposed to get but I don’t know what to ask for and whatever the teacher does I’m just like ok.”

The cultivation of self-advocacy among students with disabilities is not confined to the classroom. These skills have broader implications for the students’ overall quality of life and future prospects. Research participants mentioned that as students developed self-advocacy, they not only became more successful in navigating the educational system but also in other aspects of their lives. Nancy, a 12th grader with epilepsy, explained during the interview, “I started to talk more to teachers, and the older I got, and then it helped me too in clubs and in my volunteer stuff.” Gaining the confidence to assert their needs and exercise control over their learning can empower these students to make informed decisions about their academic and career paths. Furthermore, this indicates that fostering self-advocacy goes beyond the realm of education; it equips students with disabilities with the skills necessary to lead more independent and fulfilling lives, enhancing their prospects for success well beyond their school years.

### *Developing Self-Advocacy Skills*

A key finding was that developing self-advocacy abilities allows students with disabilities to effectively communicate needs and access accommodations. Brian, a 15-year-old 10th grader with a developmental delay, explained that learning to voice his requirements enhanced his education and independence. Brian shared in the interview, “I got better at asking for things now in high school, but in middle school, I didn’t say anything. My parents kind of told me to do that more because I had to, in high school.” Brian's experience demonstrated how nurturing self-advocacy can empower students to take ownership, catalyze positive change, and mobilize resources. The capacity to articulate needs emerges as pivotal for securing accommodations and inclusion. Building self-advocacy skills can enable students to become more engaged, self-directed learners. Equipping students to voice their needs and affect their learning path is invaluable. Cultivating these self-determination competencies enhances control over one's academic journey. Overall, self-advocacy is integral to elevating educational experiences and outcomes for students with disabilities, and promoting their self-expression and autonomy is essential for actualization. As Brian put it on the questionnaire, "I explained in class, and teachers listened more when I did that, and yeah, I guess I felt more a part of the process and independent.” His experience underscored the importance of self-advocacy in navigating the challenges presented by his developmental delay and seeking the support he requires to succeed.

Another example comes from Charles, a 15-year-old 10th grader with MS and chronic pain. Charles's journey showcases the significant impact of customized accommodations tailored to his disability, providing the extra help he requires to navigate the hurdles of his condition. He stated in the interview, "The support I got in class was real good for me, gave me more help, and

let me concentrate more. I got like different options to take tests and more time. So yeah, definitely better.” Charles's story underscores the immense value of tailored accommodations in enabling students with disabilities to overcome specific learning obstacles. Charles showed more willingness to assert his needs in the classroom and became more of an active participant in discussions. In addition, he advocated for a more comfortable chair that allowed him to concentrate better during lessons. This proactive approach led to increased participation and improved engagement. Also, Charles requested extra time on assignments when needed, resulting in higher-quality work and reduced stress. His story showed that speaking up for oneself in school is critical for doing well academically and can greatly help students with disabilities to not only get by but do really well in school.

### ***Building Independence***

Cultivating independence was vital for students with disabilities. Gary, a 14-year-old ninth-grader with cerebral palsy, emphasized the importance of accommodations empowering self-sufficiency rather than dependence. Gary expressed in the interview, "With support in class, I can do things on my own more. Like I'll need help but not as much. It makes me feel better. I get more time and even can get stuff emailed to me." He highlighted that the goal is to equip students to exercise autonomy and take ownership of their education. With the appropriate tools and support, students like Gary became more independent in their learning journeys. Promoting student self-efficacy was key, ensuring accommodations enabled active participation instead of passive reliance. Nurturing independence empowered students to thrive academically and socially, both in and beyond school. The findings revealed that while accommodations were essential, they could be leveraged to develop vital lifelong competencies of self-sufficiency and autonomous decision-making, enabling students with disabilities to fully actualize their potential.

Gary's own work ethic, coupled with the support he received from his school community, set the stage for promising futures beyond graduation.

### **Social and Emotional Well-Being**

Another theme that surfaced from the research underscored the critical impact of accommodations on the social and emotional well-being of high school students with disabilities. This theme is built on the sub-themes of the role of peer support and the emotional toll of inadequate accommodations. This highlights the major interplay between social and emotional well-being, shedding light on the pivotal role accommodations play in shaping the high school experience for students with disabilities. Peer support assumes significant importance, clarifying the transformative influence of positive relationships on emotional resilience. Cultivating an environment where students feel understood and supported by their peers contributes substantially to fostering a more inclusive school culture. Jen, an 11th grader, shared in the interview, "When my friends listen and sometimes just let me vent, it helps a lot, even if they're not really doing anything." Charles, a 10th grader, stated in the focus group, "Being in a class where I have friends and classmates who are helpful makes a big difference. I feel less nervous, I noticed, and not like I'm going to mess up in front of everyone."

It is essential to delve deeper into the multifaceted nature of peer support, exploring how it can be systematically integrated into educational frameworks. Establishing structured peer support programs, mentorship initiatives, and collaborative learning experiences could serve as effective strategies. These endeavors not only enhance emotional well-being but also contribute to the development of essential social skills, preparing students for a more inclusive societal integration beyond the academic realm. As we navigate the terrain of inclusive education, an

expanded understanding of peer support mechanisms becomes crucial for educators and policymakers alike.

Furthermore, the emotional toll of inadequate accommodations draws attention to the urgency of personalized and responsive support systems. The research strongly suggests that addressing the emotional impact of accommodation challenges is fundamental to promoting a conducive learning environment where students can thrive not only academically but also emotionally. Recognizing and addressing these different dimensions is imperative for educators and policymakers dedicated to creating inclusive and supportive educational settings.

### ***Peer Support***

Many participants underscored the significance of peer support in fostering a positive and inclusive learning environment. Ellen, a 14-year-old student with a hearing impairment, explained during focus group discussions, “Having friends who help was great. I don’t think they treat me differently, and it’s great to get the help if I need it.” Additional perspectives from participants further emphasized that a supportive peer network contributes significantly to students' emotional well-being, mitigating feelings of isolation and promoting a sense of belonging. Peer support is not only crucial in destigmatizing accommodations but also important in creating a culture of acceptance and understanding within the student community.

Fostering a culture of empathy and inclusivity within schools is integral to the success of peer support initiatives. Educators have a key role as they cultivate this culture by incorporating social-emotional learning into the curriculum. These types of programs can provide students with the necessary tools to understand and appreciate differences, fostering a more empathetic and supportive environment. Additionally, creating awareness initiatives that highlight the benefits of peer support and clarify disabilities can contribute to breaking down barriers. This concerted

effort not only enriches the school environment but also extends its positive impact on the wider community, promoting greater acceptance and understanding of individuals with disabilities.

### ***Emotional Impact of Inadequate Accommodations***

Participants collectively expressed frustration, anxiety, and a sense of inadequacy when faced with challenges arising from inadequate accommodations. My research shed light on the emotional toll experienced by students when accommodations are insufficient or improperly implemented. Ali, a 16-year-old student with autism, shared in his questionnaire, “When my support isn’t good, I feel nervous because I’m going to fall behind, and it makes me more stressed. I can be better if I have what I need.” This emotional burden not only impedes academic performance but can also have a negative effect on a student's overall well-being. The findings underscore the critical importance of not only providing accommodations but also ensuring their appropriateness and effectiveness. Addressing the emotional impact of inadequate accommodations necessitates a holistic approach that takes into account the unique needs and challenges faced by each student, thereby promoting a positive mindset.

### **Outlier Data and Findings**

This section highlights specific outliers identified during interviews, the focus group, and questionnaires. While most participants aligned with the identified themes, two outliers deviated from the established patterns, offering unique insights. They underscore the complexity of students' realities and challenge broad generalizations. These unusual cases add different stories to our understanding of students' experiences. They show how important it is to recognize each student's unique needs and abilities instead of only looking at big general trends. Studying these different situations helps us get a complete picture of what students go through.

***Outlier Finding #1: Implementation of Alternate Accommodations***

An anomalous finding emerged from one participant, who, unlike the majority of students, did not prefer conventional accommodations like enlarged print or note-taking support. This participant discovered an innate talent for auditory-based learning, facilitating active participation in classroom activities on equal footing with peers. This participant's experience illuminates the untapped potential of alternative learning approaches for students with disabilities. This student's journey suggests that recognizing and nurturing diverse strengths and talents can provide unconventional avenues for academic success and challenge traditional accommodation approaches, ultimately broadening the horizons of inclusive education. While not broadly generalizable, this outlier provokes considerations for accommodating varying capacities and learning styles.

***Outlier Finding #2: Student-Driven Customized Technology Solutions***

The second outlier participant is a student with a learning disorder who played a proactive, hands-on role in the learning plan. This participant demonstrated an innovative approach to the learning journey. By independently looking into various tools and applications that this participant's parents (both teachers) had suggested, this participant recommended tools to teachers and proactively utilized different specialized educational software programs. With this approach, the participant created a tailored digital learning environment that addressed unique learning needs. This transformative experience underscored the potential for students with disabilities to leverage technology to take charge of their education actively. It challenged conventional paradigms of accommodation, emphasizing the immense power of student-driven, adaptive learning methodologies facilitated by innovative software tools.



## **Research Question Responses**

This section presents findings addressing the central research question and sub-questions, synthesizing insights surfaced across the three qualitative data collection methods. The responses crystallize participants' experiences and recommendations to inform efforts better supporting high school students with disabilities.

### **Central Research Question**

**What are the learning experiences, attitudes, and academic performance of students with disabilities at the high school level as they prepare for graduation?**

The learning experiences of students with disabilities at the high school level are diverse and multifaceted, shaped significantly by the availability and effectiveness of accommodations. Students who receive appropriate accommodations generally have a positive attitude toward their learning experiences and demonstrate better academic performance. However, students without necessary accommodations face challenges that can hinder their academic progress and preparation for graduation. Rob, an 11th grader with a learning disorder, highlighted a related challenge in his questionnaire: "The teacher sometimes is too busy dealing with a lot of students and can't spend extra time explaining things to me. I know it's gotta be tough, but then it's also like extra tough for me." This quote reflects the complexities of the learning environment and its impact on students with disabilities.

In addition to students benefiting from tailored accommodations, innovative educational software and assistive technology have played a vital role in improving the educational experiences of students with disabilities. Participants like Sean, a 16-year-old 11th grader with dyslexia, have demonstrated how these digital tools have enhanced their learning. Sean noted on the questionnaire, "Using speech software made reading easier, and I got better in class because I

didn't have to go so slow with a ton of reading material." Sean's experience underscores the importance of accessible technology in leveling the playing field for students with disabilities, enabling them to participate actively in classroom discussions, and reducing the barriers that dyslexia can pose in traditional reading activities.

Furthermore, this research has shed light on the essential role of personalized health and safety accommodations in the educational experiences of high school students with disabilities. Students like Nancy, a 17-year-old 12th grader with epilepsy, have experienced the transformative impact of such accommodations. She further explained during focus group discussions, "Having the med alert system, yeah, at school is great and lets me not worry, so I focus more. My parents feel better too, and if there's a seizure, there's like help that's ready." Nancy's testimony highlights the significance of individualized accommodations in creating a safe and inclusive learning environment, ensuring that students with medical conditions can fully participate and succeed in their education. It is evident that not only do educational accommodations matter, but health and safety accommodations are equally crucial to enable students with disabilities to thrive academically.

### **Sub-Question One**

**What are the learning experiences of students with disabilities at the high school level who received customized and individualized accommodations, including tools such as assistive technology?**

Students with disabilities who received tailored accommodations and assistive technology generally reported positive learning experiences. These accommodations facilitated their access to the curriculum and engagement in learning activities. Amy, a 15-year-old with a visual impairment, shared her experience during the interview: "With the software that reads out

loud, I can understand assignments better and faster and be part of the like the class talks and discussions and stuff.” This quote illustrates the transformative impact of assistive technology on her learning experience.

In addition to the positive impact of tailored accommodations and technology, research indicated that cultivating self-advocacy skills was crucial for students with disabilities to fully harness the benefits of these accommodations. Charles, a 15-year-old 10th grader with MS and chronic pain, provided insights into the importance of self-advocacy. He stated on the questionnaire, “I felt good about talking about the need to get a more comfortable chair and extra time to do work. That helped me feel better in class.” Charles's example demonstrates how self-advocacy empowers students to assert their needs and drive positive change in their educational settings. It showed that, in conjunction with tailored accommodations, self-advocacy could a pivotal role in helping students overcome barriers and succeed in their academic journey.

Furthermore, the study revealed the paramount significance of peer support and inclusion in shaping the high school experiences of students with disabilities. This underscores the importance of fostering a classroom culture that encourages peer support and empathy, not only for academic engagement but also for the overall well-being and self-esteem of students with disabilities. Greg, a 17-year-old 12th grader with a visual impairment, shared his perspective during the interview: “My friends have been a big help, helping me through materials and making sure I don't miss important information. I got, like, probably better grades now because of that, I think.” Greg's experience emphasizes the importance of establishing an inclusive environment where students like him can depend on their peers for support, cultivating feelings of belonging and empowerment. It highlights how peer support can significantly enhance their academic journey and overall well-being.

## **Sub-Question Two**

**What are the attitudes of students with disabilities at the high school level who received appropriate accommodations, including assistive technology solutions and supplemental one-on-one instruction from specialized disability consultants and/or instructors?**

The attitudes of students with disabilities who received appropriate accommodations and support were generally positive. They appreciated the tools and resources provided to them, recognizing their role in leveling the playing field. Charles, a 15-year-old with MS, expressed his gratitude on the questionnaire: “The special keyboard and mouse make it easier for me to do my work, and I feel like I can do better on assignments. It’s helpful for sure.” This statement reflects a positive attitude fostered by the provision of necessary accommodations.

The research study has demonstrated the significant impact of tailored accommodations on high school students with disabilities, particularly in enhancing their self-confidence and academic performance. Aidan, a 14-year-old ninth-grader with a hearing impairment, served as a relevant example during the focus group discussions: "After using different techs, then I’ve been better at keeping up with the class, and I think I got my homework and assignments done on time. This was better than before.” Aidan's response reinforces how personalized accommodations can eliminate learning barriers, elevate academic achievements, and instill a sense of self-assuredness among students, reinforcing the transformative potential of appropriate accommodations in promoting engagement and confidence among high school students with disabilities.

Also, the research highlights the pivotal role of individualized accommodations in shaping the attitudes, self-confidence, and overall experiences of high school students with disabilities. Amy, a 15-year-old ninth-grader with a visual impairment, exemplified the

transformative impact of customized accommodations during the interview: "Because of Braille and screen readers, I participate more in my schoolwork, and getting more time for assignments is good; I need it because you know it can take me more time to ummm use the tech." Amy's journey illustrates how tailored accommodations have significantly improved her access to educational materials and her confidence in her academic abilities. These findings accentuate the significance of personalized accommodations and support, which contribute to more positive and empowered attitudes among students with disabilities, resulting in enhanced academic performance and overall well-being, directly addressing our research question.

### **Sub-Question Three**

**What is the academic performance of students with disabilities at the high school level who did not receive necessary academic accommodations?**

Students with disabilities who did not receive the necessary accommodations tended to experience low academic scores. Lack of accommodations often resulted in feelings of frustration and being left behind. Ali, a 16-year-old with autism, highlighted his struggles in the questionnaire: "It's hard to keep up when I don't get the extra help I need. I get stressed, and you know, yeah, then worry about my grades." Jen, a 16-year-old with a learning disorder, said during focus group discussions, "It would be great to get more help. I don't know what. But just that, like it gets hard for me, and I feel much slower than the rest of the class." This quote underscores the direct impact of the lack of accommodations on academic performance. The responses to the research questions underscore the crucial role of accommodations in shaping the learning experiences, attitudes, and academic performance of students with disabilities. The use of participant quotes provides authentic insights into the lived experiences of these students, emphasizing the importance of tailored accommodations and support.

For some students with disabilities like Brian, the absence of essential accommodations has significantly shaped their academic journey. Brian, a 15-year-old 10th grader diagnosed with a developmental delay, has had his learning pace and comprehension affected by his disability, yet he has not yet benefited from customized accommodations tailored to his specific needs. The absence of personalized support can lead to a sense of frustration and hinder academic performance. As Brian put it on the questionnaire, "I get behind when I don't get the extra help I need. It's kind of tough in class, and then it's hard for me to do good later. ”

Another example is Ellen, a 14-year-old ninth-grader with a hearing impairment. A lack of customized accommodations tailored to her disability has affected her learning experiences. Her challenges in understanding spoken language impact her effective communication in the classroom. The absence of the necessary accommodations created barriers that affected her access to the curriculum and active engagement in learning activities. As Ellen pointed out during the interview, "I'm slow in class, and it's hard for me to understand what's being said. Then I have to borrow notes or ask for help after or ask friends. Yeah, it just takes a lot of time." This highlights the essential requirement for personalized assistance for students with sensory disabilities, directly addressing the research question.

### **Summary**

The thematic analysis of participants' experiences revealed several key insights into the learning attitudes and academic performance of high school students with disabilities. A predominant theme was the transformative power of accommodations and assistive technologies in enabling meaningful inclusion, engagement, and enhanced academic outcomes. Quotes from students underscored the tangible benefits of tailored support in building confidence and positive learning orientations. Conversely, lack of accommodations emerged as a major barrier associated

with frustration and unrealized potential. This highlights the critical need for consistent accommodation implementation. Additionally, self-advocacy was emphasized as pivotal for students advocating their requirements and exercising agency in their educational journey. Developing self-determination skills was seen as instrumental to independence and success. Overall, the thematic exploration provided a multifaceted understanding of participants' perspectives. It clarified the critical role of accommodations in inclusion and achievement, persisting challenges around accommodation access, and the importance of fostering student advocacy and empowerment. Centering participant voices enriches the analysis, offering authentic insights into the lived experiences of high school students with disabilities.

The impact of accommodations and assistive technologies on students with disabilities extends beyond the academic realm. It touches various aspects of their high school experiences, shaping their self-concept and self-efficacy. An important facet that emerges is the influence of these supports on social inclusion. Participants' narratives illustrated how appropriate accommodations can enable students to engage with their peers, fostering a sense of belonging and empowerment. This sense of belonging not only contributes to their well-being but also enhances their motivation to participate actively in classroom activities and co-curricular endeavors. This highlights the broader implications of accommodation implementation, emphasizing that a more inclusive environment can lead to more confident and socially connected students.

While individualized supports are instrumental, it is evident that a collaborative approach involving educators, support staff, and students is essential for effective accommodation implementation. The data revealed that participants often find themselves at the intersection of personal needs and school-wide policies. Therefore, a nuanced understanding of these needs and

collaboration between stakeholders is critical for meeting students' diverse requirements. Encouraging student input, such as those captured in this study, can be a catalyst for change. Their insights can guide educators and policymakers in establishing a more inclusive and responsive educational environment that acknowledges the multifaceted dimensions of high school experiences for students with disabilities. In addition, ongoing professional development initiatives should emphasize the importance of collaborative efforts among educators, support staff, and students to ensure the effective implementation of accommodations. Likewise, creating platforms for continuous dialogue and feedback, as this study exemplifies, will foster a dynamic and adaptive educational system that evolves in response to the ever-changing needs of students with disabilities.

In conclusion, the thematic analysis delves into the transformative potential of accommodations and assistive technologies, emphasizing the importance of social inclusion, self-concept, and self-efficacy. Moreover, it underscores the necessity of collaboration among students, educators, and support staff to ensure that accommodations are individualized, consistent, and responsive. The multifaceted understanding obtained through participant narratives contributes to a holistic view of the experiences of high school students with disabilities, emphasizing the need for more inclusive educational environments. To advance inclusive practices, upcoming research may investigate the long-term effects of these accommodations on students' academic pathways. Additionally, professional development programs should be designed to cultivate a culture of understanding and proactive collaboration among all stakeholders in the educational field.



## **CHAPTER FIVE: CONCLUSION**

### **Overview**

The purpose of this qualitative phenomenological study was to understand the learning experiences, attitudes, and academic performance of students with disabilities in a high school in the Northeastern United States. This study examined high school students with disabilities' academic experiences through interviews, a focus group, and questionnaires. Data analysis followed Moustakas' (1994) phenomenological approach, extracting thematic codes and synthesizing a matrix integrating insights across methods. Chapter five includes these discussion subsections: (a) interpretation of findings, (b) implications for policy and practice, (c) theoretical and methodological implications, (d) limitations (e) delimitations, and (f) recommendations for future research. This chapter concludes with a summary

### **Discussion**

This phenomenological study sought to understand high school students with disabilities' academic experiences, attitudes, and performance. Existing research underscored that most students required customized assistance to meet milestones and achieve postsecondary pathways comparable to typical peers (Aguirre et al., 2021). Overcoming systemic barriers through accommodations facilitating participation and achievement remains critical. The current findings contributed additional dimensions of experience to this knowledge base centered on equitable access. The findings revealed how specialized supports empower students to engage academically and pursue higher education when aligned with individual needs. Conversely, findings exposed detriment when essential accommodations are lacking or inappropriately implemented. Ultimately, participants' opinions captured recommendations to better serve this population through transitional stages toward maximal inclusion, independence, and

self-actualization. Insights from the participants were valuable to shape ongoing efforts that promote empowering environments which unlock potential for students with disabilities.

### **Summary of Thematic Findings**

Twelve high school students with varying disabilities shared their perspectives. The data were collected through individual interviews, a focus group, and questionnaires. These three methods were used for the purpose of triangulation of the data. The data were analyzed by reading and re-reading interview transcripts and organizing them into meaningful codes (Moustakas, 1994). Specific themes emerged after the data were analyzed in this study. The themes include the impact of accommodations on learning, challenges, and barriers to effective accommodation, the role of self-advocacy and independence, and social and emotional well-being.

One outlier participant, unlike most students, did not prefer conventional accommodations like enlarged print or note-taking support. Instead, this participant excelled in auditory-based learning, engaging actively in classroom activities alongside peers. This highlighted the potential of alternative learning methods for students with disabilities, suggesting that recognizing diverse talents can offer unconventional paths to academic success, challenging traditional accommodation approaches and expanding inclusive education horizons. Another outlier with a learning disorder took a proactive role in their learning plan, exploring various tools and applications suggested by their parents who were teachers. The participant recommended tools to teachers and actively used specialized educational software, creating a customized digital learning environment that addressed their specific needs. This experience showcased how students with disabilities can take advantage of technology to take control of

their education, challenging conventional accommodation paradigms and highlighting the power of student-driven, adaptive learning facilitated by innovative software tools.

### **Interpretation of Findings**

Chapter Four outlined salient themes, including accommodation impacts on learning, barriers therein, self-advocacy's role, and social and emotional well-being – findings bearing on the research questions. Results validated the pivotal capacity of teachers and schools to nurture students with disabilities' academic and postsecondary pursuits when environments adapt to individualized requirements (Smith et al., 2021). Success often hinged on accessing personalized support and facilitating skill-building and inclusion. Conversely, findings exposed systemic deficiencies denying essential customized assistance as detrimentally impacting trajectories. Ultimately, equipping students to self-advocate emerged as a catalyst urging systemic reforms centered on equitable access. Insights warrant ongoing efforts optimizing accommodations' implementation to foster empowering climates, unlocking potential too frequently left marginalized.

### ***Inclusivity and Student Well-Being***

The thematic findings of this study underscored the broader impact of inclusive practices on the overall well-being of students with disabilities. Beyond academic performance, creating an inclusive environment positively influenced students' overall sense of belonging and mental health. According to Schwartz et al. (2021), although special education could effectively provide learners with disabilities with necessary accommodations, the customized learning plan can deny these students an opportunity to interact with their peers. Promoting inclusivity and fostering a supportive atmosphere can significantly enhance students' emotional and social well-being, as evidenced by the responses of the study participants. Students who genuinely feel a sense of

belonging are more likely to engage actively in their education (Schwartz et al., 2021). In addition to the responses, it is important to note that the study also found that when students felt they had a voice in shaping their learning environment, their sense of belonging and self-esteem was further enhanced. This empowerment can contribute to improved mental health and a positive attitude towards academic pursuits.

Participants consistently emphasized the positive impact of having an inclusive educational environment. Their responses indicated that when students experienced a sense of belonging and acceptance, their overall well-being was significantly enhanced, positively affecting self-esteem and overall life satisfaction. Furthermore, the study revealed that participants highlighted the importance of peer relationships and peer support in creating an inclusive atmosphere. The interactions and friendships formed among students were identified as key elements in enhancing well-being. These relationships offered emotional support, which, in turn, contributed to better mental health and a stronger sense of belonging.

Moreover, the interpretation highlighted the extension of inclusivity beyond the student body to involve parents, guardians, and the community, creating a more comprehensive support network for students with disabilities. The responses from participants underscored the importance of involving these stakeholders in the pursuit of inclusivity, emphasizing the need for a collaborative approach involving all stakeholders in the educational process. Engaging these parties created a culture of inclusivity, empowering students to pursue postsecondary education with increased confidence and self-assuredness. Additionally, the study found that participants stressed the importance of community engagement programs, which provided opportunities for students with disabilities to interact with the broader community. This extended their sense of belonging and facilitated social integration, ultimately contributing to their overall well-being.

### ***Teacher's Role in Student Success***

According to their responses, teachers' enthusiasm and dedication profoundly impacted students' motivation and aspirations. Moreover, the study revealed that participants highlighted the importance of teachers' adaptability in catering to individual student needs. This adaptability allowed for more personalized support, strengthening the mentorship role and enhancing student motivation and success. This study revealed insights into the vital role that teachers play in the success of students with disabilities, focusing on more than accommodation provision.

According to Rapp and Corral-Granados (2021), the best learning environment for learners with disabilities was an inclusive environment. Offering this learning approach can be challenging for teachers but critical for students. The responses from the participants of my study provided valuable insights into the critical role that teachers played in students' success, stressing that teachers are not merely facilitators of accommodations but mentors who can inspire and guide students with disabilities.

Participants' responses highlighted that teachers' support and dedication profoundly impacted students' motivation. They also underscored the importance of teacher-student relationships built on trust and encouragement, significantly influencing students' confidence and decisions to pursue higher education. In addition to these insights, it is important to note that the study revealed that participants also stressed the value of involving students with disabilities directly in developing educational plans. By giving students a voice in shaping their educational journey, teachers can empower them to take ownership of their success. This collaborative approach with students can be a catalyst for increased motivation and self-belief.

Participants' responses further illuminated the importance of continuous professional development for teachers to effectively support students with disabilities. They emphasized that

educators should be equipped with the necessary tools, knowledge, and strategies. Participants' responses reflected the belief that investing in continuous training and resources for teachers would empower them to serve not only as academic instructors but also as mentors guiding students with disabilities throughout their educational journey. Additionally, the study uncovered that participants highlighted the significance of mentorship programs among educators.

Collaborative mentorship opportunities provided professional growth and fostered a supportive network for teachers. These networks, in turn, benefitted students with disabilities by providing them with a holistic support system from their mentors.

### ***Tailored Support for Postsecondary Plans***

The thematic findings of this study emphasized the need for tailored support to help students with disabilities pursue postsecondary education. According to Knickenberg et al. (2020), there is a critical need to tailor the curriculum for learners with disabilities to their specific needs. My research study validated this idea and highlighted the ineffectiveness of a one-size-fits-all approach in guiding these students toward higher education. The participants' responses further validated the study's findings, emphasizing the importance of customizing support to cater to each student's unique aspirations and needs. In addition to these findings, it is essential to note that the study revealed that participants stressed the value of career readiness programs tailored to student's interests and skills. These programs allowed students with disabilities to explore potential postsecondary pathways while honing their talents, contributing to a smoother transition and opening doors to various opportunities.

Participants' responses confirmed other studies. Their responses reinforced the idea that personalized guidance and support were essential for students with disabilities pursuing higher education. Moreover, the study unveiled the importance of early interventions and individualized

education plans (IEPs). Early identification of a student's aspirations and needs, along with targeted IEPs offered a solid foundation for their journey toward postsecondary education. These tailored plans ensured that students received the specific support they required.

In addition, the study revealed the significance of collaboration between educational institutions, schools, and postsecondary facilities. The study highlighted the importance of establishing partnerships and pathways providing ongoing support and accommodation beyond high school. This collaborative approach can facilitate a seamless and supported transition for students with disabilities, bridging the gap between high school and postsecondary education and ensuring a continuous journey to higher education. Furthermore, the study indicated that participants would benefit from the role of mentorship programs that connected students with disabilities to alumni or current students at postsecondary institutions. These mentorship programs can offer guidance and shared experiences to create a supportive network, making the transition to higher education more attainable for participants.

### **Implications for Policy or Practice**

The findings of this research paper provided crucial insights into the implications for policy and practice in the realm of inclusive education for students with disabilities. The study's thematic interpretations have uncovered significant considerations that offer valuable guidance for a range of stakeholders, including policymakers, administrators, teachers, parents, and the broader educational community. The following sections will delve into the specific recommendations and actions that can be undertaken to better support students with disabilities, with a focus on implications for policy or practice, recognizing that while the number of recommendations may differ, both facets are essential for fostering a more inclusive and supportive educational environment.

### ***Implications for Policy***

The research findings presented in this study emphasized the crucial implications for policy across different tiers of the educational framework. As highlighted by Zigmond and Baker (1995), the United States has demonstrated notable progress in establishing a comprehensive system of services for students with disabilities over recent decades. It is imperative for policymakers to continue reinforcing the principles of inclusivity in education through the enactment and maintenance of pertinent laws and regulations. In addition, integrating grants and funding initiatives for technology within the policy framework could significantly enhance accommodations for students with disabilities. Moreover, exploring partnerships with technology firms like Google or Microsoft to develop cutting-edge technologies tailored to meet diverse accommodation needs could also be advantageous. There is a critical need for increased investment in both the development and dissemination of such technologies to ensure that they are accessible to all students. Integrating technology into the educational landscape can bridge some of the gaps created by inconsistent accommodation practices and inadequate educator awareness.

Federal laws like the Individuals with Disabilities Education Act (IDEA) set standards for accommodating students with disabilities, and states have corresponding frameworks. However, the effectiveness of these policies varies among districts and schools due to factors like limited resources and differing interpretations of guidelines. Administrators must ensure policies are implemented and translated into practice, providing thorough training for educators on tasks like crafting Individualized Education Plans (IEPs). Schools should also allocate resources for fostering inclusivity through initiatives like peer support programs and professional development for teachers. Schools should recognize the value of peer relationships and should actively



facilitate opportunities for inclusive interactions among students, thereby fostering a supportive network that extends beyond the classroom. In addition, continuous monitoring and evaluation are crucial for identifying areas of improvement and meeting the needs of students with disabilities effectively. By bridging the gap between policy mandates and implementation, schools can create environments prioritizing inclusivity and supporting the well-being of all students, including those with disabilities.

### ***Implications for Practice***

For educational practitioners, the implications of this study are manifold. First and foremost, it is essential for teachers and school administrators to embrace inclusive practices that extend beyond accommodation provision. This includes fostering a culture of empathy, understanding, and acceptance among students, as highlighted by the study's thematic interpretations. Educators should prioritize the emotional and psychological welfare of students with disabilities, ensuring that they feel a genuine sense of belonging in the school community. Teachers should actively involve students in shaping their learning environment and educational plans, empowering them to take ownership of their academic journey. Peer relationships and peer support should be cultivated, recognizing that these relationships are pivotal in enhancing students' well-being. According to Sempowicz et al. (2018), an inclusive learning environment allows learners with disabilities to interact with their peers and fosters a smooth transition to the outside world.

Findings underscore the need for expanded educator development and school-wide coordination to enable consistent, appropriate accommodations responsive to students' unique needs. Enhanced communication and collaboration among stakeholders are critical to elucidating challenges and implementing solutions. Without adequate communication and understanding,

schools may fail to implement accommodations optimally, hindering inclusion and student success. Well-intentioned educators can inadvertently overlook student needs without sufficient training on disabilities and accommodation best practices. Addressing these limitations is essential for dismantling barriers to inclusion and success for students with disabilities.

Schools may already have plans to create an inclusive environment; some specific measures can be taken to improve inclusivity further. One idea is to enhance professional development opportunities for teachers focused on fostering inclusivity and understanding the needs of students with disabilities. This could involve training sessions, workshops, and ongoing support from subject matter experts. Another idea is that schools can implement systematic approaches to gather feedback from students and parents regarding the inclusivity of the school environment. This feedback can be used to inform continuous improvement efforts. Furthermore, schools can collaborate with community organizations and disability advocacy groups to gain access to resources and expertise that can contribute to creating a more inclusive environment. By planning to continuously enhance inclusivity through targeted professional development, feedback systems, and community partnerships, schools can further improve their efforts to create an environment where all students, including those with disabilities, feel supported.

Parental involvement is another crucial aspect of fostering inclusivity in educational settings and is a vital component in supporting the academic and social development of students, including those with disabilities. Therefore, educators should actively engage parents in the educational process, ensuring they are informed about their child's progress, needs, and goals. Parents may hold valuable insights into their child's strengths, challenges, and preferences. As a result, meaningful communication between teachers and parents can help build a practical approach to supporting students with disabilities. In addition, involving parents in

decision-making processes related to their child's education can promote a sense of empowerment, reinforcing the importance of a collaborative approach to education. With these measures, educators can create a supportive network that enhances the overall well-being and success of students with disabilities.

Additionally, educators should continuously invest in their professional development, equipping themselves with the knowledge and strategies required to support students with disabilities effectively. Collaborative mentorship programs among educators should be established to provide a support network and professional growth opportunities. To further support postsecondary aspirations, educators should implement career readiness programs tailored to individual interests and skills. Finally, schools and postsecondary institutions should prioritize collaborative pathways that provide ongoing support and accommodation beyond high school, ensuring a seamless transition for students with disabilities. For example, schools can plan to work with external entities such as businesses or government agencies to help students with disabilities transition successfully. This partnership could involve creating internship opportunities, providing vocational training, offering job placement services, or ensuring accessibility accommodations in various environments. Schools that work together with external entities can broaden the support network available to students with disabilities and enhance opportunities for successful transition and integration into postsecondary education as well as employment settings.

These collaborative practices can be tailored to each student's unique aspirations and needs and can contribute to a more inclusive educational environment. This collaboration can be done through a variety of approaches. First, establishing collaborative mentorship programs among educators can lead to a support network where educators can share knowledge, and best

practices for effectively supporting students with disabilities. Second, implementing career readiness programs tailored to individual interests and skills can ensure that students with disabilities receive personalized support to pursue their postsecondary goals. Moreover, prioritizing collaborative pathways between schools and external organizations such as businesses and government agencies can assist students with disabilities to have access to a wider range of resources. This expands the support network available to students and promotes their successful transition into postsecondary education and vocational settings.

### **Empirical and Theoretical Implications**

The themes that emerged from this research study described the experiences of high school students with disabilities and corroborated Maslow's (1954) hierarchy of needs theory that guided this research study. The theoretical and empirical implications of this study are discussed below. Furthermore, the alignment between the observed experiences and Maslow's hierarchy emphasizes the universality of these fundamental human needs, providing valuable insights for educators, policymakers, and practitioners working with diverse student populations.

#### ***Empirical Implications***

The empirical implications of this research are noteworthy, shedding light on practical aspects that can inform the design of interventions and programs. The study provided empirical evidence of the positive impact of inclusive practices on students' self-esteem and emotional well-being. These empirical findings contributed to the theoretical framework by adding concrete evidence of the link between inclusivity and students' psychological welfare, reinforcing the importance of a supportive and inclusive educational culture. This study substantiated and reinforced the empirical evidence of the positive impact of inclusive practices on the academic performance and overall well-being of students with disabilities. According to Zigmond and

Baker (1995), increased academic supports helped to ensure that special needs learners could access full mainstream curricula, but the researchers also recommended future efforts to focus on ensuring equality. Barros et al. (2019) noted that learners with disabilities have the capacity to perform better and progress through their academic journey to become productive contributing members of society with the appropriate support systems in place. Rapp and Corral-Granados (2021) concluded that the best learning environment for learners with disabilities is an inclusive environment. Sempowicz et al. (2018) confirmed that such an environment allows learners with disabilities to interact with their peers and fosters a smooth transition to the outside world. Archambault and Milone (2020) and McKay (2018) found in their studies that the present environment defines one's experience through interaction with other people and events. These findings offered practical guidance to educators, schools, and policymakers by highlighting the tangible benefits of inclusivity and the imperative need for its implementation in educational settings. The empirical evidence of the multifaceted nature of inclusivity added depth to the field's empirical understanding.

Furthermore, the empirical findings emphasized the role of students' active involvement in shaping their educational journey, empowering them to take ownership of their academic experiences. According to Smith et al. (2021), learners with disabilities have unique educational needs that schools must fulfill with custom learning pathways designed for such students. According to Taub and Foster (2020), learners with disabilities should be actively engaged in their learning activities, or their academic performance may be affected. This indicates that when students are part of the decision-making process it can positively influence their motivation. By diverging from the predominantly teacher-centered perspective, our findings emphasized the empirical relevance of involving students in the decision-making process, shifting the focus

toward a more collaborative and student-empowering approach to inclusive education. These empirical insights informed the design of interventions and programs to enhance student participation and self-determination, contributing to a more holistic and empowering educational environment for students with disabilities. Thapliyal et al. (2022) examined how a differentiated learning environment impacted the learning experience of students with disabilities. The researchers revealed that learners with disabilities require differentiated instruction models in a preferential learning environment. Fostering a collaborative and student-empowering approach to inclusive education is imperative for enhancing the overall well-being of students with disabilities.

### ***Theoretical Implications***

Throughout the data collection process, the application of Maslow's theory of hierarchy of needs (1954) was evident. This study builds upon Maslow's proposition that individuals have both deficiency needs and growth needs and elucidates the role of motivation in the context of learning. McLeod (2023) further clarifies Maslow's assertion that human decision-making and functioning are structured by a hierarchical arrangement of needs. Among the participants of this study, many students articulated the influence of specific needs in driving their pursuit of academic endeavors. This observation resonates with prior research by Noltemeyer et al. (2021), which underscores the motivating influence of growth needs in individuals aspiring to realize their maximum potential. Moreover, findings align with the description of human needs proposed by Rojas et al. (2023), comprising physiological, safety, love and belonging, esteem, and self-actualization needs, collectively shaping individuals' behaviors. Notably, a predominant theme among participants was the positive impact of support and motivation on their academic experiences.

A deeper examination of Maslow's hierarchy of needs in educational contexts, particularly concerning the diverse requirements of students with disabilities, is valuable. This understanding can inform the development of targeted interventions and support structures within educational institutions. Recognizing the significance of addressing both deficiency and growth needs, as underscored by Nadeau (2022), is pivotal in creating inclusive learning environments. Nadeau's research (2022) underscores the transformative potential of inclusive educational environments, fostering competition and enhancing academic outcomes along with the holistic well-being of students. Such environments empower students to actualize their full potential. Therefore, it is important to do further exploration of the dynamic interplay between Maslow's hierarchy of needs and educational outcomes, with a focus on designing evidence-based interventions tailored to the multifaceted needs of students.

This study extended the field by shedding new light on the significance of student involvement and agency in shaping their educational journey. Smith et al. (2021) highlighted the critical role of teachers to nurture students with disabilities when learning environments are adapted to individualized requirements. In addition, these research findings underscored the value of students actively participating in decision-making processes, specifically in shaping their learning environment and educational plans. This theoretical extension highlighted the empowerment of students and their sense of ownership, which can, in turn, positively impact their motivation and aspirations. It added to existing theory and emphasized a more collaborative and holistic approach, to support students with disabilities, prioritizing student agency and self-determination.

### **Limitations and Delimitations**

The study explored the experiences of high school students with disabilities in the

Northeastern United States. It did face limitations due to a small sample size and narrow focus on high school settings. With only 12 participants, the study risks biased findings that may not accurately represent the broader disabled student population. Additionally, by focusing exclusively on high school environments, the study overlooked potential differences in experiences across educational levels and geographic regions. The study's delimitation to high schoolers in the Northeastern US schools aimed to focus on a specific demographic experiencing the phenomenon of interest. However, this approach risked excluding valuable perspectives from demographically distinct groups or different academic environments. Future research could benefit from considering broader approaches to capture a more diverse range of experiences and insights.

### ***Limitations***

Two core limitations may constrain the broader applicability of findings. First, the sample size of 12 high school students with disabilities risks inadequate representativeness, given considerable variance across individual experiences and demographics. Spanning just four females and eight males, this narrow participant pool may introduce gender or other biases that obscure general challenges. Consequently, reported barriers, aids, and recommendations may diverge from those related more broadly to the wider disabled student population in the United States.

Secondly, focusing inquiry exclusively on high school settings overlooks potentially differential experiences shaping access, inclusion, and outcomes for students with disabilities in other educational contexts. As pedagogical strategies, resourcing, and accommodations practices vary by level, distinct needs likely manifest from elementary through higher education. Consequently, some findings may be less transferable. Being mindful of such scope conditions



provides critical awareness in applying outcomes while highlighting the value in subsequent expansive samples and comparative studies across academic stages. Delineating boundaries allows appropriately contextualized rather than overreaching interpretations, conclusions, and practice recommendations when translating insights to guide equitable reforms system-wide.

### ***Delimitations***

This study delimited participants to high schoolers ages 14-19 with disabilities in Northeastern US schools, seeking a bounded sample experiencing the phenomenon of interest. However, such parameters risk excluding illuminative perspectives from those demographically distinct or in other academic environments. For example, challenges related to support and needs may differ across younger students or postsecondary settings. Similarly, geographic variance in resources and cultural norms may drive differing barriers by region. Consequently, findings reveal only a particular snapshot.

Studying additional participant groups across widening variables of age, school level, locality, and background would mitigate these constraints and can lead to more transferable, comprehensive revelations through contrasting common and exceptional cases. Comparing disability experiences longitudinally and contextually better conveys systemic strengths, limitations around inclusion, and insights transcending particularities. Ultimately, expansive samples and multi-institutional inquiry would further efforts to advance equity in access and outcomes for students with disabilities by transcending the boundaries imposed here.

### **Recommendations for Future Research**

This study has a few recommendations for future research. First, the limitations of the study can be broadened in future research. The sample size limited this study. A small sample size of 12 participants was used to gather relevant data for analysis. The small sample size may

pose a challenge in generalizing this study's findings since it may not be a fair representation of all students with disabilities in the United States, presenting a biased representation of findings. Future studies should use a larger sample size to generalize their findings. Also, the study was limited by the target population. The researcher used only students with disabilities in a high school rather than including other academic institutions like colleges to compare their experiences. Future studies should expand the target population to include participants from other higher education institutions to ensure generalizability of the study.

In addition, given the critical importance of inclusivity in the educational experiences of students with disabilities, future research should explore the effectiveness of specific strategies and interventions designed to enhance inclusivity in different educational settings. These investigations should examine the impact of various inclusivity measures, such as teacher training, curricular adaptations, and peer support programs, on academic performance and overall well-being. It is imperative to explore how students with disabilities perceive and respond to these inclusivity initiatives. This could involve qualitative inquiries that capture students' perspectives on the effectiveness of such strategies and their suggestions for improvement. Furthermore, longitudinal studies tracking the progress of students over time would provide insights into the long-term effects of inclusivity measures on academic achievement and postsecondary pursuits.

Also, the role of teachers in motivating students with disabilities remains a pivotal area of interest. Future research should delve deeper into the specific teacher-student interactions, practices, and pedagogical approaches that significantly impact students' motivation and aspirations. This could involve in-depth case studies of educators who have successfully motivated students with disabilities, exploring their strategies, mindset, and challenges they

encountered. Comparative studies examining the effectiveness of different teacher training programs and professional development initiatives in fostering a motivating and inclusive classroom environment would also be valuable. Additionally, research should investigate the transferability of these findings to diverse educational contexts, including higher education and vocational training, to understand the broader implications of teacher-student relationships in guiding students with disabilities.

Moreover, the effectiveness of tailored support for postsecondary aspirations for students with disabilities warrants further exploration. Future research could investigate the design and implementation of personalized guidance and support programs, considering the diverse needs and aspirations of these students. Comparative studies between schools that have successfully tailored their support systems and those that have not could offer insights into the most effective strategies. Moreover, longitudinal studies tracking the postsecondary outcomes of students who have received tailored support would provide valuable information about the long-term impact of these interventions. Additionally, research should explore the collaboration between high schools, colleges, and postsecondary institutions, focusing on developing seamless transition pathways and support networks. Comparative studies between schools with strong postsecondary collaboration and those without can shed light on the benefits of such partnerships.

### **Conclusion**

This study has advanced our understanding of motivating students with disabilities to not only achieve academically but also pursue postsecondary education. By examining the high school experiences of students with disabilities through the lens of Maslow's hierarchy of needs, this research has shed light on the importance of inclusivity, teacher-student relationships, and tailored support. According to McNicholl et al. (2021), including technology in the learning

environment for students with disabilities creates a personalized academic experience, aiding interaction through interactive technologies. The findings of my research, based on data collected through individual interviews, a focus group, and questionnaires involving 12 students with various disabilities, emphasize the profound impact of creating personalized learning experiences as well as the value of an inclusive environment that fosters a sense of belonging and enhances students' overall well-being. The pivotal role of teachers as motivators and mentors has been underscored, highlighting the need for teachers to inspire and guide students, instilling self-belief and determination. The study has also stressed the importance of personalized support in aligning with individual aspirations and needs, thus equipping students to transition to postsecondary education successfully. Considering these findings, the implications for policy and practice have been outlined, calling for developing inclusive measures, teacher training programs, and personalized guidance to support students with disabilities. Recommendations for future research have been provided, emphasizing the need to explore the effectiveness of inclusivity strategies, the specific teacher-student interactions that motivate students, and the impact of tailored support programs. In conclusion, this study contributes to the field of education by highlighting the multifaceted approach necessary to motivate students with disabilities, address their unique needs, and foster an environment where they can thrive academically and aspire to postsecondary education.

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## Appendix A

### Recruitment Letter

Dear Parents:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a Ph.D. degree. The purpose of my research is to understand the learning experiences, attitudes, and academic performance of high school students with disabilities, and I am writing to invite eligible participants to join my study.

Participants must be in high school in the United States, be between ages 14-19, and have a disability. Participants, if willing, will be asked to participate in an interview (20-30 minutes), participate in a focus group interview (15-20 minutes), and complete a questionnaire (5-10 minutes). It should take approximately 40 minutes to complete the procedures listed. Names and other identifying information will be requested as part of this study, but the information will remain confidential.

To express interest in this study, please email me at [REDACTED] and I will provide more information.

A consent document will be sent as an email attachment after you respond by email to my recruitment email. The consent document contains additional information about my research. If you choose to participate, you and a parent will need to sign the consent document and return it to me at the time of the interview.

Participants will receive a \$10 Amazon gift card.

Sincerely,

Delavar Basha  
Ph.D. Doctoral Student

[REDACTED]

## Appendix B

## IRB Approval Letter



November 1, 2023

Delavar Basha  
Ellen Ziegler

Re: IRB Approval - IRB-FY23-24-276 Understanding the Learning Experiences, Attitudes, and Academic Performance of High School Students with Disabilities as They Prepare for Graduation: A Phenomenological Study

Dear Delavar Basha, Ellen Ziegler,

We are pleased to inform you that your study has been approved by the Liberty University Institutional Review Board (IRB). This approval is extended to you for one year from the following date: November 1, 2023. If you need to make changes to the methodology as it pertains to human subjects, you must submit a modification to the IRB. Modifications can be completed through your Cayuse IRB account.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. [45 CFR 46.101\(b\)\(2\)](#) and (b)(3). This listing refers only to research that is not exempt.)

For a PDF of your approval letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study Details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your stamped consent form(s) and final versions of your study documents can be found on the same page under the Attachments tab. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

**G. Michele Baker, PhD, CIP**  
*Administrative Chair*  
**Research Ethics Office**

## Appendix C

**Site Permission Letter**

**Researcher:** Delavar Basha

**Contact Information:** [REDACTED]

**Date:** 07/25/23

**Dear**

***Introduction of Study:***

I am a doctoral student at Liberty University pursuing a Ph.D in Education with a concentration in Instructional Design. I am requesting permission to conduct this study at your school.

The purpose of this qualitative phenomenological study will be to understand the learning experiences, attitudes, and academic performance of students with disabilities in a high school in the Northeastern United States.

In addition to approval from students, parents, and the school, this project will be reviewed and approved by the Liberty University Institutional Review Board (IRB) prior to initiation.

***Request to access participants at your organization:***

As part of this study, I plan to engage with approximately 10-15 students who agree to participate after formal approval is provided by the school and their parents / guardians. I plan to use interviews, a focus group, and questionnaires to gather responses from the participants. The responses may be collected via remote meetings or in-person. All data will be secured and follow research best practices. There will be minimal disruption to the students' classes

The anticipated start date for this study is Sept 2023.

Please feel free to let me know if you have any questions. If you allow the research to be conducted in your school, please complete the information below.

Sincerely,

Delavar Basha, [REDACTED]

## Appendix D

**Consent Letter**

**Title of the Project:** UNDERSTANDING THE LEARNING EXPERIENCES AND ATTITUDES RELATED TO THE ACADEMIC PERFORMANCE AND SUCCESS OF HIGH SCHOOL STUDENTS WITH DISABILITIES: A PHENOMENOLOGICAL STUDY

**Principal Investigator:** Delavar Basha, Doctoral Student, Liberty University

**Invitation to be Part of a Research Study**

You are invited to participate in a research study. To participate, you must be a student enrolled in high school and have received a formal diagnosis of a disability. Taking part in this research project is voluntary. Please take time to read this entire form and ask questions before deciding whether to take part in this research study.

**What is the study about and why is it being done?**

The purpose of this study is to understand the learning experiences and attitudes related to the academic performance of students with disabilities in the high school level. The study can reveal how accommodations can be better established to provide support.

**What will happen if you take part in this study?**

If you agree to be in this study, I will ask you to do the following things:

1. Participate in a 20-30 minute interview which may be in person or via video call. This interview will be audio recorded.
2. Participate in a 30-45 minute small focus group interview which may be in person or via video call. This interview will be audio recorded.
3. Provide responses to questionnaires or surveys. This will take 5-10 minutes.

**How could you or others benefit from this study?**

Participants may or may not see enhancements in the accommodations and instructional supports they typically receive from their schools.

Benefits to society include a better understanding of how students with disabilities learn in a school environment.

**What risks might you experience from being in this study?**

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**How will personal information be protected?**

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

- Participant responses will be kept confidential through the use of pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and in a locked filing drawer. The data may be used in future presentations. After three years, all electronic records will be deleted, and all physical records will be shredded.
- Interviews will be recorded and transcribed. Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.
- Confidentiality will be maintained throughout the research and presentation process. Participants will not be identifiable to anyone other than the researcher.

**Is study participation voluntary?**

Participation in this study is voluntary. Your decision on whether or not to participate will not affect your current or future relations with your school, learning institution, or organization. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**What should you do if you decide to withdraw from the study?**

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

**Whom do you contact if you have questions or concerns about the study?**

The researcher conducting this study is Delavar Basha. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Ellen Ziegler, at [REDACTED].

**Whom do you contact if you have questions about your rights as a research participant?**

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu).

*Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.*

**Your Consent (or your Parent/Guardian Consent if you are less than 18 years old).**

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

*I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.*

The researcher has my permission to audio-record me as part of my participation in this study.

\_\_\_\_\_  
Subject - Printed Name

\_\_\_\_\_  
Subject - Signature & Date

\_\_\_\_\_  
Parent / Guardian name (for any subjects under the age of 18)- Printed Name

\_\_\_\_\_  
Parent / Guardian - Signature & Date

## Appendix E

## Permission to Use Graphic

Saul Mcleod [REDACTED]

Wed 6/28/2023 9:22 AM

To: Basha, Delavar [REDACTED]

You don't often get email from saulmcleod@simplypsychology.org. [Learn why this is important](#)

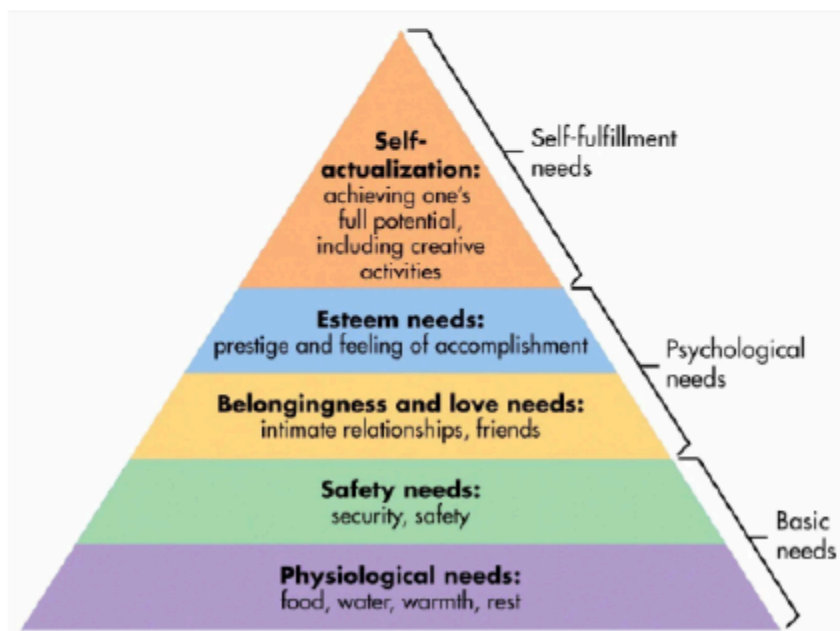
[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

Yes, but please cite the original source.

On Tue, 27 Jun 2023 at 20:23, Basha, Delavar [REDACTED] wrote:

Hello, I am a doctoral student. For my research paper, I am seeking permission to use the graphic below listed on your site:

<https://www.simplypsychology.org/maslow.html>



I have done the appropriate citation and reference in my paper.

Thank you.



## Appendix F

### Interview Questions

1. Describe and discuss your learning experiences, educational background, and your plans for graduation.
2. Describe and discuss your disability.
3. Describe and discuss any disability support you are receiving. What has your learning experience been like, as you prepare for graduation?
4. Describe and discuss your learning experiences and progress of course completion coursework when assistive technology applications were implemented in the classroom.
5. Describe and discuss any other accommodations provided to you.
6. Describe and discuss the role you played in helping to select the specific accommodations for your learning needs and to prepare for graduation.
7. Describe and discuss the supplemental support that was provided and share details about the process.
8. Describe and discuss your learning experiences and completion of subjects in school when assistive technology solutions and accommodations were not used in the classroom.
9. Describe and discuss the reasons accommodations were not implemented.

## Appendix G

### Focus Group Questions

1. Describe and discuss how long you have been at this school. Describe or discuss your attitudes about your learning experiences.
2. Describe and discuss any challenges you have faced in school when completing assignments. Describe and discuss challenges you feel may affect your graduation.
3. Describe and discuss how effective it was to have group activities in class as part of completion of projects or assignments.
4. Describe and discuss the strategies used in the classroom or by the teacher that were helpful to you. What, if any, input did you have into the development of those strategies?
5. Describe and discuss the subjects you have the most difficult experience with and the subjects you have the easiest experience with.
6. Describe and discuss how you complete homework assignments and projects at home. What, if any, technologies or adaptive applications do you use?
7. Describe and discuss how you received one-on-one support or assistance from an aide and the experience.
8. Describe and discuss how well-prepared you feel for your next phase of life after graduation. How do you feel your current school system and support systems that you received prepared you for graduation?
9. Describe and discuss any situations where you were not provided any accommodations. How were your grades affected and what was the impact on your graduation?

## Appendix H

### **Questionnaire Questions**

1. What is your grade level and class placement (e.g., standard, honors, AP classes)?  
Responses can be in written or audio format.
2. Describe and discuss your learning experiences and academic performance during the past two years. Responses can be in written or audio format.
3. Please write a ½-page letter to a school leader (administrator, counselor, support person) to let them know the challenges you faced related to path to graduation and how those challenges were helped or hindered. Responses can be in written or audio format.
4. Please share a song or meme that represents your learning experiences, attitudes, and academic performance. Describe and discuss why you made the selection.