FORGING PATHWAYS: A MULTI-CASE STUDY OF INDIVIDUALS WITH INTELLECTUAL

DISABILITY PURSUING POSTSECONDARY EDUCATION

AT THE COMMUNITY COLLEGE

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This multi-case study sought to better understand how students with intellectual disability (ID) are forging pathways to higher education via the community college. Five individuals with ID who accessed higher education via the community college and their parents/guardians were interviewed. Each case provided insight into personal pathways with results given in case descriptions and individual case themes. Cross-case analysis revealed four themes positively impacting the college-going pathway for students with ID: value-driven grit, pathway knowledge, community support, and accessibility. Based on findings from this study, families appear to be the primary systems forging pathways to the community college for individuals with ID. Local education agencies and community colleges can assist these families by engaging in interagency collaboration, evaluating their systems, and aligning practices to the goal of students with ID accessing and engaging in higher education.

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CHAPTER 1

INTRODUCTION

Education pipeline is a term often used to describe the transition from high school into higher education (Maes, 2010). Working effectively, this pipeline would support and prepare students in K-12 for higher education. When there are clear patterns of undermatching (Lowry, 2016), high school incompletion (Brown & Rodriquez, 2009; Robinson, Jaggers, Rhodes, Blackmon, & Church, 2017), lack of representation in honors courses (Maes, 2010), and underrepresentation of minority groups in higher education (Seider, Clark, & Soutter, 2015), this pipeline is considered "broken."

Broken educational pipelines are known to affect specific racial groups and students with disabilities, who share the common characteristic of being historically underrepresented in higher education (Espinosa, 2011; Palmer, Wood, Dancy, & Strayhorn, 2014). Researchers have sought to understand and learn how to better support students diverse in race, socioeconomic status, and gender; while also acknowledging students may have a multiple "minority status" (Maes, 2010). Likewise, students may display different higher education access and attainment patterns when accounting for subgroups (Hune, 2002). For students with disabilities, there are many subgroups and clustering students with disabilities as one group hides within-group differences.

When considering subgroups of students with disabilities, one group stands out as having the poorest post-school outcomes—individuals diagnosed with intellectual disability (ID) (referred to in this study as "individuals with ID" or "students with ID" for ease of writing and

not to be understood as a lack of acknowledgement of the social construct of this diagnosis). Individuals with ID have been found most likely to be unemployed (with rates ten times that of their peers) (Butterworth et al., 2013; Lipscomb et al., 2017a; Mann & Wittenburg, 2015; Winsor et al., 2021) and least likely to enroll in college post high school in comparison to other disability subgroups and students without disabilities regardless of race or gender (Bouck, 2014; Grigal, Hart, & Migliore, 2011; National Center for Education Statistics [NCES], 2017). Approximately 70% of recent high school graduates enroll in college within one year of graduation (McFarland et al., 2019). For students with ID, this rate is estimated to be around 11% (Grigal, Hart, & Migliore, 2011). Individuals with ID need to "move forward from the current system that all too often results in a pipeline to segregated sheltered work...or day programs to a future that achieves the vision of employment and independence" (Smith Lee, Rozell, & Will, 2018, p. 6). With a pipeline that does not include higher education and a "master narrative that characterize[s] . . . individuals with disabilities as academically inferior" permeating the American educational system, how do students with ID create pathways to college (Banks, 2017, p. 99)?

1.1 Purpose of the Study

Individuals with ID have some of the poorest post-school outcomes compared to other disability subgroups and individuals without disabilities. These post-school outcomes include low college-going (Bouck, 2014; Grigal, Hart, & Migliore, 2011; NCES, 2017) and employment rates (Bureau of Labor Statistics, 2018; Butterworth et al., 2013; Winsor et al., 2021). These issues are partly addressed by legislation including the Higher Education Opportunity Act (HEOA) (2018) that supports higher education programs designed to serve students with ID

(HEPSSIDs). As a result, these programs have been rapidly increasing over the past fifteen years (Schmidt, 2005; Think College, n.d.-a). Despite this growth, students with ID continue to be underrepresented in higher education. This field could benefit from research to gain a deeper understanding of how students with ID successfully transition to higher education. Specifically, seeking higher education via community college is of interest given preference for this institutional type by students with ID (Bouck, 2014).

Approximately 17% of students with a mild severity level of ID, and 11% of students with ID regardless of severity level enroll in postsecondary education within two years post high school (Bouck, 2014; Grigal, Hart, & Migliore, 2011). Given the broken pipeline to college evidenced by the underrepresentation of students with ID in higher education, this study seeks to answer the question, "How are individuals with intellectual disability successfully pursuing and accessing American higher education 'despite the master narrative that characterize[s] . . . individuals with disabilities as academically inferior?'" (Banks, 2017, p. 99). The purpose of this qualitative study is to identify factors that influenced and enabled students with ID to pursue, access, and enroll in postsecondary education, with a specific focus on community colleges.

1.2 Significance of the Study

The results of this study benefit staff at college programs designed to serve students with ID, disability and higher education researchers, policymakers, and individuals involved in high school transition planning for students with ID. Study findings may also benefit students with ID seeking postsecondary education via community college, as well as their family members and/or legal guardians who, based on findings from this study, may assist in the successful transition to a community college post high school.

Another benefit of this study is related to giving marginalized populations a "voice" that may not be found traditionally in research. This lack of voice is evident in educational research of students with ID (Taylor, 2018) and goes against the international disability slogan, "Nothing about us, without us" (Jaeger & Bowman, 2005). Having individuals with disabilities participate in research also can act as a form of "emancipatory research" although, ideally, this approach would have involved having individuals with ID part of the research team which unfortunately the individual nature of a dissertation study would not allow (Gabel, 2009).

Marginalized populations are described as "those excluded from mainstream social, economic, cultural, or political life" (Cook, 2008, p. 495). Students with ID fit this description of a marginalized population; and although many studies are about this population, few educational studies include interviews with students with ID (Taylor, 2018). *The SAGE Encyclopedia of Qualitative Research Methods* states marginalized populations may "find themselves ignored by those who have the power to establish the generally accepted definition of the situation" (Given, 2008, p. 491). An example given in that publication was interviewing the warden to understand life at prison instead of those incarcerated. By having a qualitative research design that includes interviewing members of a marginalized population, I sought to give a voice to members of that population (Annamma, Connor, & Ferri, 2016; Cook, 2008) and recognize individuals with ID as "knowledge citizens" (Taylor, 2018, p. 1).

Taylor (2018) talked about the need to recognize individuals with ID as knowledge citizens to counter the practice of excluding them from the very research that impacts their lives. The systematic exclusion of individuals with ID from participation in research is related to the dominant belief that people with ID "lack the capacity to positively and productively

participate in knowledge production in the academy" (Taylor, 2018, p. 2) referring to the perception that these individuals "lack sufficient reasoning or deliberative capacity [needed] to participate" (p. 7). As a result of these beliefs "the voices, experiences, and social meanings of individuals labeled with intellectual disabilities are at grave risk of marginality, . . . and outright exclusion" (Taylor, 2018, p. 2). Taylor's (2018) article suggests individuals with ID should be research participants to create "more equitable educational research" as without their voice knowledge production is not truly objective but rather "dehumanizing" and ultimately created by the dominant, nondisabled group (p. 6).

1.3 Research Questions

This study sought to explain the phenomenon of how students with ID successfully pursue pathways to higher education post high school. Of particular focus was higher education via the community college. The central research question that guided this study was:

How have students with ID successfully pursued pathways to postsecondary education via the community college?

This study also sought to answer the following sub-question in relation to the central research question:

What obstacles have been overcome in pursuit of transition to postsecondary education via the community college for students with ID?

1.4 Theoretical Framework

Yosso's (2005) cultural wealth model provided a lens through which to interpret the data from this qualitative study. Yosso's (2005) cultural wealth model proposes six types of

capital—aspirational, familial, social, navigational, resistant, and linguistic. This model is explored further in Chapter 2.

1.5 Definition of Terms

A discussion of classification, labeling, and defining disability is beyond the scope of this study. Such discussion is better left to the dialogue present in disability studies (Evans, Broido, Brown, & Wilke, 2017). However, it is important to note this study seeks to adhere to a strengths-based view of disability while constrained within the systems of categorizing and labeling to understand generalized differences between identifiable student populations (Reindal, 2008).

The term *disability* in this study refers to "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (United Nations General Assembly, 2006, Article 1). This definition acknowledges both impairment (the focus of the medical model of disability) and social barriers (the focus of the social model of disability).

When seeking to classify various impairments into specific disability sub-categories, such categorization is fairly limited to the use of texts rooted in the medical model of disability. One disability sub-category, *developmental disability*, is defined as conditions where there is "an impairment in physical, learning, language, or behavior areas" and includes conditions referred to as speech disorders, autism spectrum disorders, and intellectual disability (ID) (American Psychiatric Association [APA], 2013; Centers for Disease Control and Prevention [CDC], n.d.-b, para. 1). Attempting to veer away from this medical model lens of disability, while acknowledging the term *intellectual disability* comes from diagnostic categorization, this study

will not use the APA (2013) definition of ID in the *Diagnostic and Statistical Manual of Mental Disorders-V* (DSM-V), and instead uses the definition of ID from the Higher Education Opportunity Act (2008) that reads:

. . .the term 'student with an intellectual disability' means a student (A) with...a cognitive impairment, characterized by significant limitations in (i) intellectual and cognitive functioning; and (ii) adaptive behavior as expressed in conceptual, social, and practical adaptive skills; and (B) who is currently, or was formerly, eligible for a free appropriate public education under the Individuals with Disabilities Education Act. (Sec. 760)

This definition is specific to students in higher education with ID; and although it focuses on impairment, it avoids reference to diagnostic criteria such as intelligence quotient (IQ) global scores found in the DSM-V (APA, 2013).

1.6 Disability Lens

Disability lens refers to how disability is viewed and may apply to an individual or larger entity. Just as the aforementioned theoretical framework used in this study acts as a lens to interpret data, my disability lens impacts my approach to and construction of this study. The difficulty in articulating this is I do not align completely with any of the major disability models (Evans et al., 2017). As will be discussed in Chapter 2, I see some ways disability is a social construct and acknowledge policies and practices that limit human potential. I also think there is some value in understanding impairment to help foster individual growth, provide relief as needed, and/or for purposes of allocating resources. Indeed, I agree with Reindal (2008) that disability is complex "phenomenon" (p. 136).

I also agree with Danforth (2001) that when it comes to disability there need not be "competition for the one, best way of thinking" (p. 357). One can "appreciate the best of each

[disability model] and criticiz[e] the worst of each" (Danforth, 2001, p. 357). It is within this context that I express my personal view of disability that I term *spiritual lens*.

A spiritual lens of disability stems mostly from worshipping a God who I see as the creator of human life and, therefore, the diversity within these human lives. From an eternal perspective, the human differences our society categorizes as disabilities are a temporary condition part of a mortal experience. Viewing disability as an aspect of diversity has some similarity to disability interpretive lens (Creswell, 2013).

A spiritual lens also influences my choice to use person-first language. I view people as spiritual beings having a mortal experience. The emphasis is on the divine nature inherent within individuals making disability a secondary, temporary label that has no bearing on personal worth.

Since disability/impairment is part of the human condition, the disability/impairment itself is not solely the result of social construction, although grouping and labeling these differences (impairments) would be of mortal construction. Couple this with the idea that every human life is of intrinsic value to God and should have the opportunity for growth, and there is some similarity with the social model of disability that also looks at disability as a social construct with the need to remove barriers limiting individuals with disabilities (Evans et al., 2017). Lastly, I believe in a principle specific to my religion that every human mind is capable of enlargement, which is why this study takes a strengths-based view of disability.

1.7 Limitations and Delimitations

As a multi-case study, findings will not be generalizable to the entire population of students with ID. With this understanding, the object of this study was to produce results that

were "a rich and holistic account of a phenomenon" for the partial purpose of "advancing a field's knowledge base...such as education" (Merriam, 2009, p. 51).

Students with ID also sometimes have difficulty with communication which can limit self-report (Brahm, Mckee, & Stewart, 2014; Taylor, 2018). To partly address this issue, the bound of each case was extended to include the families of individuals with ID who are both familiar with the individual with ID and his/her expressive language. Other possible limitations of this study include the assumption participants will be open and honest in their responses to interview questions, and cooperative in providing documents such as confidential Individualized Education Program (IEP) paperwork. Building rapport and engaging in one-on-one interviews was a strategy used to increase validity despite these limitations (Shank, 2002).

A delimitation of this study is related to the unique federal rights students with ID have regarding transition services and education through the local education agency (LEA) (until aging out of services). This study did not explore student and family experiences with LEA transition programs as these transition programs are extensions of the K-12 public school system instead of the higher education system. The focus of this study was on the transition to higher education via the community college.

CHAPTER 2

REVIEW OF LITERATURE

To examine the pathway students with intellectual disability (ID) pursue to higher education in the United States, it is first necessary to review the theoretical framework that frames this study and provide a review of the literature. The literature review summarizes information related to understanding how this population has historically been discriminated against and the occurrences that led to eventual access to primary and secondary public education—a precursor to higher education. A review of history provides insight into socially constructed barriers and prejudices impacting students with ID, and why collegiate program growth has rapidly increased over the past two decades. Other topics that required review given the population of this study included an overview of ID and current population estimates.

A literature review of what is currently known about college enrollment and preparation, higher education pathways, and collegiate programs specific to students with ID is also warranted given the purpose of this study is to explore how students with ID have broken away from the current trend of unemployment post high school to instead enroll in higher education. This study specifically is looking at students who accessed higher education via community college; therefore, a brief review of the history of community colleges and their unique qualities that may impact access to higher education for students with ID is explored. Lastly, known factors related to college-going and college-preparatory behavior specific to students with ID are included to provide insight into possible factors impacting the collegiate pathway.

2.1 Theoretical Framework

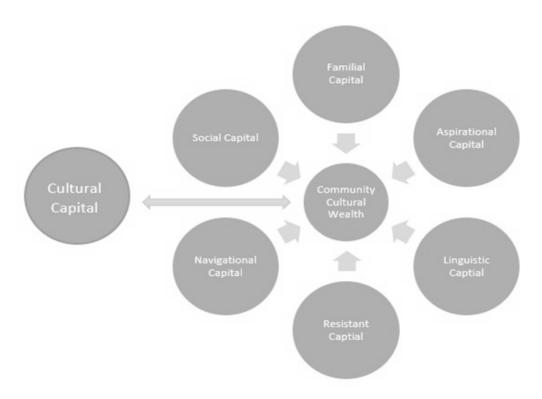
Yosso's (2005) cultural wealth model provided the lens through which to interpret data for this study. A disability interpretive lens that impacted the design and approach to data collection was viewing disability "as a dimension of human difference and not as a defect" (Creswell & Poth, 2018, p. 32). Although considered, the social justice model of disability and Evans and Broido's (2011) interactionist model of disability were not chosen as theoretical frameworks. The social justice model of disability focuses on the broader social justice movement and structural change within systems versus on students in higher education (Evans et al., 2017). Evans and Broido's (2011) interactionist model of disability centers on understanding the college student experience by looking at how the person, impairment, and environment interact with one another in ways that impact the student experience. During data analysis, attention was given to noticing what codes were related to the person, impairment, and environment; but with the study's focus on the collegiate pathway versus the student experience, this framework was not a good fit.

Yosso's (2005) cultural wealth model draws on critical race theory (CRT), a framework used to study how "racism implicitly and explicitly impact...social structures, practices and discourses" (p. 70). Although race is not a primary focus of this study, CRT has tenets that apply to students with disabilities such as "isms" being a part of society and central to forms of subordination and discrimination (Solorzano, 2010). Using a CRT lens, Yosso (2005) proposed an alternative to the traditional theory of cultural capital stating this traditional view encompasses values of "White, middle class culture" while simultaneously regarding other groups as "culturally poor" (p. 76). Yosso's (2005) alternative theory based on the literature is termed

cultural wealth model and includes the following six identified types of capital: 1) aspirational capital—despite inequality and barriers in education, students and families retain high aspirations; 2) familial capital—"cultural knowledges nurtured among *familia* (kin) that carry a sense of community history, memory and cultural intuition" and "engages a commitment to community well being" (p. 79); 3) social capital—social connections and community resources; 4) navigational capital—ability to navigate institutions created with the dominant culture in mind; 5) resistant capital—the culminating "knowledges and skills fostered through oppositional behavior that challenges inequality" (p. 80); and 6) linguistic capital—"the intellectual and social skills attained through communication experiences in more than one language and/or style" (p. 78).

Figure 1

Cultural Wealth Model



Source: Yosso, 2005, p. 78.

Each type of capital listed in Yosso's (2005) cultural wealth model is supported by research involving "communities of color" and their experiences in education (p. 75). Although race is not a focus of this study, five participants (three parents and two students) identified as belonging to a community of color, and all five student participants identified as belonging to a marginalized population based on a socially constructed view of "ability" (Mayes, 2018). Using the cultural wealth model in this study acknowledges the intersectionality of racism and ableism.

2.2 Brief History of Disability in America

In its simplest form, the history of education in America for people with disabilities can be divided into three main areas—"Deaf education, the influence of war veterans, and disability activism" (Evans et al., 2017, pp. 11-12). All three of these areas intertwine throughout American history as does the intersectionality of "disability, education, [and] law [in] the broader historical context in which . . . social structures are nested" (Evans et al., 2017, p. 92). The shifting social view of disability in the United States over time is evidenced when reviewing landmark court case decisions. Laws (case, state, and federal) also have played an instrumental role in granting access to education for various student groups, including students with disabilities. In the following paragraphs, a brief chronological overview of the history of disability in American society, education, and law is provided.

2.2.1 Deaf Education: Colonial Times through the 19th Century

From colonial times to the late 19th century, the social and educational theme is that of segregation and exclusion (Evans et al., 2017). Historically, the benefits of education were

afforded to individuals and groups based on social position and power (Thelin, 2011). Regarding higher education, access to college in Colonial America was mostly restricted to young, White males who typically came from wealthy families, although some "able" males from less affluent families could also gain admittance (Thelin, 2011, p. 18). This restrictive access fostered power and elite social status for these individuals.

Most individuals with disabilities were "far from positions of power and...had to fight to legitimate their very existence in society, as well as their right to an education" (Evans et al., 2017, p. 12). The colonial era was a time when "some families would hide [the] family member with disabilities and other families would allow individuals with disabilities to die by withholding necessities" (Fleischer & Zames, 2001, p. 11). In terms of education, children with disabilities were one of the two largest student populations (the other being Black children) historically denied equal access to public education in the United States (Ferri & Connor, 2005).

Post-colonial times with the aftermath of the Revolutionary War, the first acts passed regarding disability. The Revolutionary War Pension Acts of 1776, 1818, and 1832 provided pensions to disabled veterans and, later, their widows. The War Pension Acts "began [the practice] to require that doctors . . . determine impairments" thus applying the medical model of disability (Nielsen, 2012, p. 66).

Access to education for individuals with disabilities came to the subgroup of those with hearing and visual impairments mostly at the hands of social advocates. In 1817, the first known school for deaf children was established in Connecticut (Fleischer & Zames, 2001). By the mid-1800s education of individuals with disabilities gained momentum with the deaf education movement that started when religious leaders in Europe and the United States

sought to educate and communicate with those who were deaf. Prominent individuals promoted the idea that this population could be trained for specific professions (Evans et al., 2017). As a result of these actions, "Deaf children were the first group of children outside the boundary of those considered physically 'normal' to receive an education" albeit through attending special schools (Evans et al., 2017, p. 12).

Deaf and blind students were the first disability student population to gain access to higher education with the establishment of the Columbia Institution for the Instruction of the Deaf, Dumb, and Blind in 1864 (Evans et al., 2017). Today this institution is known as Gallaudet University in honor of Edward Gallaudet who advocated for the institution's creation (Gallaudet University, 2018). Located in Washington, D.C., Gallaudet University was authorized by Congress to confer degrees but was not fully accredited until 1957.

The 1860s was also the time of the Civil War which resulted in hundreds of thousands of people who were left with various disabilities (Evans et al., 2017). The Invalid Corps was created in 1863 to assist the employment of soldiers who had sustained injuries leading to a disability, but private sector employment was scarce for these individuals (Nielsen, 2012). As a result of limited employment options post-war, many of these soldiers resided in poorhouses or asylums (Nielsen, 2012).

The late 1800s until the end of WWII marked the period known as the eugenics movement (Evans et al., 2017). The focus of this movement was to segregate those with disabilities from "normal" members of society and from producing defective and degenerate offspring" (Evans et al., 2017, p. 33). To this end there grew the prevalence of "restrictive"

marriage laws, institutionalization, . . . involuntary sterilization, and the most extreme measure, euthanasia" (Evans et al., 2017, p. 33).

Individuals with disabilities fought against the eugenics movement in collaborative political efforts through the creation of organizations such as the National Association of the Deaf (established in 1880) and the American Blind People's Higher Education and General Improvement Association (established in 1895) (Evans et al., 2017; Kudlick, 2001; "Policy of the American Association Relative to Higher Education for the Blind," 1900). A primary goal of the latter organization was to ensure blind individuals were able to access and receive higher education (Evans et al., 2017). The journal called *The Problem* was the voice of this organization and it gave the counternarrative to the ideas of the eugenics movement in part by showing the academic abilities and achievements of blind individuals (Kudlick, 2001, p. 187).

During the mid to late 1800s, the concept of disability was also being used as justification to exclude individuals without disabilities such as Blacks and women from full participation in society. Baynton (2001) wrote in a review of the history of disability in America that disability is "one of the most prevalent justifications for inequality . . . [and] has functioned historically to justify inequality for disabled people themselves, but it has also done so for women and minority groups" (p. 33). Perceived disability excluded women from full citizenship by referencing "supposed physical, intellectual, and psychological flaws" (Baynton, 2001, p. 33). The right to vote in the United States was limited by disability, race, and gender because "bodies and minds were considered deficient and defective" (Nielson, 2012, "The Deviant and the Dependent: Creating Citizens, 1776-1865", para. 3). This and other unequal treatment of certain races and women was supported by linking these groups to mental and/or physical

deficits such as physical weakness, feeble-mindedness, and excessive emotionality (Baynton, 2013; Nielsen, 2012). Specifically, medical "evidence" was used to justify the idea that Black individuals were intellectually inferior based on "proven" differences (Nielson, 2012). In an editorial piece published in July of 1920, DuBois (1970) addressed the methods that had been employed in trying to prove race inferiority of Black males compared to White males on the grounds of lower academic ability and intelligence. He refuted the "evidence" of brain weight and dolichocephalic class (skull size). In summary, both individuals with and without disabilities were being excluded from American education and full participation in society until the mid-1800s (for some groups and much later for other groups) based on perception of disability.

One catalyst that helped some groups access higher education was the Morrill Act of 1890. The result was an expansion of and a shift in the purpose of higher education (Thelin, 2011). Higher education was no longer reserved for White, upper-class, "able-bodied" men, but women/Black/deaf students were now accessing higher education. Similar to the Morrill Act of 1865 this second Morrill Act created new state institutions with course offerings related to work in agriculture and the sciences, a change from the previous focus on the classical arts. This Act established Black land-grant institutions in states, notably the South, that did not do so with the first Morrill Act. Despite this shift and expansion, disability efforts were for the most part not targeted in higher education (Evans et al., 2017).

2.2.2 1900s-1950s: Vocational Training and Veterans

By the early 1900s, many states had mandatory school attendance laws for primary grades. However, these laws did not apply to children with disabilities. Rather, social acceptance was still a battle for many individuals with disabilities. In 1911, a Chicago ordinance

forbade "person[s] who [were] diseased, maimed, mutilated, or in any way deformed so as to be an unsightly or disgusting object or improper person to be allowed in or on the public ways or other public places in this city" (Fleischer & Zames, 2001, p. 12). The ordinance went on to say these individuals were not to "expose [themselves] to public view" (Fleischer & Zames, 2001, p. 12). So as not to be in "public view," individuals with disabilities were often hidden by their families or institutionalized. Institutionalization was especially common practice for individuals with ID who were excluded from state mandatory school attendance laws of the early twentieth century (Trent, 1994). One case recorded in 1919 involved the expulsion of a student with cerebral palsy on the grounds of discomfort by peers and teachers because of the student's condition (Fleischer & Zames, 2001).

During the late 1910s and early 1920s, disability was viewed as impairment preventing the ability to work and engage in other activities necessary to manage one's life (Evans et al., 2017, p. 25). Physicians were again deemed responsible for determining disability. In 1917, the Vocational Education Act passed resulting in the establishment of state vocational rehabilitation agencies in large part to serve returning WWI veterans who sustained injuries during the war (Madaus, 2000). A year later in 1918, the Smith-Sears Veterans Rehabilitation Act was passed which provided federal financial support for state vocational training services which sometimes included the need for postsecondary education (PSE) (Fleischer & Zames, 2001; Madaus, 2000). It was not until 1920, with the Smith-Fess Civilian Vocational Rehabilitation Act, that vocational rehabilitation was "extended . . . to disabled civilians over the age of 16 who demonstrated the potential to successfully become employed" (Evans et al., 2017, p. 25). As seen with these acts, the view of physical disabilities post WWI was shifting to

embrace the reality of the ability to engage in some type of vocation. Still, the practice of parents hiding their children with "mobility impairments . . . fear[ing] detection could result in their children's institutionalization" was a terrifying reality (Fleischer & Zames, 2001, pp. 9-10). Edgar (Edward) Allen became aware of this practice from a survey he conducted after opening a hospital—an act in response to losing his son in a streetcar accident (Fleischer & Zames, 2001). Allen became an advocate for children with physical disabilities and founded the National Easter Seal Society in 1922. This society which started as a focus on "crippled" children grew to advocate more generally for the medical and educational needs of children by the early to mid-1900s (Fleisher & Zames, 2001).

Counter to these types of efforts, the early 1900s also marks when society's view of individuals with ID shifted from seeing them as a "burden to [now being] a menace" (Trent, 1994, p. 141). Individuals with ID were thought to be the cause of some social vices and problems, instead of linked to social vices. A pamphlet circulated in Cincinnati entitled "Cincinnati's Problem" had a picture of a "feeble-minded" youth at the center of a wheel with the title, "The feeble-minded or the hub to our wheel of vice, crime and pauperism" (Trent, 1994, Figure 23). Eight words/phrases were written around the wheel—jail, police court, juvenile court, house of refuge, work house, charity, city hospital, and infirmary. This climate allowed for the rise of the American Breeder's Association (later named the American Genetics Association) and the American eugenics movement. This movement targeted individuals with disabilities and individuals with "traits" of criminality, promiscuity, and poverty; and aimed to enhance the human race by "selective breeding...focused on eliminating negative traits" (Rivard, 2014, para. 5). By the 1920s, the eugenics movement resulted in sixteen states

adopting laws to sterilize those considered "unfit" (Fleischer & Zames, 2001, p. 12). An estimated 64,000 people were sterilized by state mandate during the eugenics movement (Rivard, 2014). A few eugenicists promoted killing those with ID, referring to it as "mercy killing" (Fleischer & Zames, 2001, p. 12). California had particularly robust laws supporting sterilizations—practices which German dictator Adolf Hitler referenced when constructing his Nazi regime (Jaeger & Bowman, 2005; Rivard, 2014). The 1930s and 1940s and the horrific acts overseas by the Nazis in World War II brought an end to the eugenics movement.

The 1930s and 1940s also saw a rise in organizations comprised of people with disabilities advocating for decreased employment discrimination and increased vocational training (Evans et al., 2017). In 1935, the Social Security Act which aided mainly the elderly also extended to youth and adults with disabilities (Fleischer & Zames, 2001). The Barden-LaFollette Act of 1943 provided rehabilitation services to those with cognitive impairments and mental health diagnoses (Fleischer & Zames, 2001).

With the end of World War II, there was a surge of individuals with physical disabilities who pushed for access to higher education (Longmore, 2009). Aided by the Vocational Rehabilitation Amendments of 1943, and the Serviceman's Readjustment Act of 1944 which provided financial assistance for veterans to attend college, significant enrollment of students with disabilities was seen for the first time in higher education (Evans et al., 2017). Student efforts involved suing higher education institutions and establishing student advocacy groups (Evans et al., 2017). As a result of student efforts and federal legislation, by 1946 veterans with and without disabilities comprised 52% of total college enrollment (Madaus, 2011).

With the increase of war veterans on college campuses post WWII, many of whom had

some type of disability, there began to emerge programs at a handful of college campuses to assist students with disabilities (Evans et al., 2017). This practice was limited to only a few campuses nationwide "as most administrators and faculty believed that providing severely disabled students with a college education was not a worthwhile endeavor" (Evans et al., 2017, p. 30) in part because the assumption was that employment after college would be limited (Madaus, 2011).

2.2.3 1950s-1980s: Activism and Access

Activism gained momentum in the 1950s as seen with the Civil Rights Movement, and the establishment of a variety of organizations. In 1950, the Association of Retarded Citizens (now known as The ARC) was created in a large part from efforts by parents who had children with intellectual and developmental disabilities (Fleischer & Zames, 2001). This organization has advocated for those with intellectual and developmental disabilities on a national and local level.

Much of legal activity in the form of federal public laws supporting the education of students with disabilities in the United States did not appear until the mid-20th century. These laws were buttressed largely by advocacy associations (such as The ARC) and families, and partially by the Civil Rights Act of 1964. The impact of this legislation, however, was more indirect in terms of opening the path for future disability-specific legislation (Fleischer & Zames, 2001).

Some of the gains for people with disabilities during this time included training for special education teachers, support of captioned films for those with hearing impairments, and grant assistance to states earmarked for the education of children with disabilities (U.S.

Department of Education, 2007). These federal laws did not include the mandate to educate all children. Even the landmark *Brown v. Board of Education* (1954) Supreme Court ruling stating education was a right "available to all on equal terms" excluded children with disabilities as the Fourteenth Amendment was interpreted at that time to apply only to children without disabilities (para. 10). Without a federal law in place demanding the right to education for children with disabilities, state laws that denied education to "children who were deaf, blind, emotionally disturbed, or mentally retarded" prevailed (U.S. Department of Education, 2007, para. 4). As a result, roughly 12.5%-20% of children with disabilities were being educated in K-12 public schools during the 1960s (U.S. Department of Education, 2007). Many of those children going to school did not receive the services and supports needed to be successful (Fleischer & Zames, 2001).

Some of the efforts to expand education to students with disabilities in the 1960s included the Elementary and Secondary Education Act and the State Schools Act (U.S. Department of Education, 2007). Each of these federal legislations provided grant monies to states to educate students with disabilities. The Handicapped Children's Early Education Assistance Act in 1968 was specific to pre-school educational programming (U.S. Department of Education, 2007). None of these acts, however, mandated public education of all students regardless of the type of disability.

During the same time, institutionalization was common for individuals with ID as seen in the 1960s when state institutions housed "almost 200,000 persons with significant disabilities" (U.S. Department of Education, 2007, para. 8). These institutions were "restrictive settings [that] provided only minimal food, clothing, and shelter . . . [where] persons with disabilities . . .

were merely accommodated rather than assessed, educated, and rehabilitated." (U.S. Department of Education, 2007, para. 8). Institutionalization and the lack of educational opportunities were partly why "the fate of many individuals with disabilities was likely to be dim" (U.S. Department of Education, 2007, para. 8). Parents were part of the movement to support community-based living versus institutionalization—an effort that gained national attention and momentum in 1972 when the abuse of residents at Willowbrook State School in New York City was exposed in national media due to the journalistic efforts of Geraldo Rivera (Fleischer & Zames, 2001).

In the early 1970s, the *Pennsylvania Association for Retarded Citizens v. Commonwealth* (1971), and *Mills v. Board of Education of the District of Columbia* (1972) established case law in support of local educational agencies being responsible for educating children with disabilities. These decisions were "grounded in the equal protection clause of the 14th Amendment" which was now being interpreted to include individuals with disabilities (U.S. Department of Education, 2007, para. 16). Then, in 1975, the landmark federal legislation Education for All Handicapped Children Act (EAHCA) passed, legally ending the practice in many states to deny access to public education based on a student's disability. Every student with a qualifying disability was now guaranteed a "free, appropriate, public education" in the "least restrictive environment" (U.S. Department of Education, 2007, paras. 15 & 26). The least restrictive environment would later be challenged in a Texas case in 1989, *Daniel R. R. v. State Board of Education*, where the ruling was one of the first to interpret EAHCA as the right for students with disabilities to be included in general education classrooms (Fleischer & Zames, 2001). The EAHCA would also impact the movement for access to higher education for all students in the

decades that followed as these students now accessing public elementary and secondary schools would later seek similar postsecondary educational opportunities as their peers.

The 1970s was also a time when Veterans again impacted education. After the Vietnam conflict/war, approximately 153,000 veterans returned with some type of injury resulting in a high unemployment rate for this population (Evans et al., 2017). In response to this issue, Congress passed the Vietnam Era Veterans' Readjustment Assistance Act in 1974 to counter employment discrimination (ADA National Network, 2017), and the Rehabilitation Act of 1973 (Nielsen, 2012). The Rehabilitation Act of 1973 has multiple sections prohibiting discrimination against individuals with disabilities by entities that receive federal funding (Fleischer & Zames, 2001). It is regarded as landmark legislation in education because of the included Section 504, which granted significant civil rights to students (not just veterans) with disabilities in higher education (Evans et al., 2017). Section 504 did not go into effect immediately as institutions were reluctant to financially support possible changes to comply. It took efforts of disability organizations and coordinated demonstrations for Section 504 of the Rehabilitation Act to be implemented approximately four years after its passing (Evans et al., 2017).

Emerging in the 1970s, the disability rights movement drew tactics from the 1960s civil rights movement (Fleischer & Zames, 2001). Early leaders of the disability rights movement included Edward Roberts, Judith Heumann, Fred Fray, Wade Blank, and Lex Frieden (Fleischer & Zames, 2001). The disability rights movement initially worked to create awareness of the oppression of individuals with disabilities, then moved to efforts focused on eliminating practices contributing to marginalization and increasing self-determination for individuals with disabilities. The focus on self-determination is evidenced in its slogan, "Nothing about us

without us" (Evans et al., 2017, p. 36). With the disability rights movement came a shift in the view of disability away from a medical paradigm, increased push for education including inclusion, and a growing number of disability-specific organizations. Deinstitutionalization efforts also resulted in "a new population" of self-advocates who were able to now join the disability rights movement (Fleischer & Zames, 2001, p. 13). This growth in disability rights activists and collaborative efforts between a growing number of disability-specific organizations meant "a stronger force for disability rights" (Fleischer & Zames, 2001, p. 13).

2.2.4 1990s-Present: The ADA and Higher Education for Students with ID

In 1990, EAHCA was reauthorized, amended, and renamed Individuals with Disabilities Education Act (IDEA) (2004), and included mandates to conduct transition planning and for students to be educated at the neighborhood school closest to their residence as opposed to separate schools (Fleischer & Zames, 2001). That same year, the Americans with Disabilities Act (ADA) was signed by President George H. W. Bush (Fleischer & Zames, 2001). Both pieces of legislation impacted higher education and students with disabilities.

Postsecondary enrollment and employment rates for students with disabilities have increased since EAHCA and IDEA (U.S. Department of Education, 2007; Evans et al., 2017). The percentage of college students in their first year of college who reported having a disability has "more than tripled since 1978" (U.S. Department of Education, 2007, para. 7). Employment rates for students with disabilities who received a public education "under IDEA are twice those of older adults with similar disabilities who did not have the benefit of IDEA" (U.S. Department of Education, 2007, para. 7). IDEA also requires individualized education plans for each child with a qualifying disability and focuses on helping all children reach their maximum potential

(U.S. Department of Education, 2007; Fleischer & Zames, 2001). This has improved the quality and support services delivered to students with disabilities in public education (Evans et al., 2017).

The ADA (reauthorized in 2009) gives protections for people with disabilities in areas of employment, transportation, and services offered by the government as well as the private sector (Evans et al., 2017; Fleischer & Zames, 2001). The far-reaching nature of the ADA had a major impact on increasing college enrollment for students with disabilities. The ADA is what "extended rights to every aspect of the operation of college and university campuses, providing access to all facilities, services, and programs they offered" (Evans et al., 2017, p. 43).

Some pioneer efforts in higher education for students with ID appeared in the 1990s, mostly the result of grassroots efforts by families and professionals (Grigal, Hart, & Weir, 2011). Lewis and Clark Community College in Illinois established a program in 1991 specific to supporting students with developmental and intellectual disabilities (Schmidt, 2005). A decade later, Bellevue Community College in Washington established a similar program in 2001 for students with ID (Schmidt, 2005).

These few institutional programs formed in the 1990s and early 2000s could not produce the same growth that was to be seen with the turn of the millennia. Expansion of higher education opportunities for students with ID resulted from the culminating effects of the previously passed Section 504 of the Rehabilitation Act and the ADA, along with two pieces of legislation yet to be passed in 2008—the Higher Education Opportunity Act (HEOA) and the Americans with Disabilities Act Amendments Act (ADAAA). These four pieces of legislation collectively have significantly impacted access to higher education for individuals with

disabilities (Evans et al., 2017).

In 2008, the ADAAA and the HEOA brought opportunities and protections. The ADAAA "granted equal access through reasonable accommodations and modifications" for those with disabilities and clarified the definition of disability as "a very broad category" (Shaw, Keenan, Madaus, & Banerjee, 2010, p. 145). Reasonable documentation and mitigating measures were also addressed and clarified in the ADAAA.

Although access to higher education for students with ID emerged during the 1990s, most of the growth occurred with the turn of the millennia post the HEOA (Think College, 2016). A reauthorization of the Higher Education Act of 1965, the HEOA allowed individuals with ID to be eligible for Pell Grants, Supplemental Educational Opportunity Grants, and the Federal Work-Study Program if attending a Comprehensive Transition Program (CTP) (Lee, 2009; Papay, Grigal, Hart, Kwan, & Smith, 2018; Think College, 2014). The HEOA also appropriated funds for helping individuals with ID gain access to higher education in the form of grants to institutions with programs approved as model demonstration programs, as well as the support of a national coordinating center called *Think College* (TCNCC) (Grigal et al., 2015). This national coordinates efforts with approving inclusive, college-based CTPs.

In 2014, the Stephen Beck Jr. Achieving a Better Life Experience (ABLE) Act and the Workforce Innovation Opportunity Act (WIOA), a reauthorization of the Workforce Investment Act of 1988, became law (Employment and Training Administration, n.d.; Smith Lee et al., 2018). The ABLE Act allows for individuals with disabilities to have a tax-favored ABLE account that may be used for expenses to "maintain health, independence, and quality of life" (Internal

Revenue Service, 2019, p. 1) including expenses for education (Smith Lee et al., 2018). The ABLE Act is instrumental as it allows families and individuals to save money for a person with disabilities without having that asset included in determining social security benefits (Internal Revenue Service, 2019). The WIOA, being employment focused, clarified that vocational rehabilitation funding could be used for students with ID in supporting postsecondary education at designated programs defined by the HEOA for the purpose of achieving a credential for employment (Employment and Training Administration, n.d.; Smith Lee et al., 2018). The application of the WIOA by state vocational rehabilitation entities has not aligned with the intention of Congress as evidenced by some individuals with disabilities being denied vocational rehabilitation financial support in accessing PSE (Smith Lee et al., 2018).

The 21st century has also brought a change from activist efforts focused on independence, to the embracing of natural interdependence present for those with and without disabilities (Evans et al., 2017). This change known as the *disability justice movement* includes efforts "explicitly address[ing] the absence [of people with disabilities] from the discourse on disability and from leadership roles in the disability rights movement" (Evans et al., 2017, p. 3).

2.3 National Population Estimates

The Centers for Disease Control and Prevention (CDC) (2018) issued a press release dated August 16, 2018, where data collected from the 2016 Behavioral Risk Factor Surveillance System was used to estimate the national population of individuals with a disability. The data was collected using six disability-related categories—mobility, cognition, hearing, vision, independent living, and self-care. The brief reported an estimated 61 million Americans have a

disability (CDC, 2018). This equates to about one in every four individuals. Individuals with a mobility-related impairment were the most common disability category, impacting about one in seven Americans (CDC, 2018). The 2016 Behavioral Risk Factor Surveillance System did not collect data specific enough to estimate the population of disability subgroups such as those with ID. The cognition category should not be assumed to equate with ID since this category was defined as "serious difficulty concentrating, remembering, or making decisions" which is associated with other conditions and disorders (i.e., mood disorders) (CDC, 2018, para. 4).

2.4 Intellectual Disability

The population of individuals with ID in the United States is estimated to be between 2.6 and 8.2 million (Larson et al., 2001; Trahan, Stuebing, Hiscock, & Fletcher, 2014; U.S. Census Bureau, 2018). This wide variation is due to the sources available for estimation and their limitations. Unlike national origin and ethnicity, ID is not a category or data point collected as part of the typical national census surveys. As a result, national population estimates may not accurately reflect the current population. National population estimations for this population may use bell curve distribution (Kozma, 1995), and the National Health Interview Survey on Disability (NHIS-D) (Larson et al., 2001). Each state's special education data may also be used to estimate a portion of the population for those aged 3-21 (McFarland et al., 2019).

Based on a normal distribution using a bell curve, individuals with an intelligence quotient (IQ) global score of 70 or less should comprise 2.5% of a population (Kozma, 1995).

Factoring for the Flynn effect (the documented increasing shift in IQ scores in a population over time), the estimation drops to about 2.2% of a population (Trahan et al., 2014). The U.S. Census Bureau (2018) shows the population on July 4, 2018, in the United States was 328,054,892,

which using the above percentage estimations would mean in the United States there may be approximately 8,201,372 to 7,217,208 individuals with an IQ global score at or below 70. This basic approach to population estimation has obvious limitations, one being it does not account for limitations in adaptive functioning and the actual number of people with a diagnosis of ID.

Larson et al. (2001) used data from the 1994 and 1995 National Health Interview Survey Disability Supplements (NHIS-D) to estimate the prevalence of ID and developmental disability in the noninstitutionalized U.S. population. The NHIS-D was done in two phases for the years 1994 and 1995 as a supplement to the National Health Interview Survey, a household interview survey conducted by the U.S. Census Bureau continuously since 1957 (CDC, n.d.-a). Based on data from the NHIS-D, Larson et al. (2001) estimated there were 14.9 people per thousand (approximately 4.6 million people) with intellectual and developmental disabilities in the United States, and specifically 7.8 people per thousand with ID (approximately 2.6 million people). A national advocacy organization for individuals with ID, The ARC (2016), uses the work by Larson et al. (2001) for population estimation with the caveat prevalence studies may underestimate the number of people with ID. Specifically, the NHIS-D, although arguably the strongest national survey data source available for population estimation, may underestimate the number of individuals with ID as the survey has an estimated 30% no response rate, is based on self-report, and includes only those noninstitutionalized (CDC, n.d.-a).

The Condition of Education 2019 report showed 7 million, or 13.7%, of students being served in public schools ages 3-21 had some type of diagnosed disability (McFarland et al., 2019). The majority of students (53%) had either a learning disability (34%) or speech/language impairment (19%). Intellectual disability accounted for 6%, or roughly 420,000 students

(McFarland et al., 2019). Limitations of using data collected by school districts of the number of students receiving special education services are that it only encompasses students aged 3-21 identified and diagnosed as having ID in the public education system, and it may not account for students with multiple disabilities (McFarland et al., 2019).

2.5 Intellectual Disability

College student data is often aggregated by race, gender, socioeconomic status, and other student attributes including disability. *Disability* is a term that for this study is used to describe "those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (United Nations General Assembly, 2006, Article 1). Within this vast, encompassing group of individuals who have a disability based on this definition there exists multiple disability labels and categorizations. Individuals labeled with ID are the focus of this present study.

Intellectual disability is considered a developmental disability (APA, 2013; National Institutes of Health [NIH], 2010) and neurodevelopmental disorder previously referred to as "mental retardation" before the passing of the federal statute known as Rosa's Law in 2010 (Brahm et al., 2014). What is regarded as ID has changed over time and is argued to be a socially constructed diagnosis (Annamma, Connor, & Ferri, 2013; Smith, 2000). Support of this argument stems from occurrences such as in the 1970s when the definition of ID (called *mental retardation* at that time) changed and "in the stroke of a policy change, many people who had been labeled as mentally retarded were essentially 'cured' of their condition" (Annamma et al., 2013, p. 3).

In 1973 an AAMR committee again revised the definition. . . . It specified that significantly subaverage general intellectual functioning was to be determined by a score of at least two standard deviations below the mean on an intelligence test (Grossman, 1973). This meant that the cutoff point for mental retardation was essentially moved downward from 85 to 70. This change lowered the percentage of the population that might be identified as having mental retardation from 16% to approximately 2.25%. This revision meant that fewer people would be labeled retarded because of language differences, socioeconomic factors, or minority status. It also meant, however, that fewer students were eligible for special education services. This is a particularly important consideration since the 1973 AAMR definition was adopted for defining mental retardation under the Education for All Handicapped Children Act of 1975 (P.L. 94- 142). (Smith, 2000, pp. 381-382)

For a more complete review of the social construction of ID, I recommend reviewing the chapter "Social Constructions of Mental Retardation: Impersonal Histories and the Hope for Personal Futures" by Smith (2000) in the book *Mental Retardation in the 21st Century* edited by Wehmeyer and Patton (2000).

2.5.1 Intellectual Disability Definition and Diagnostic Criteria

While engaging in discussion of the social construct of ID is beyond the scope of this study and my expertise; it is important to review the definition of ID used in this study while also noting how a diagnosis of ID is defined in manuals used by the medical community, psychologists, educational diagnosticians, and similar professionals. Knowing the diagnostic criteria used in these fields brings an understanding of how one receives an ID diagnosis. The definition of ID used in this study is not one used by the aforementioned professionals for diagnosing purposes and comes from the Higher Education Opportunity Act (2008) which states:

'[S]tudent with an intellectual disability' means a student (A) with . . . a cognitive impairment, characterized by significant limitations in (i) intellectual and cognitive functioning; and (ii) adaptive behavior as expressed in conceptual, social, and practical

adaptive skills; and (B) who is currently, or was formerly, eligible for a free appropriate public education under the Individuals with Disabilities Education Act. (Sec. 760)

This definition refers to cognitive impairment but avoids reference to diagnostic criteria relying on intelligence quotient (IQ) global scores that are found in the *Diagnostic and Statistical Manual of Mental Disorders-V* (DSM-V) and the *American Association of Mental Deficiency* manuals. These manuals are based on the medical model of disability and are typically used by psychologists, educational diagnosticians, and medical or similar professionals for diagnosing purposes (APA, 2013).

The use of IQ testing is important to diagnosing ID based on criteria in the aforementioned manuals. However, similar to the argument of ID being a social construct is the concept of defining and assessing *intelligence*. Alfred Binet, who is typically the person that IQ tests trace back to, sought "to develop a means by which to identify struggling students who would then receive remediation" (McGrew & Evans, 2004, p. 3). It was an optimistic approach centered on how to help students. Then, in the early 1900s, Binet's optimistic view was largely replaced by Sir Cyril Burt's work and the resulting "popular view that intelligence was a genetically based fixed entity" (McGrew & Evans, 2004, p. 3). This philosophy of IQ influenced educational systems based on "ability" despite research showing "IQ test scores, under optimal test conditions, account for 40% to 50% of current expected achievement" and "that for any given IQ test score, half of the students will obtain achievement scores at or above their IQ score" (McGrew & Evans, 2004, p. 6). This statistical approach brings understanding on the controversial construct of ID but also makes sense by having some knowledge of common IQ tests such as the Kaufman Assessment Battery for Children, 2nd edition (KABC-II).

The KABC-II measures five broad abilities—short-term memory, planning ability, long-term storage and retrieval, visual processing, and crystalized ability (Hall & Noggle, 2011).

Additional measures are available to assess two more areas (processing speed and auditory processing). This means the KABC-II excludes three to five of the ten broad abilities from the Cattell-Horn-Carroll intelligence theory (Kaufman, Lichtenberger, Fletcher-Janzen, & Kaufman, 2005). The KABC-II subtests used are scored, scaled, and calculated, and used to produce a global IQ score. Thus, this global IQ score acts much like a grade point average and fails to adequately show areas of strength and weakness. I view these tests similar to Binet—as a way to understand a student's cognitive profile for purposes of academic support.

The DSM-V relies on IQ testing for diagnostic purposes to assess "deficits in intellectual functions" (APA, 2013, p. 33). These "deficits" are defined as a global IQ score of 70 or below on a standardized intelligence test; and when there is also the presence of limitations in adaptive behavior, two of the three primary criteria for a diagnosis of ID are met (American Association on Intellectual and Developmental Disabilities, n.d.; Brahm et al., 2014). The other criterion is onset must occur before 18 years of age, and as such would exclude individuals who experienced conditions resulting in reduced cognitive and adaptive functioning later in life (Brahm et al., 2014).

2.5.2 Severity Levels

The four severity levels for intellectual disability diagnosis are mild, moderate, severe, and profound (Brahm et al., 2014). The majority (estimated 85%) of individuals with ID have a mild severity level (APA, 2000). Individuals with ID diagnosed with mild severity level are those who scored between 50-55 and 70 on a standardized intelligence test (Brahm et al., 2014).

The other severity levels have similar flexible ranges to account for the margin of error of five points in IQ tests. A moderate severity level is when the global IQ score is between 35 to 40 and 50 to 55. Global IQ scores between 20 to 25 and 35 to 40 are considered in the severe range, and scores below 20 to 25 are in the profound range (Brahm et al., 2014).

2.5.3 Causes

A diagnosis of ID has a high prevalence rate in some genetic conditions (namely Fragile X syndrome, Rett syndrome, and Down syndrome) and autism spectrum disorder (ASD) (Brahm et al., 2014; Valenti, de Bari, de Filippis, Henrion-Caude, & Vacca, 2014). Intellectual disability may also result from Fetal Alcohol Spectrum Disorder and other preventable problems during pregnancy, problems at birth such as temporary oxygen deprivation, and problems after birth resulting in brain damage due to contracting diseases such as Haemophilus Influenzae Type B (that causes meningitis) and encephalitis (The ARC, 2011; NIH, 2010). There are nonphysical causes of ID as well such as limited caregiver responsiveness and inadequate cognitive stimulation during the developmental years (NIH, 2010). Environmental factors such as lead exposure have also been found to correlate with ID (NIH, 2010). Hundreds of specific causes have been identified related to these aforementioned and other categories, yet approximately one-third of people diagnosed with ID have no identified cause for the neurodevelopmental disorder (The ARC, 2011).

All individuals with Down syndrome are expected to meet diagnostic criteria for ID (Brahm et al., 2014; Kozma, 1995). The reason individuals with Down syndrome will have ID is thought to be related to the additional chromosome (Kozma, 1995). Down syndrome is the

most common cause of ID followed by Fetal Alcohol Spectrum Disorder and Fragile X syndrome (The ARC, 2011; Brahm et al., 2014).

Rett syndrome is another chromosomal disorder that involves mutations on the X chromosome (International Rett Syndrome Foundation, n.d.). The National Organization for Rare Disorders (NORD) (2015) published a report claiming prevalence of ID among those with Rett syndrome is difficult to assess given the individuals' inability to speak and physically meet the demands of many intelligence tests that require the use of hand control and movements. Despite this limitation, Rett syndrome is considered the second leading cause of severe ID (NORD, 2015).

Autism Spectrum Disorder replaced subdiagnoses of Asperger syndrome and Autistic Disorder in the APA's (2013) Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-V) (Hyman, 2013). This broader category encompassing the previous subdiagnoses decreased the prevalence rate of ID in this population as individuals previously diagnosed with Asperger syndrome who also have a diagnosis of ID is low. However, when using the diagnosis criteria for what was previously termed *autistic disorder*, thereby excluding Asperger syndrome, an estimated 70% of children with autistic disorder have a dual diagnosis of ID (Sadock & Sadock, 2009).

2.6 College Enrollment

The status of college student is a valued role in society and one that has been accessed for some since colonial times and for many others over the past century (Bok, 2013). The percentages of high school graduates who gain that status today varies across different student

factors. Some of these factors include sex, parental educational degree attainment, family income level, and race (Renn & Reason, 2013).

2.6.1 General Student Body

Results from the U.S. Census Bureau and the U.S Bureau of Labor Statistics Current

Population Survey showed approximately 67% of recent high school graduates and GED

completers between the ages of 16 and 24 enrolled in higher education in 2017 (McFarland et al., 2019). Of this 67%, 44% enrolled at a 4-year institution and 23% enrolled at a community college. This rate was not much different from that seen since the turn of the millennium.

2.6.2 Sex

When accounting for sex, the population survey mentioned above showed female students enrolled in higher education more than male students (72% and 61%, respectively), but this varied by institutional type (McFarland et al., 2019). Female students were more likely to enroll at a 4-year institution compared to male students (50% versus 37%), and male students were more likely to enroll at a community college compared to female students (24% versus 21%). This trend has remained consistent since October 2000 per data analysis from the Current Population Survey (McFarland et al., 2019).

2.6.3 Race and Ethnicity

The Current Population Survey reports results not only by sex but also by race. In 2017, the immediate undergraduate college enrollment rate was 87% for Asian American students, 69% for White students, 67% for Hispanic/Latinx students, and 58% for Black students (McFarland et al., 2017). This rate has markedly increased since 2003 for Asian American and

Hispanic/Latinx students, growing approximately 13% and 9%, respectively (McFarland et al., 2019). The rate of White and Black students in 2003 compared to 2017 has minimally fluctuated, holding steady within a few percentage points (McFarland et al., 2019).

2.6.4 Students with Disabilities

Unlike the demographics mentioned above, the immediate college enrollment rate for students with disabilities is not available using Current Population Survey reports. In the literature, the total enrollment of students with disabilities is typically used. This estimation is based on published survey data available through the National Center for Education Statistics (NCES) from the National Postsecondary Student Aid Study (NPSAS).

The NPSAS included 1,800 higher educational institutions, and 89,000 undergraduate and 24,000 graduate students across the United States as well as the District of Columbia and Puerto Rico. Although the NPSAS focused on financing in higher education, the surveys asked students to self-identify if they had a disability described as follows:

...[O]ne or more of the following conditions: blindness or visual impairment that cannot be corrected by wearing glasses; hearing impairment (e.g., deaf or hard of hearing); orthopedic or mobility impairment; speech or language impairment; learning, mental, emotional, or psychiatric condition (e.g., serious learning disability, depression, ADD, or ADHD); or other health impairment or problem. (NCES, 2019, Table 311.10)

Based on the NPSAS data collected during the 2015-2016 academic year, approximately 19.5% of total undergraduate and 20.8% of community college enrollment were students who identified as having a disability (NCES, 2019). Students with disabilities ages 18-23 accounted for 17.6% of total undergraduate enrollment in 2015-2016 (NCES, 2019). These estimations are higher than what was reported for the previous data collection period (2011-2012 academic year) which showed students with disabilities comprised 11% of total enrollment (NCES, 2017).

Partly this is attributed to a substantial change in methodology between the two data collection periods (A. D'Amico, personal communication, August 21, 2018).

In the 2015-2016 survey period, students were asked to identify their main disability from the following choices: hearing impairment; blindness or visual impairment; speech or language impairment; specific learning disability or dyslexia; attention deficit disorder (ADD or ADHD); anxiety; autism, Asperger's syndrome, or other developmental disability; depression; traumatic brain injury; and other (A. D'Amico, personal communication, August 21, 2018). The three most common disabilities identified by respondents were attention deficit disorder (ADD) (26.4%), depression (20.9%), and anxiety (19.18%) (NCES, 2019; A. D'Amico, personal communication, August 21, 2018). The fourth frequently marked response was "other" (11.5%) (A. D'Amico, personal communication, August 21, 2018).*

2.6.4.1 Enrollment Rates and Self-Identification

College students with disabilities may self-identify to their institution. In part, the purpose of self-identifying is to secure disability related services provided by the institution.

This is different from secondary education where the local education agency (LEA) legally is charged with identifying students with disabilities, often conducting individual evaluations using standardized assessments as outlined in the Individuals with Disabilities Education Act (IDEA).

There are thirteen diagnoses recognized in IDEA (2004) that qualify students for special education services—autism, deaf-blindness, deafness, hearing impairment, emotional

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^{*} Details of specific survey questions and some responses are not publicly available but may be requested. Details included in the section include data provided given a request I submitted, and which was completed via email with explanatory information from Aurora D'Amico in the NCES Longitudinal Surveys Branch on August 21, 2018.

disturbance, ID, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment (Sec. 300.8). IDEA does not apply to higher education; instead, the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act (ADA) provide protections for students in higher education while also defining what qualifies as a disability. Disability under these statutes is not limited to the thirteen qualifying diagnoses by IDEA. Under the ADA, disability includes "physical or mental impairments which substantially limit one or more major life activities" with the caveat there needs to be "a record of such an impairment; or [be] regarded as having such an impairment" for longer than six months (U.S. Department of Justice, 2010, Sec. 36.101). Self-identification and the encompassing higher education applied ADA definition of disability results in discrepancies between the reported figures of students with disabilities between secondary and higher education.

An estimated 12% of youth under the age of 18 in the United States have a disability (Lipscomb et al., 2017a). Based on the number of students receiving special education services under IDEA, another estimate shows in 2018 approximately 14% of students ages 3-21 in public schools had a diagnosed disability (McFarland et al., 2019). Contrast this estimate to 19.5% of college students who identified as having a disability in the NPSAS for the 2015-2016 academic year and the larger enrollment percentage of students with disabilities in higher education could suggest these students are more represented in higher education than in secondary education. However, this discrepancy may be related to other factors such as the following: 1) secondary education uses IDEA's specific disability subgroups that require confirmed diagnosis through a full individual evaluation by a professional, 2) higher education uses ADA's broader

definition of what is recognized as a disability, 3) higher education estimations are based on self-reported survey data, and 4) a large number (about 40%) of higher education students who reported a disability marked "depression" and "anxiety" which may be more prevalent in college students than other populations (Holterman, 2016; Ibrahim, Kelly, Adams, & Glazebrook, 2013).

2.6.4.2 State Performance Reports

While NCES is useful for overall enrollment, it is limited in its use for providing the immediate college enrollment rate for students with disabilities. Instead, a close estimation of the immediate college enrollment rate that can be calculated for this population may be done using state data published through the Department of Education, Office of Special Education Programs (OSEP), in IDEA mandated annual performance reports. Under IDEA each state must provide this report and it includes various outcomes related to students receiving special education services. As stated earlier, this would include only those students with the thirteen disabilities/disability categories identified under IDEA. This is one limitation as is the inconsistency in data collection processes employed by various states and by each state from year to year. Despite these limitations, state performance reports are one of the few sources that may be used to calculate enrollment rates and view transition patterns between high school and college for students with disabilities.

Included in the reports is the indicator "post-school outcomes." The post-school outcomes indicator pertains to students who exited secondary school and had an IEP at the time of exit (i.e., were students who had a qualifying disability diagnosis under IDEA) (OSEP, n.d.). Higher education enrollment within the first year post high school for these students is

reported as a percentage. The type of higher educational institution is not specified, so whether these students were accessing 2- or 4-year institutions is unknown.

Individual state data is provided in Table 1 and was taken from the OSEP online database called *GRADS360* by selecting each state's report and extracting data for the college enrollment indicator under the section "post-school outcomes." Table 1 shows the "percent of youth who are no longer in secondary school, had IEPs in effect at the time they left school, and were enrolled in higher education within one year of leaving high school" (OSEP, n.d., Table 20 U.S.C. 1416(a)(3)(B)). The most recent published data at the time these reports were accessed was for the year 2016. For comparison purposes, included are data for the year 2010 which was the earliest year Annual Performance Reports were published for all fifty states.

Table 1

PSE Enrollment of Students with IEPs from State Annual Performance Reports

| | 2010 | 2016 | | 2010 | 2016 |
|-------------|-------|-------|----------------|-------|-------|
| Alabama | 14.12 | 27.81 | Montana | 24.8 | 22.14 |
| Alaska | 14.2 | 15 | Nebraska | 39.10 | 38.16 |
| Arizona | 13.6 | 22.79 | Nevada | 20 | 18.88 |
| Arkansas | 14.54 | 17.92 | New Hampshire | 54.4 | 29.48 |
| California | 49.5 | 48.87 | New Jersey | 48.8 | 52.5 |
| Colorado | 40 | 26.10 | New Mexico | 47.3 | 41.13 |
| Connecticut | 52.5 | 51.34 | New York | 42 | 44.02 |
| Delaware | 20 | 49.47 | North Carolina | 34 | 27.27 |
| Florida | 27.5 | 27.84 | North Dakota | 50.2 | 29.07 |
| Georgia | 26.9 | 25.8 | Ohio | 41.4 | 28.81 |
| Hawaii | 37 | 36.34 | Oklahoma | 33 | 22.32 |
| Idaho | 22 | 16.93 | Oregon | 25.3 | 24.56 |
| Illinois | 41.2 | 32.07 | Pennsylvania | 31.16 | 33.08 |
| Indiana | 32.5 | 31.15 | Rhode Island | 28.6 | 28.43 |
| | | | | | |

| | 2010 | 2016 | | 2010 | 2016 |
|---------------|-------|-------|----------------|-------|-------|
| lowa | 72.79 | 18.86 | South Carolina | 29.7 | 26.21 |
| Kansas | 45.61 | 42.67 | South Dakota | 8.69 | 20.53 |
| Kentucky | 23.2 | 18.09 | Tennessee | 16.8 | 21.17 |
| Louisiana | 23.39 | 39.48 | Texas | 23 | 21.41 |
| Maine | 25 | 18.81 | Utah | 33.1 | 20.74 |
| Maryland | 29.36 | 22.66 | Vermont | 16.36 | 22.22 |
| Massachusetts | 50.7 | 49.64 | Virginia | 35.9 | 32.85 |
| Michigan | 31.7 | 32.56 | Washington | 25.5 | 21.79 |
| Minnesota | 33 | 23.24 | West Virginia | 12.2 | 19.22 |
| Mississippi | 24 | 27.79 | Wisconsin | 41.52 | 28.4 |
| Missouri | 30.2 | 28.5 | Wyoming | 50.57 | 26.43 |

Source: Final SPP/APRs at https://osep.grads360.org

Using the data in Table 1 to calculate the overall mean, approximately one out of every three students with disabilities having an IEP enroll in college one year post high school—32% in 2010 and 29.2% in 2016. Enrollment rates vary heavily by the state as evidenced by a difference between the states of 37.5 percentage points. In 2016, New Jersey had the highest enrollment at 52.5%, and Alaska the lowest at 15% (see Table 1).

When looking across the years there were inconsistencies for some states' reports that although are not included in the table above warrant mentioning. For example, lowa reported a 72.29% college enrollment rate for the year 2010, but the year prior showed 34.09% for this same indicator. It is not likely this much growth occurred in one year, nor is it probable a 30% decline would occur by 2012 when the reported rate dropped to 39.95%. Similar fluctuations were seen in other states including Delaware, California, Wyoming, and Vermont; but this was not the case with every state. The fluctuations may have resulted from the inconsistency in what data is collected and how states are able to choose and make changes to their data

collection processes at will each year.

2.6.4.3 National Longitudinal Transition Study Series

Assessing the postsecondary landscape regarding students with disabilities can also be achieved by looking at college preparation and student expectations. One of the largest projects looking at transition patterns of students with disabilities began in 1987 by the U.S. Department of Education. This effort was in response to a request by Congress in the 1983 amendments to the Education of All Handicapped Children Act (EAHCA) to quantify transition outcomes in terms of employment, education, and independent living for secondary students who received special education services. Under contract with the U.S. Department of Education, SRI International conducted longitudinal survey research at multiple points regarding youth with disabilities and transition outcomes. These efforts are known as the National Longitudinal Transition Study (NLTS) and it eventually expanded to include three series—the NLTS (1987-1993), the National Longitudinal Transition Study-2 (NLTS2) (2001-2009), and the NLTS 2012 (2012-2013). The NLTS and NLTS2 only involved students who had a disability and received special education services. The NLTS 2012 expanded to include students not receiving special education services.

The NLTS series does not directly include higher education enrollment patterns, rather the reports show student and parent expectations regarding college enrollment, and "[describe] the backgrounds of secondary school youth and their functional abilities, activities in school and with friends, academic supports received from schools and parents, and preparation for life after high school" (Lipscomb et al., 2017a, p. i). The most recent series of the NLTS, the NLTS 2012, involved approximately 13,000 youth ages 13 to 21 across 432 school

districts (Burghardt et al., 2017; Lipscomb et al., 2017a). Survey data was collected for this series from 2012 to 2013. The survey was completed by youth, their parents, teachers, and school administrators (Burghardt et al., 2017).

Findings of the NLTS 2012 are published in three comparison reports—Volumes 1-3. Volume One compares students with an Individualized Education Program (IEP) to students without an IEP. Students without an IEP include two groups—"students with 504 plans" but without an IEP, and students without both 504 plans and IEPs. The term "504 plans" is in reference to Section 504 of the Rehabilitation Act of 1973 that "consists of the provision of regular or special education and related aids and services designed to meet the student's individual educational needs as adequately as the needs of nondisabled students are met" (Office for Civil Rights, n.d., para. 5). This is important to note as students with 504 plans are students with disabilities, but their disabilities do not "adversely affect" their academic performance enough to qualify them for IEPs (Storkel, 2019). An example could be a student with speech impairment who scores at or above average on state standardized tests and generally has passing scores in each course. Therefore, reference to NLTS findings in this paper will refer to students without 504 plans and IEPs as "students without disabilities," and students with either a 504 plan or IEP as "students with disabilities."

Volume Two of the NLTS 2012 explores similarities and differences of students with an IEP across the IDEA recognized disability subgroups that qualify students for special education services. These IEP qualifying disability subgroups are autism, deaf-blindness, emotional disturbance, hearing impairment, deafness, ID, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic

brain injury, and visual impairment (Lipscomb et al., 2017b). Because the focus of this study is on students with ID, reference to NLTS findings will also differentiate between "students with disabilities" (those with 504 plans and IEPs) and "students with disabilities having an IEP" (only students with IEPs). This differentiation will provide increased understanding about differences between the two groups of students with disabilities, and specifically focus on the group that encompasses students with ID (i.e., those likely with an IEP).

The third comparison report published in 2018 used data from all three series of the NLTS to gain a longitudinal view of changes over time for youth who received special education services through LEAs regarding areas such as independent living skills, bullying, household income, health, employment, and school placement (i.e., time spent in/out of general education classrooms) (Liu et al., 2018). Some of these areas are related to postsecondary education (PSE) enrollment patterns. Expectation to attend college was also in the first two reports, but not directly included in the third comparison report (Liu et al., 2018).

The first comparison report of the NLTS 2012 which compares students with an IEP to students without an IEP showed 76% of students with disabilities having an IEP indicated they expected to obtain PSE post high school (Lipscomb et al., 2017a). In comparison, 94% of students without disabilities marked they expected to obtain PSE. When asked specifically about attending a 4-year institution, the gap in expectations was even larger with 51% of students with disabilities having an IEP indicating they expected to pursue this course post-high school and 81% of students without disabilities indicating likewise. Without accounting for institutional type, this data may support the idea that students with disabilities have lower expectations regarding pursuing higher education compared to their peers. However, when

asked about the expectation to attend a two-year college or a technical or trade school, 25% of students with disabilities having an IEP responded affirmatively with only 13% of students without disabilities indicating likewise (Lipscomb et al., 2017a). From this dataset, it appears students with disabilities are looking to two-year colleges and trade schools for PSE more than their peers without disabilities.

2.6.5 Students with Intellectual Disability

Regarding the disability subgroup of students with ID, reporting accurate immediate college enrollment or overall college enrollment rates is difficult. Part of the challenge in obtaining immediate college enrollment data is many datasets group students with disabilities collectively and not by subgroups. There is also the problem noted by Grigal, Hart, and Weir (2011) that "very few datasets in higher education research include students with ID," meaning some datasets that include students with disabilities exclude the subgroup of students with ID altogether (p. 1).

Despite these limitations, there are a few sources available that provide information sufficient to estimate the higher education enrollment rates of students with ID. As will be explored in this chapter, one of these sources is the National Longitudinal Transition Study- 2 (NLTS2). Secondary data analysis of the NLTS2 by Grigal, Hart, and Migliore (2011) and Bouck (2014) show higher education enrollment of students with ID within six years of exiting high school to be between 11%-17%. Their estimations along with data from other national databases and state reports provide evidence that students with ID have the lowest collegegoing rates of any student population (Bouck, 2014; Grigal, Hart, & Migliore, 2011; NCES, 2017; NCES, 2019).

2.6.5.1 National Databases

Avellone and Scott (2017) addressed yet another issue of the limited number of datasets that include the broader population of students with disabilities. In their article, they listed national databases that may be used to aid researchers studying students with disabilities in higher education. Of the eleven listed databases, five had a category that either directly or indirectly included students with ID and were a mix of PSE databases, longitudinal databases of college graduates, and transition and postsecondary outcomes databases. These five databases are Cooperative Institutional Research Program-Freshman Survey, National Postsecondary Student Aid Study (NPSAS), National Survey of Student Engagement (NSSE), Baccalaureate and Beyond Longitudinal Study 2008/2012, and National Longitudinal Transition Study-2 (NLTS2) (Avellone & Scott, 2017). However, only two of these databases directly included data on students with ID—the NPSAS and NLTS2.

The Cooperative Institutional Research Program-Freshman Survey may also include students with ID. However, this survey reported students who identified as having autism spectrum disorder. As stated earlier in this chapter, this may include students with ID as some students on the spectrum have a dual diagnosis of ID. However, having autism spectrum disorder does not mean a student also has ID. Given the inability to decipher the presence of a dual diagnosis, the results of this survey were not utilized.

The National Postsecondary Student Aid Study (NPSAS) through the National Center for Education Statistics (NCES) does not publish but will provide data specific to students with ID upon a formal request. Otherwise, data on students with ID is not directly in NCES reports. The NCES survey reports instead were found to use the following higher education student

demographic disability subgroup categories: visual, hearing, speech, orthopedic, specific learning disability, Attention Deficit Disorder, mental illness, and other (NCES, 2019). *Other* is also a category in the National Survey of Student Engagement (NSSE), and Baccalaureate and Beyond Longitudinal Survey 2008/2012. In these cases, *other* could include students with ID but cannot be used to provide an accurate estimation of this student population.

The Baccalaureate and Beyond Longitudinal Survey 2008/2012 includes the category developmental disability. Although ID is a type of developmental disability, developmental disabilities also encompass diagnoses such as autism spectrum disorder and hearing loss.

Therefore, it cannot be assumed the data listed under developmental disability is specific to students with ID. In contrast, the NLTS series, including the second wave of the series (the NLTS2) collected data on students by their qualifying special education diagnosis which separates developmental disabilities and lists students with ID specifically. In summary, only two of the eleven national databases related to higher education listed by Avellone and Scott (2017) provided data specifically on students with ID—the NPSAS and the NLTS series.

2.6.5.2 The Condition of Education Report and IDEA Section 618 Data Files

Another source to consider is *The Condition of Education* report which provides information on various education related indicators including high school dropout rates and immediate college enrollment (McFarland et al., 2019). Student data for the various indicators are separated by characteristics of gender and race/ethnicity but not disability. The report does provide a global figure of students served in preprimary, elementary, and secondary public schools by disability diagnosis/subgroup. Of the seven million students with disabilities ages 3-21 being served under IDEA by preprimary, elementary, and secondary public schools in 2017-

2018, 420,000 were diagnosed with ID (McFarland et al., 2019). How many of these students were transition age (18-21 years of age) or in a transition program was not reported.

The number of students with ID who exit public secondary schools is reported by state in data files published online by the Department of Education's *IDEA Section 618 Data Products*. For the 2017-2018 school year, 34,585 students with a diagnosis of ID exited secondary school either by receiving a high school diploma, alternate diploma, certificate, aging out, or dropping/stopping out (U.S. Department of Education, n.d.). This data set did not include the state of Vermont stating data was not available for that state and does not show how many of these students went on to postsecondary education.

2.6.5.3 High School Longitudinal Study of 2009

Survey data from the High School Longitudinal Study of 2009 provides information about high school completion and college enrollment for students with ID (NCES, 2017). This study reported 76% of students with ID who were ninth-graders in 2009 completed high school, and 27% enrolled at a public or private nonprofit 2-year institution by the 2013 fall semester. The latter estimation may not be an accurate reflection for this population as the number was marked "unstable" stating the "standard error represents between 30 percent and 50 percent of the estimate" (NCES, 2017, p. 16). The majority (52.8%) of students with ID were not engaged in any PSE, and no data was provided for the fields for 4-year institutions (public or private), for-profit institutions, and less than 2-year institutions. The reason for this missing information (that was reported for other disability subgroups) was there were "too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater" for students

with ID (NCES, 2017, p. 16). This means 20% of immediate post-school activities were unaccounted for regarding students with ID.

2.6.5.4 State Data

There is no collective report of state data and instead obtaining college enrollment information of students with ID requires seeking or requesting this information through the respective state higher education coordinating board or like entity. Doing this goes beyond the resources available for this study. Therefore, two states were contacted- Texas and New York. Texas was selected given the location of this study, and New York was selected as it is similar to Texas in terms of overall disability population while different in that there are more college programs designed to support students with ID listed by Think College for that state. Both requests required significant time, contacting the states' higher education coordinating boards, and email communications.

In Texas, college enrollment data was not collected for students with ID until the Texas

Legislature during the 84th Regular Session implemented the requirement for the Texas Higher

Education Coordinating Board [THECB] (2016) to "conduct ongoing study on the college

recruitment of persons with intellectual and developmental disabilities" (p. 1) and to "collect

administrative data on students with IDD enrolled in public IHEs" (with IHEs referring to

"institutions of higher education") (p. 2). A report regarding students with ID in higher

education was reviewed on the THECB website. However, enrollment data was not published in

this report or elsewhere on the website. In a response to my digital request of this information

to the THECB, an email stated enrollment data is not published as the numbers are so low that

doing so would be a violation of student rights under the Family Educational Rights and Privacy

Act (N. Coffey, personal communication, May 7, 2019).

Running a similar search of online materials related to students with ID enrolled in higher education in the State of New York, no briefs or published materials were found. I inquired about this information and was informed by New York's Office of Higher Education that higher education enrollment data of students with ID is not collected in that state. This led to other inquiries into randomly selected states (i.e., New Jersey, Montana, and Oklahoma) which resulted in similar results. Due to the limitations presented of one state not being able to report enrollment data of students with ID, and other states not collecting enrollment data of students with ID, national datasets are used in this study to estimate college enrollment of students with ID when ID is a type of disability for which data is disaggregated.

2.6.5.5 Expected College Enrollment

Using the NLTS series, NLTS 2012 data is aggregated by disability subgroup concerning expected college enrollment post high school. In a NLTS 2012 report, half of the students with ID surveyed indicated they expected to pursue PSE (Liu et al., 2017). This was the lowest percentage of the twelve disability subgroups identified. Students with ID also were less likely than their peers with disabilities to take college entrance or placement tests with 24% of students with ID indicating they had engaged in this college-preparatory step. This was the second lowest percentage compared to the other disability subgroups (Liu et al., 2017).

2.6.5.6 Secondary Data Analysis

Prior to the NLTS 2012 was the NLTS2 which involved survey data from 2000 to 2010.

Secondary data analysis of the NLTS2 was conducted by Grigal, Hart, and Migliore (2011) and Bouck (2014). From this process, these researchers estimated the enrollment of students with ID in higher education.

Bouck's (2014) research focused on students diagnosed with a mild severity level of ID (MID) and their patterns of PSE enrollment and completion within two, four, six, and eight years of graduating from or completing high school. Patterns indicated students with MID were accessing PSE mostly via the community college compared to vocational schools and 4-year institutions. Bouck (2014) found 22.6% of students with MID were pursuing higher education via 2- or 4- year institutions post high school, with 17% of students with MID attending a community college and 5.5% attending a 4-year college/university within two years of exiting high school. Students with MID were more likely to attend a community college than a vocational school (5.6%) two years post high school. Attendance at a community college was highest within six years of exiting high school for students with MID (25.8%) with approximately half obtaining a diploma or credential in that time (45.9%) (Bouck, 2014).

Grigal, Hart, and Migliore (2011) in their secondary data analysis using NLTS2 data reported approximately 11% of students with ID exiting high school attended college (2- or 4-year) over the different waves data was collected. When accounting for institutional type, 18% of students with ID attended a community college and 5% attended a 4-year college/university. Grigal, Hart, and Migliore (2011) included a statement in the limitations section of their article that variables on PSE often revealed low numbers of students with ID, "rarely over 200 and often at 100 cases" (p. 13).

The overall and 4-year college/university estimates by Grigal, Hart, and Migliore (2011)

are lower than the findings by Bouck (2014) who disaggregated data by ID severity level.

Although mild severity level is the most common diagnosis among students with ID, my study concerns students with ID regardless of severity level. Thus, the findings by Grigal, Hart, and Migliore (2011) which shows 89% of students with ID who exited high school pursued paths other than higher education is used to show "students with ID have the lowest percentage of postsecondary enrollment" compared to other disability subgroups (Grigal, Hart, & Weir, 2011, p. 2).

2.6.5.7 Think College Research

There are college programs that specifically serve students with ID. These programs include the model demonstration, grant-funded programs called Model Comprehensive

Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSIDs);

Comprehensive Transition Programs (CTPs); and other higher education programs designed to serve students with ID at higher education institutions (referred to in this study as HEPSSIDs).

The national coordinating center called *Think College* provides technical assistance to and collects data on TPSIDs.

Think College reported from 2010 to 2017, 3,350 students attended TPSIDs across 93 college programs (Smith Lee et al., 2018), with 2,245 attending across 52 campuses from 2010-2015 (National Coordinating Center Accreditation Workgroup, 2016). These figures are limited as they only include TPSIDs and do not account for the broader higher education landscape of CTPs and other HEPSSIDs, which total (TPSIDs, CTPs, and HEPSSIDs) is estimated to be 284 programs as of August 12, 2021 (Think College, n.d.-a). These figures also do not include students accessing college by enrolling as a traditional student with the institution (i.e., not

through TPSIDs, CTPs, or HEPSSIDs).

2.6.5.8 Community College Preference

As described earlier, data shows students with ID are more likely to access higher education via the community college than 4-year institutions. Students with ID surveyed in the NLTS2 accessed higher education at an 11% rate, but when aggregating data by institutional type community colleges were preferred with enrollment estimates between 17% and 27% (Bouck, 2014; Grigal, Hart, & Migliore, 2011; NCES, 2017). Along with enrollment rates, students with MID have also been found to be successful at the community college with a 45.9% six-year completion rate (Bouck, 2014) which is higher than the national six-year completion rate of 39.2% for the overall student population who start at a 2-year institution (Shapiro et al., 2018).

2.7 Three Ways Students with ID Access Postsecondary Education

The literature shows students with ID who are accessing higher education are doing so through three identified ways. One way is accessing PSE through the local education agency (LEA) as part of the LEA's transition program or a dual enrollment program (Plotner & Marshall, 2014). These students have not exited high school and are still supported by the LEA and IDEA monies (Plotner & Marshall, 2014). The second way is students enroll directly with the college as a traditional student. They may be seeking a degree or certificate, or take courses as a non-degree seeking student. These students have exited high school and follow the same enrollment process as other students seeking admittance (and may access disability services or other support services). The third way students with ID access higher education is by enrolling in a program specifically designed for students with ID, a HEPSSID, which includes but is not

limited to non-dual enrollment CTPs and TPSIDs mentioned earlier. These college programs serving students with ID are not to be confused with community-based transition programs that may or may not be on college campuses (Hartman, 2009).

2.7.1 Local Education Agency Transition Services

Members of the Individualized Education Program (IEP) committee for students who receive special education services through the LEA ultimately decide "whether a child should participate in a transitional program on a college campus or in a community based setting to meet his or her goals" as well as whether those transitional goals include PSE (Smith Lee et al., 2018, p. 10). Transition programs through LEAs may be located at a high school or other LEA property, or offsite at another facility. Onsite transition programs rarely have a higher education component, while offsite transition programs may be located at a college campus with services that include a dual enrollment component.

Dual enrollment is when students are concurrently enrolled in higher education and secondary education and courses bear credit with each educational institution (Hart, Zimbrich, & Parker, 2005). Dual enrollment high school programs located at college campuses account for approximately 38% of CTPs (Smith Lee et al., 2018). In dual enrollment programs, students "typically are considered high school students receiving education in a college environment rather than actual college students" (Plotner & Marshall, 2014, p. 49).

Transition programs through a LEA are like CTPs in that both provide a "coordinated set of activities for a [student] with a disability...that is focused on improving the academic . . . achievement of a [student]" (IDEA, 2004, Sec. 300.43). As mentioned above, IDEA funded transition services are dissimilar in that the services are facilitated by the LEA, not an institution

of higher education. Additional differences are that student eligibility for transition services though the LEA must end the academic year the student turns 21 (age varies by state) or once the student graduates from high school (Smith Lee et al., 2018), and transition services are to help students with disabilities move from "school to post-school activities, including postsecondary education, vocational training, integrated employment (including supported employment), . . . independent living, or community participation" (IDEA, 2004, Sec. 300.43).

These differences are related to the laws that regulate the two settings (public primary and secondary schools, and higher education). IDEA requires education through LEAs for students with disabilities and the transition services listed above (Griffin & Papay, 2017). ADA Amendments Act of 2008 and Section 504 of the Rehabilitation Act of 1973 apply to higher educational institutions where students with disabilities are "not entitle[d] . . . to an education" (Griffin & Papay, 2017, p. 417). Students with disabilities in higher education instead must receive "appropriate accommodations in college classes taken for credit" which is dependent on the student identifying himself/herself as a student with a disability and formally requesting these accommodations (Griffin & Papay, 2017, p. 417).

2.7.2 Traditional Degree or Certificate-Seeking Student

Individuals with ID may access higher education by enrolling as a traditional degree- or certificate-seeking student (Schmidt, 2005). These students are those who have exited/graduated from high school and are no longer receiving transition services or support from the LEA through the IDEA mandate. These students are not attending a specialized program designed to support students with ID (i.e., CTPs, TPSIDs, or HEPSSIDs) (Schmidt, 2005). These students may access disability services at the college campus—a process that requires

the student to self-identify and seek assistance from the institutions' disability services offices.

Little is published about traditional degree- or certificate-seeking college students with ID outside of a few periodicals. One dissertation had a title that alluded to having students with ID and/or Autism Spectrum Disorder pursuing traditional pathways to higher education as participants in the study, but the participants who accessed college via the traditional pathway versus a program were only four participants and all four of these participants did not have a dual diagnosis of ID (Sala, 2015). Schmidt (2005) wrote an article in *The Chronicle of Higher Education* that mentioned different students with ID pursuing higher education. One of the students enrolled traditionally, a task that included the student's family hiring a mentor to live in the student's dormitory (Schmidt, 2005). An article in *Inside Edition* highlighted a student with Down syndrome who graduated from Concordia University as a result of the student's parent approaching the institution and working with the institution to have the student attend and ultimately graduate with a "certificate of achievement" (Li, 2018, para. 2). Further details about enrollment and the credential earned were not included in the article.

2.7.3 Higher Education Programs Designed to Serve Students with ID

When not enrolling traditionally, students with ID may seek postsecondary education by attending HEPSSIDs. These programs have been rapidly increasing over the past two decades. In 2004, there were 25 HEPSSIDs (Schmidt, 2005). By August 12, 2021, there were 284 programs in existence—a 1,036% increase (Think College, n.d.-a). One hundred and nine (38%) of these 284 HEPSSIDs are at community colleges. With approximately 1,050 community colleges in existence nationally, this means 10% of these institutions have programs designed to specifically support students with ID (American Association of Community Colleges [AACC],

2019; The Carnegie Classification of Institutions of Higher Education, 2016). The number of HEPSSIDs continues to grow as new programs are started at various college campuses (Think College, n.d.-c). Each HEPSSID listed in the *Think College* "college search" database is vetted by TCNCC staff to be "a program of or directly affiliated with an accredited institute of higher education (IHE) and . . . support students with intellectual disability" (Think College, n.d.-b, para. 13). Most of these programs are operated by IHEs with a few "that are affiliated with a college but are operated by an external entity such as a community agency" (Think College, n.d.-b, para. 15).

These programs vary widely from one another (Thoma, 2013). One variation is the program's degree of inclusivity described by Hart, Grigal, Sax, Martinez, and Will (2006) as belonging to one of two categories—separate or hybrid. Inclusive higher education was a third category mentioned in the article, but this described situations where there was no program on campus and the student pursued the traditional enrollment path discussed earlier in this chapter including accessing individual support services (Hart et al., 2006). Separate programs were described as programs where students with ID participated in classes only with students with similar disabilities, and students' participation on campus was in "generic social activities" (Hart et al., 2006, p. 1). Hybrid programs had the opportunity to take courses for audit or credit with the general student body on campus, and also included program-specific courses taken only with students with disabilities. Thoma (2013) found inclusivity differences to be more on a continuum with many variations in program components which included types and range of supports and services.

Of the HEPSSIDs in the United States, some are designated as CTPs and/or TPSIDs. These

two types of HEPSSIDs are both approved by the national coordinating center, *Think College*, and meet specific criteria. The latter of the two also receives additional financial and logistical support.

2.7.3.1 Comprehensive Transition Programs

Comprehensive transition programs (CTPs) are a type of HEPSSID that were first described in the Higher Education Opportunity Act (HEOA) of 2008. The HEOA of 2008 set criteria for programs to be approved as CTPs, which included: (a) students must be "physically attending the institute of higher education;" (b) the program needs to be affiliated with "an institute of higher education that is participating in Title IV Federal Student Aid;" (c) the program has to "support students with intellectual disability in preparation for employment" and (d) provide advising, (e) have a curriculum structure where half or more of the program requires taking "college courses for credit or for audit, or internships with other students without intellectual disabilities;" and (f) at the completion of the program there needs to be a credential offered or some type of "identified outcomes for students" (Think College, n.d.-c, para. 1). Approval as a CTP is important as it allows the program to offer federal financial aid to students with ID in the form of grants (Pell and Federal Supplemental Education Opportunity Grants) and federal work-study. Students are eligible for this aid even if they did not earn a regular high school diploma (Think College, n.d.-c). Federal student loans are not available to students with ID.

2.7.3.2 Model Comprehensive Transition and Postsecondary Programs for Students with Intellectual Disabilities

The reauthorization of the HEOA in 2008 appropriated \$10.6 million in funds for helping

individuals with ID gain access to higher education and renewed this financial support for another five years in 2015 (Grigal et al., 2015). The long-term goal of appropriating these funds was to create a "model demonstration program aimed at developing inclusive higher education experiences to support positive outcomes for individuals with ID" (Grigal et al., 2015, p. 2). Known as Model Comprehensive Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSIDs), these programs are approved by and have access to technical assistance from the Think College National Coordinating Center (TCNCC) (Grigal et al., 2015) and receive U.S. Department of Education grants under the Higher Education Act, part D (U.S. Department of Education, 2015). To qualify, TPSIDs must meet eight criteria set forth by the U.S. Department of Education. These criteria are as follows: 1) "serve students with intellectual disabilities;" 2) provide support for "academic and social inclusion;" 3) focus on self-advocacy, academic, socialization, and career skills; 4) have each student's course of study be the result of person-centered planning; 5) submit to evaluation by the TCNCC; 6) have a relationship with a LEA to allow for dual-enrollment of students who still receive special education services through IDEA; 7) have a sustainability plan; and 8) offer a "meaningful credential" for students who complete the program (U.S. Department of Education, 2015, para. 2).

The TCNCC selects and approves TPSIDs as discussed in the Higher Education Act, Part D, section 777(b) (U.S. Department of Education, 2015). The TCNCC is supported by the Office of Postsecondary Education, U.S. Department of Education (2015). In 2010, 27 TPSIDs were awarded five-year grants not to exceed \$500,000 a year from the Office of Postsecondary Education (OPE) (Think College, n.d.-d). TPSIDs have the charge to "create, expand, or enhance high-quality, inclusive higher education experiences . . . for individuals with ID" (Grigal et al.,

2015, p. 5). The 2010-2015 TPSIDs collectively served approximately 2,245 students at 52 campuses (Think College, 2016). Two additional cohort TPSID groups (2015-2020 and 2020-2025) were selected and approved by the TCNCC. A report of the 2020-2025 cohort was not published at the time of this study, but a report using data collected from the 2015-2020 TPSID cohort was available. This report showed TPSID programs collectively served 956 students across 56 campuses during the 2019-2020 academic year (Grigal et al., 2021).

Since 2010, TCNCC has used an online tool to collect and analyze data on each TPSID to evaluate the programs and student outcomes. Results are published online in an annual report (as referenced above). These reports include information on student demographics, program design, course enrollment, inclusion, and post-exit outcomes (Grigal et al., 2021).

The TCNCC report for the 2019-2020 academic year showed students with ID (including those with a dual diagnosis) in TPSIDs were the most prevalent (91%) disability group among students, followed by students with autism but not ID (5%) (Grigal et al., 2021). Approximately half (48%) of the programs served students enrolled in high school, leaving 52% of programs that served only adult students who were no longer served by LEAs under IDEA. Majority (88%) of students took two or more inclusive classes which included courses such as Intermediate Algebra, Race and Social Justice, and U.S. History Since 1877 (Grigal et al., 2021).

Thirty-five percent of enrollments were in courses that issued credit only valid toward obtaining a credential issued by the TPSID (as opposed to the college) (Grigal et al., 2021). In other words, the credits earned were program-specific, issued by the TPSID to be used only toward the credential/certificate offered by the TPSID, and were not transferable college credits. Of the 342 students who exited the TPSIDs after the 2019-2020 academic year, 79%

completed the program and earned a credential offered by the TPSID and 14% earned a non-TPSID credential such as Certificate of Nutrition or Certificate of Child and Family Studies (Grigal et al., 2021). No students were reported as earning an associate or bachelor's degree. In terms of post-exit employment outcomes, 21% of the students who exited had paid employment at the time of exit or within 90 days of exiting. Almost half (49%) of the students who exited were involved in an "unpaid career development experience" (Grigal et al., 2021, p. 20). These outcomes may be related to decreased employment rates during the COVID-19 pandemic. The number of paid positions reported by month decreased by 47% in March 2020 and remained low until August 2020 (which was the last month included in this report) (Grigal et al., 2021).

A qualitative study looking at program practices at five TPSIDs was conducted by Weir, Grigal, Hart, and Boyle (2013). Sites were in different parts of the United States and were authorized, started, and funded under the HEOA. Four of the five TPSIDs included in the study were housed at 4-year institutions, and the other was at a community college. The researchers had staff complete a quality indicators self-assessment online before site visits. The self-assessment was designed by Think College and looked at four standards—academic access, career development, campus membership, and self-determination. The researchers used information from this assessment and from site visits to create in-depth program profiles of each TPSID.

The profile in the study by Weir et al. (2013) of Highline Community College ACHIEVE

Program in Washington stated 20-30 new students were enrolled into one of the two certificate

programs offered during the study. These students included both those who had exited high

school and those still receiving special education services through IDEA. Students engaged in

TPSID specific courses as well as credit courses offered by other departments at the community college. Supports for students in ACHIEVE included educational case managers who assisted students in academic classes, employment consultants, peer helpers, and participation in a quarterly capstone course used to develop a skills portfolio. The community college sought to increase access to credit courses at the college for students with ID by adopting Universal Design for Learning (UDL) on its campus and providing faculty with training and ongoing professional development in UDL. The stated end goal for the ACHIEVE community college program centered on paid employment and mention was made that this information was being collected by Think College although the employment rate post program completion was not included in the report (Weir et al., 2013).

2.8 Community Colleges

The system of higher education in the United States is a mixture of diverse institutions.

There are research universities, comprehensive universities, four-year colleges, community colleges, and for-profit institutions (Bok, 2013). Community colleges which account for nearly 40% of undergraduate enrollments (Bok, 2013), have a key role in American higher education as a result of its history, evolution, mission.

2.8.1 Brief History

Higher education in North America dates to the seventeenth century, but the emergence of the community college (also called *junior college*) was not present until the early twentieth century (Cohen, Brawer, & Kisker, 2014; Thelin, 2011). With momentum from the Morrill Acts of 1862 and 1890 which expanded affordable higher education in each state, social

pressure continued "for social equality and greater access to higher education" (Cohen et al., 2014, p. 1).

In addition to social pressure, advocates for a new system in higher education where lower-level coursework would be the responsibility of another institution allowing universities to focus on "higher-order scholarship" first proposed their ideas starting in the mid-1800s (Cohen et al., 2014, p. 6). These advocates included Henry Tappan, William Mitchell, and William Folwell. William Rainey Harper, who was President of the University of Chicago, was especially vocal in support of this approach which was similar to the system in Europe at that time (Cohen et al., 2014). Harper is considered the "father" or founder of the American community college. Harper passed away in 1906, just five years after the first community college, Joliet Junior College, was founded ("William Rainey Harper," 2019).

As the number of high school graduates increased significantly from the early twentieth century to the mid-twentieth century, there also came an increased demand for higher education. In 1916, there were 74 public and private nonprofit two-year colleges, with the majority being private nonprofit institutions (Cohen et al., 2014). By 1938, there were 575 public and private nonprofit two-year colleges, almost equally divided between the two sectors. The demand for higher education grew again in the mid-twentieth century after WWII when the G.I. Bill financially assisted veterans in pursuing higher education. With the increased birth rates of the 1940s, there was a large and rising college-going generation by the 1960s. Today, there are approximately 1050 community colleges in the United States serving 12 million students who benefit from the unique mission of the community college in terms of access and equity (AACC, 2019; Troyer, 2015).

2.8.2 Mission

The early mission of the community college is reflected in the original term for these institutions—junior college. Open to high school graduates, junior colleges offered the first two years of college-level coursework. Then, in 1925, these institutions expanded their mission to "develop a different type of curriculum suited to the larger and ever-changing civic, social, religious, and vocational needs of the entire community in which the college is located" (Bogue, 1950, p. xvii).

In the 1950s, many community colleges sprang up along newly built interstates around different municipalities (Cohen et al., 2014). For some cities, the community college was the first public higher education institution located in the area. When this was the case, postsecondary enrollment of high school graduates increased (Cohen et al., 2014). Community colleges had found a niche market serving students near their homes. This trend continued and by the late 1970s majority of community college students lived at home and commuted to campus averaging a distance of ten miles or less (Hyde, 1980).

Community colleges continue to serve the communities in which they are located today.

Responding to the needs of their communities is one part of the mission of community colleges

(Troyer, 2015). The mission of community colleges also includes a commitment to equity and access (Troyer, 2015). This commitment is seen in part by admissions practices.

2.8.3 Admissions

The Americans with Disabilities Act (ADA) is not interpreted as requiring institutions of higher education to alter admission policies (Schmidt, 2005). Community colleges often have open admissions policies that create an easier means of accessing higher education compared

to 4-year institutions (Cohen et al., 2014). The caveat to these policies is remedial education.

So, while selective admissions policies are not at the community college, filtering students who do not meet certain cut scores on standardized assessments of literacy and mathematics into remedial courses is common in this sector of higher education. Some community colleges are changing this practice by offering tutoring and other support services to students who did not meet or exceed the institution's cut scores, thereby allowing these students to enroll directly into credit-bearing courses. Despite remedial education, the community college has "succeeded in opening access to all [even] if that access is limited to developmental courses" (Cohen et al., 2014, p. 261).

2.9 Factors Influencing Access to and Enrollment in Higher Education

Students with ID have the lowest college-going rates of any student population (Bouck, 2014; Grigal, Hart, & Migliore, 2011; NCES, 2017; NCES, 2019). Multiple factors may impact access to and enrollment in higher educational institutions for students with ID. Some of these factors are similar to the general student body such as financial barriers and viable college options, while others are unique to this student population such as lacking Individualized Education Program (IEP) transition goals for PSE and placement in self-contained classes (Griffin, McMillian, & Hodapp, 2010). These and additional topics found in the literature that impact access to and pursuit of higher education for students with ID are included in this chapter and will be reviewed in the following order: inclusive education; high school extracurricular activity; parental involvement with schools, teachers, and homework; public school transition planning and goals; parental expectations; parental education level; marital status of parents; poverty; health; attending quality public schools; graduating from high school

with a diploma; taking college entrance exams; and geographic availability of higher education programs designed to serve students with ID.

2.9.1 Inclusive Education

Students with ID attending postsecondary institutions at a significantly lower rate than their peers in part was explained by Grigal, Hart, and Migliore (2011) to be due to barriers related to segregated K-12 education, as well as lack of PSE goals on IEPs and access to PSE. The practice of educating students with and without disabilities together in the general education classroom using the same curriculum, versus in segregated educational placements, is referred to in the field of education as *inclusion*. Educating students in separate schools and classrooms based on disability was addressed in IDEA under the term *least restrictive environment* (Fleischer & Zames, 2001, p. 187). IDEA states a child with a disability should be educated with nondisabled peers in the least restrictive environment which is interpreted to be part of a continuum that starts with the general education classroom.

Despite this mandate, half of students with ID spend 60% or more of their day in a more restrictive setting than the general education classroom (Office of Special Education Programs [OSEP], 2018). This practice is reinforced by funding formulas that allocate additional funds to schools based on the location of services with more money given to more restrictive settings versus based on student need or disability (Fleischer & Zames, 2001). Culture, parent desires, and "severity" of disability are additional reasons cited by Fleischer and Zames (2001) for the common practice of educating students with disabilities outside of the general education classroom (p. 187).

Think College National Coordinating Center (TCNCC) issued a report on data collected

for the academic year of 2013-2014 reviewing grant-funded Model Comprehensive Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSIDs). This report showed prior to attending the TPSIDs, 22% of students attending these programs were in self-contained or life skills classes (Grigal et al., 2015). Fifty-five percent of students were in inclusive settings with non-disabled peers part-time, but how much time and differentiating between time in academic courses and electives were not reported. Fifteen percent were in fully inclusive educational settings before attending TPSIDs (Grigal et al., 2015). These findings are similar to those of Polloway, Lubin, Smith, and Patton (2010) who reported students with ID are primarily educated in self-contained or resource classrooms with peers who have cognitive and/or physical impairments.

Educational placement outside the general education classroom may hinder academic progress. The *Brown v. Board of Education* (1954) case addressed the impact of segregated schooling, albeit from a racial perspective. The judges concluded that regardless of if facilities are equal, the act of segregating students by race has a psychological impact and "is usually interpreted as denoting the inferiority of" children leaving them with a "sense of inferiority [that] affects the motivation of a child to learn" (*Brown v. Board of* Education, 1954, para. 13).

Using the parent survey from a previous study by Buckley and Sacks (1987) of 90 teenaged students with Down syndrome educated in "special schools" for students with disabilities; Buckley, Bird, Sacks, and Archer (2006) conducted a study of 46 teenaged students with Down syndrome in 1999 who had "similar social and family backgrounds and . . . similar potential abilities" (p. 55). Of the 46 students in the 1999 study, 28 students attended special schools educated with other students with disabilities, and 18 students attended "mainstream"

schools" where the students were "fully included in age-appropriate classes in their local schools, supported by a Learning Support Assistant" (Buckley et al., 2006, p. 55). Buckley et al. (2006) compared data of the participants in the 1999 study to each other, separating data by whether students were educated in special or mainstream schools. The students in the inclusive educational placement had a mean gain of more than three years in reading and writing skills, a mean gain of two years and six months in expressive language, and exhibited less significant behavior difficulties compared to the students who attended special schools. Both groups were found to have similar daily living skills which included money management, toileting, preparing meals, and dressing (Buckley et al., 2006). Buckley et al. (2006) further compared data from the 1999 study to the 1987 study only for the students educated in segregated special schools based on the assumption the 1999 group should have some educational gains as a result of improved academic programs at these schools. Results showed "no improvements in 1999, when compared with 1987, for spoken language skills, reading, general knowledge and overall school achievement" (Buckley et al., 2006, p. 58). Writing was the only area found to have "small gains" (Buckley et al., 2006, p. 58).

The benefits of inclusive education have been found to increase as the Intelligence

Quotient (IQ) score decreases (Canadian Council on Learning, 2009). Specifically, an inverse
relationship between educational gains and the category of ID (i.e., mild, moderate, severe, or
profound) has been found (Canadian Council on Learning, 2009). Secondary data analysis of the
National Longitudinal Transition Study-2 (NLTS2) by Bouck (2012) showed students with
moderate to severe ID received a majority of core academic instruction which included
language arts, mathematics, science, and social students in a special education setting. Time

spent in the special education setting for core courses depended on the content area and ranged from 96.6% to 100% (Bouck, 2012). Students with moderate to severe ID taking art, drama, music, and/or physical education were more likely to do so in the general education setting compared to the core academic courses, but the special education setting was still the dominant setting for these electives with a range of 78%-79.6% of students with moderate to severe ID taking these courses outside of the general education classroom. In summary, students who would gain much from inclusive education are often the students educated outside of general education settings.

In another study by Bouck (2017) reviewing curriculum, findings indicated emphasis in the general education environment was on academic curriculum and focus on functional curriculum was dominant in more restrictive placements. Bouck (2017) defined a functional curriculum as the development of skills related to independent living with components that often include instruction related to money management, navigation, vocational education, functional academics, and daily living tasks. An academic curriculum was described briefly as being the same as the general education curriculum which focuses on mathematics, social students, language arts, and science.

Numerous studies show lack of academic preparedness and not being "college-ready" can negatively affect PSE completion rates (Bahr, 2012; Crisp & Delgado, 2014; Melguizo, Bos, & Prather, 2011; Nakajima, Dembo, & Mossler, 2012). In a report by the Texas Higher Education Coordinating Board (THECB) (2016) regarding students with ID at public colleges, "underpreparation" of students was reported as an important barrier to PSE (p. 1). However, in an earlier study by Bouck and Joshi (2012) using data from the NLTS2, the type of curriculum

(functional or academic) was not found to be a predictor variable for engagement in PSE for students with mild ID. This seems contrary to a later statement by Bouck (2017) that stated the following:

. . .[S]tudents who wish to attend postsecondary education should spend a significant portion of their day in general education settings receiving more academically-oriented content. Those with goals towards independent living should spend more time in special education settings receiving functional curriculum. (p. 375)

In another study by Bouck (2012) reviewing instructional location placements, curriculum, and post-school outcomes including PSE where results showed no statistically significant difference between students with ID who received a functional versus an academic curriculum on later PSE attendance; it was noted students with ID who received an academic curriculum had higher frequencies than students with ID who received a functional curriculum. Table 2 in this research article showed 13.5% of students with moderate to severe ID who received an academic curriculum attended PSE, while 4% of students with the same diagnosis who received a functional curriculum did the same. Bouck (2012) explained the lack of statistically significant differences "is not to suggest that curriculum is not important or should be disbanded for students with moderate/severe ID; rather, a deeper and broader analysis is needed to connect students' in-school experiences with success post school" (p. 1182).

Another benefit of inclusive education in the general education setting is related to navigational skills. Although functional curriculum, which often includes navigational skills (Bouck, 2017), is found in special education settings (Bouck, 2012), self-contained educational placements may not encourage independent navigation (Griffin & Papay, 2017). These skills include the ability to use public transportation and navigate campuses including independently following a changing class schedule. Students in mostly self-contained educational placement

settings may remain in the same academic classroom most of the school day and have adult assistance transitioning to elective classes, lunch, and buses or other transportation. As a result, students in self-contained dominant academic placement face challenges navigating college campuses since independent navigation skills may not have developed at the high school campus (Griffin & Papay, 2017).

2.9.2 Extracurricular and Parental Involvement in High School

Participation in extracurricular activities and parental involvement have been tied to greater academic achievement including PSE enrollment and attainment (Barron, Ewing, & Waddell, 2000; Tierney & Auerbach, 2005; Wilder, 2013). The NLTS series collected data on secondary students with disabilities in areas of known indicators linked to post-high school success measures of employment and PSE which included student participation in IEP meetings, student involvement in extracurricular activities, and parental involvement. Student participation in IEP meetings is part of the broader literature on IEP transition planning and goals (Liu et al., 2018) and will be explored independently in this chapter under the section titled "Public School Transition Planning and Goals."

2.9.2.1 Extracurricular Activities

Volume three of the NLTS 2012 report which includes data on students with and without disabilities, showed students with ID have become more involved in public school sponsored extracurricular activities with an upward growth between 2003 and 2012 from 36% to 56% participation rate in sports and clubs (Liu et al., 2018). This is similar to that of students with disabilities having an IEP who have a 64% participation rate but lags behind peers without

disabilities who have an 81% participation rate (Lipscomb et al., 2017a).

2.9.2.2 Parental Involvement

The NLTS 2012 showed parental involvement overall has increased, with the exception in the area of homework assistance, since 2003 for students with ID (Liu et al., 2018). This is important as parental involvement in education has been found to be correlated with enrollment in PSE for students with disabilities (Wagner, Newman, & Javitz, 2014). The NLTS 2012 also showed parents of students with disabilities having an IEP were more likely than parents of students without disabilities to attend parent-teacher conferences (83% versus 65%) and to help their child with homework on a weekly basis (62% versus 54%) but were less likely to attend a school or class function (58% versus 71%) and volunteer at the school (22% versus 28%) (Lipscomb et al., 2017a).

The NLTS 2012 showed parents of students with ID were less likely to volunteer at school (19%) than parents of students without disabilities and parents of students with disabilities (collectively), but were more likely to attend a parent-teacher conference (84%) compared to those same parent groups (Liu et al., 2018). Parents of students with ID were also more likely than parents of students without disabilities but less likely than parents of students with disabilities to assist with homework on a weekly basis (59%). This may or may not be an important finding as homework assistance has not been found to be a strong predictor of academic achievement, unlike parental expectations (Wilder, 2013). In summary, students with ID lag behind their peers without disabilities in extracurricular participation and have parents less involved in volunteering at school but more involved in parent-teacher conferences.

Additional parental factors associated with post-school outcomes such as educational

attainment, income, marital status, and employment will be discussed later in this chapter under the section titled "Parental Factors on PSE Attainment."

2.9.3 Public School Transition Planning and Goals

Going to college may not be viewed as an option for many individuals with ID (Hart, Grigal, & Weir, 2010). Prior to 1975, students with ID were denied the opportunity to go to elementary and secondary school in many locations in large part stemming from no federal legal requirement granting access to general education for students with disabilities (U.S. Department of Education, 2007). With the change to mandatory elementary and secondary education, grew the natural progression of students with disabilities desiring PSE (Hart et al., 2010). Under IDEA, each student who has an IEP must receive transition services in pursuit of one of the listed IDEA transition goals of which PSE is an option.

Bouck (2017) explained, "a student's desired adult life outcomes shape the individualized educational experiences for the student in school to help him or her achieve [postschool] goals" (p. 374). Having desires shape experiences is related to self-determination (Bouck, 2017). If this was occurring, then more students with ID would be accessing higher education at rates greater than the estimated 11% since the NLTS 2012 reported 50% of transition-age students with ID indicated an expectation to obtain PSE after high school (Lipscomb et al., 2017b).

College attendance preparation for students with ID differs from some of their peers.

Students without disabilities have been shown to be influenced by high school counselors when preparing for the transition from high school to college (Bryan, Moore-Thomas, Day-Vines, Holcomb-McCoy, 2011; Woods & Domina, 2014). Griffin and Papay (2017) reported special

education teachers, not high school counselors, are often the first source families of students with ID turn to when seeking information about college. These teachers are often members of IEP committees which have the legal mandate to plan transition for students with disabilities receiving special education services.

Students with ID who qualify for and receive special education services through a LEA plan, in part, for post high school activities with their assigned IEP committee. The 2004 amendments of the Individuals with Disabilities Education Act (IDEA) mandates transition planning occur annually starting no later than age 16 (Liu et al., 2018). This transition planning is done during IEP meetings attended by a committee of team members. The team legally must include a teacher, administrator, guardian/parent(s), and the student; but the guardian/parent and student can waive the right to attend the meeting (Liu et al., 2018). Rarely will IEP transition planning meetings include a high school counselor (Liu et al., 2018; U.S. Department of Education, 2007).

During transition planning, IEP committees must consider student strengths and interests to develop an IEP that includes measurable goals for the transition from high school into work, the community, and/or postsecondary programs (Liu et al., 2018; U.S. Department of Education, 2007). In a study by Grigal, Hart, and Migliore (2011) looking at IEP goals via secondary data analysis of the NLTS2, the "most frequently reported goal on students with ID's IEP was to prepare for independent living (50%) followed by competitive employment (46%)" (p. 4). Approximately 11% of IEP goals involved attending 2- or 4-year colleges for students with ID. If a student had a disability other than ID, IEP goals to attend a 2- or 4-year college were significantly higher (58%) (Grigal, Hart, & Migliore, 2011). These findings are similar to

those found in a qualitative study of students with autism spectrum disorder where students with an additional diagnosis of ID had families who reported involvement with service agencies while those without ID were guided to PSE (Anderson & Butt, 2017). In this study, the students who went to college participated in a "meaningful" way at their IEP meetings, which alludes to the presence of self-determination (Anderson & Butt, 2017, p. 3032).

Per the 1997 reauthorization of IDEA, students with an IEP are to be invited to IEP transition planning meetings (Wei, Wagner, Hudson, Yu, & Javitz, 2016). Students can waive their legal right to attend IEP transition meetings and/or may attend without participating in a meaningful way as described above. National survey results from the NLTS 2012 showed less than half (44.7%) of 17 to 18-year-old students with ID provided input in their own IEP and transition planning (Lipscomb et al., 2017b). Involvement decreased to 38.3% for students with ID age 19 or older who were still receiving special education services through the LEA (Lipscomb et al., 2017b). Wei et al. (2016) found in a study with students with autism spectrum disorder that students who participated in their transition planning were more likely to meet the goal of accessing higher education compared to students who did not participate in their transition planning.

Grigal, Hart, and Migliore (2011) found that for students with ID, the goals most frequently on IEPs were directed at attaining and retaining employment, but employment-specific goals were not the IEP goals that correlated with the greatest employment rates and wage earnings. Goals for PSE and receiving such education at 2- or 4- year colleges was "the only predictor associated with a greater likelihood of employment for students with ID" (Grigal, Hart, & Migliore, 2011, p. 6). Students with ID who completed a college program were

approximately twice as likely to gain employment and earn twice as much compared to students with ID with no PSE. The IEP transition goals, formulated years before graduation, on students' education plans are determining outcomes which for students with ID means being among those least likely to enroll in PSE (Grigal, Hart, & Migliore, 2011).

Reasons for the lack of PSE related IEP transition goals identified in the research include:

(a) members of IEP committees infrequently involved higher education representatives; (b) vocational rehabilitation counselors were the most common professionals participating (Grigal, Hart, & Migliore, 2011); and (c) information about PSE options was either not shared or insufficient (Griffin et al., 2010; Martinez, Conroy, & Cerreto, 2012). In survey research by Griffin et al. (2010) of 108 family members who had a student with ID and/or a developmental disability in transition planning, results indicated parents of students with ID were mostly positive about their child attending a PSE program, but educators were less supportive and did not provide sufficient guidance. These factors may partially explain why Grigal et al. (2015) believe it is "vital" to inform families of students with ID about college programs that serve this student population (p. 31).

Some college programs take on the responsibility to inform families of postsecondary education options for students with ID. Grigal et al. (2015) reported over 50% of TPSIDs participated in recruitment and outreach activities geared toward families of potential students for the academic 2013-2014 year. These recruitment and outreach efforts included "[distributing] marketing materials, [presenting] to local schools, [operating] a . . . website, [participating] in transition fairs, [offering] tours . . . , [presenting] at parent advocacy and support groups, and [including] information" about the programs in college marketing materials

(Grigal et al., 2015, p. 31). Staff positions with a title of marketing, recruitment, or similar were not listed in the report making it unclear which staff members engaged in these tasks.

2.9.4 Parental Factors on PSE Attainment

Bouck (2017) identified families as being "very important in the education and lives of" students with ID (p. 377). Parental involvement in education specifically is positively correlated with enrollment in PSE for students with disabilities (Renn & Reason, 2013; Wagner et al., 2014). As discussed earlier, parents of students with ID are more likely than parents of children without disabilities to be involved in such activities as attending parent-teacher conferences and assisting with homework (Lipscomb et al., 2017b). Parents of college students with developmental disabilities have also been found to provide significant help to their children by engaging in a range of support services (Anderson & Butt, 2017). The areas parents of students with disabilities tend to lag behind parents of students without disabilities are related to factors such as being a single-parent household and the "three main predictors . . . in the sociological literature on college enrollment" which include "parent education, parents' educational aspirations for their children, and parental encouragement for college" (Tierney & Auerbach, 2005, p. 41).

2.9.4.1 Parental Expectations

Parental expectations have been found to have a strong relationship with academic achievement (Wilder, 2013) and future enrollment in college for the general student population (Renn & Reason, 2013). Using NLTS2 data, Papay and Bambara (2014) found parental expectations of PSE for students with ID were a particularly strong predictor of success in

reaching this goal. Volume two report of the NLTS 2012 showed 76% of students with disabilities having an IEP surveyed expected to obtain postsecondary education, with 50% of students with ID indicating this expectation (Lipscomb et al., 2017b). Parents of students with disabilities having an IEP were also surveyed inquiring about their expectations for their children and 61% of these parents expected their children to obtain PSE. Parents of students with ID were the lowest of all the disability subgroups with 32% indicating the expectation their son/daughter would obtain PSE (Lipscomb et al., 2017b). It appears students with disabilities may have higher expectations for obtaining PSE than their parents, and parents of students with ID are the least likely parent group of students with disabilities to expect their children to obtain PSE.

2.9.4.2 Parental Education Level

Other familial factors also influence the pursuit of higher education. According to the NLTS 2012, students with disabilities having an IEP were the least likely (26%) to have one parent who earned a four-year degree or higher compared to students without disabilities (37%) (Lipscomb et al., 2017a, p. v). This is important because students who have at least one parent, with data from the Panel Study of Income Dynamics showing particularly the mother's education level has the larger impact (Ziol-Guest, Duncan, & Kalil, 2015), in the home with a college education when controlling for family income are more likely to go to college compared to students who do not have one or both parents graduate from college (Renn & Reason, 2013).

2.9.4.3 Single Parent Households

Sixty-three percent of students with disabilities having an IEP in the NLTS 2012 study

were reported as living in households where their parents were married "or in a marriage-like relationship" (Lipscomb et al., 2017a, p. v). In comparison, 72% of students without disabilities reported likewise (Lipscomb et al., 2017a). According to data from the longitudinal study called Panel Study of Income Dynamics, less than 15% of students who come from a single-parent household complete college compared to close to 40% of students from two-parent families (Ziol-Guest et al., 2015).

2.9.5 Poverty, Affordability, and Cost

Zusman (2005) believed poverty was "the biggest barrier to college attendance" for students with ID (p. 130). At the time Zusman wrote this, options to supplement cost for students with ID going to college included the following funding sources: (a) IDEA for students still receiving services in a dual credit program with the local school district, (b) a state vocational rehabilitation and/or disability services agency, (c) private grants or scholarships, and (d) Medicaid. On August 14, 2008, the reauthorization of the Higher Education Opportunity Act (HEOA) (2008) (P. L. I 10-315) allowed individuals with ID to be eligible for additional funding sources including Pell Grants, Supplemental Educational Opportunity Grants, and the Federal Work-Study Program (Lee, 2009; Think College, 2014).

Despite access to financial assistance as outlined in the HEOA starting in 2008, Grigal et al. (2015) reported students and/or students' families paid the majority of the cost of tuition (55%) and non-tuition costs (71%) for TPSIDs in 2013-2014. Next to private pay, state vocational rehabilitation agencies funded 16% of tuitions, and scholarships funded the next highest percentage at 13% (Grigal et al., 2015). The state vocational rehabilitation agencies can provide these funds in part due to the Workforce Innovation Opportunity Act (WIOA) passed in 2014

which allows support for training that leads to "industry recognized post-secondary credentials" (Employment and Training Administration, n.d., para. 10). The WIOA states "vocational and other training services...encompass tuition and other services for students with intellectual or developmental disabilities in Comprehensive Transition and Postsecondary Program for Students with Intellectual Disabilities [referred to as CTP], as defined by the [HEOA]" (Office of the Federal Registrar, 2016, p. 55678). States' application of the WIOA varies in deciding financial support to students with disabilities for PSE (Smith Lee et al., 2018). Inconsistent application of the WIOA, reliance on private pay, and imposed limits on financial aid options under the HEOA fail "to address the financial barriers that many families face" and/or results in fewer financial options and more limits on collegiate choice compared to students without ID (Griffin & Papay, 2017, p. 414).

The familial financial barriers referenced by Griffin and Papay (2017) include the fact that individuals with an ID and their families face poverty at higher rates than their non-disabled peers (Emerson, 2007; Lipscomb et al., 2017a; McDonald, Keys, & Balcazar, 2007). Liu et al. (2018) showed an increase in poverty-related indicators between 2003 and 2012 for students with ID which included a rise in those living in low-income households (62% to 72%), living in single-parent homes (36% to 43%), and having neither parent employed (28% to 32%). Students with disabilities were also less likely to have at least one parent working a paid job (80%) compared to students without disabilities (87%) (Lipscomb et al., 2017a, p. v). In survey research about students with ID by Griffin et al., (2010), 36% of participants reported finances as a barrier to postsecondary education.

The cost of attendance influences students' college choice and enrollment in PSE

(Engberg & Allen, 2011; NCES, 2018). Students from low-income households enroll in college at a rate of about 50% less than their peers who come from families earning \$100k or more (Engberg & Allen, 2011). *The Condition of Education Report 2019* showed PSE enrollment decreased as socioeconomic status decreased, and 32% of students in the 2009 ninth grade cohort belonging to the lowest fifth socioeconomic status bracket enrolled in college within one year of exiting high school (McFarland et al., 2019). Comparatively, 79% of this same cohort in the highest fifth socioeconomic status bracket enrolled in college within one year of exiting high school. Given these findings, high poverty rates for families and students with ID may impact the pursuit of higher education. McDonald et al. (2007) reported an additional concern for students with ID living in poverty as they have fewer resources to use when addressing educational and other challenges related to their impairment.

2.9.6 Health and Communication

Another challenge students with disabilities may face is related to health. The presence of chronic health conditions and mental health conditions are correlated with lower collegegoing behavior and persistence once pursuing higher education (Boyraz, Granda, Baker, Tidwell, & Waits, 2016; Boyraz, Horne, Owens, & Armstrong, 2016; Vaughn, Salas-Wright, & Maynard, 2014). Survey results from the NLTS 2012 showed 30% of students with disabilities having an IEP had chronic physical or mental health conditions, and 9% of students without disabilities reported likewise (Lipscomb et al., 2017a). Of students with ID, 37% were shown to have a chronic mental or physical health condition.

Difficulty communicating is another challenge that is higher among students with ID (Brahm et al., 2014). The NLTS 2012 showed 29% of students with disabilities having an IEP had

difficulty communicating, compared to 4% of students without disabilities (Lipscomb et al., 2017a). For students with ID, this issue was more prevalent with 54% reporting difficulty with communicating (Liu et al., 2018). In terms of receptive language, the NLTS 2012 showed 44% of students with an IEP had difficulty understanding others, compared to 7% of students without disabilities (Lipscomb et al., 2017a). For students with ID, 67% reported having difficulty with receptive language (Liu et al., 2018). In summary, the NLTS 2012 reported more than half of the students with ID have difficulty with receptive and/or expressive communication.

Individuals with ID may have difficulty describing their experiences and communicating their preferences (Taylor, 2018). Specifically, individuals with ID have been found to have difficulty with narrative language competence which is "the ability to generate or retell a personal or fictional story" (Channell, McDuffie, Bullard, & Abbeduto, 2015, p. 1). The difficulty with describing past experiences may in part be related to memory (Taylor, 2018), but also is related to challenges with narrative coherence including sequencing events (Barton-Hunlsey, Sevcik, Romski, 2017) and narrative macrostructure (Channell et al., 2015).

2.9.7 College-Going Preparation

The first comparison report of the NLTS 2012 which compares students with and without an IEP showed students with disabilities collectively "lag behind their peers in planning and taking steps to obtain postsecondary education" (Lipscomb et al., 2017a, p. ii). Students with ID, being a unique subgroup of students with disabilities, "lag behind their peers" in specific ways regarding college preparation. Some of the issues are access to quality schools, taking advanced secondary courses, graduating with a regular high school diploma, and taking/performing above cut scores on college entrance exams.

2.9.7.1 Access to Quality Schools

College-going culture, instruction from highly qualified teachers, and better resources are qualities likely to be found in schools with a higher tax base (Renn & Reason, 2013). These school characteristics have been associated with college-going behavior (Perna, 2005; Renn & Reason, 2013). The NLTS 2012 showed 27% of students with disabilities having an IEP attended low-performing schools which were described as schools "with an average math and reading proficiency rate in the lowest 25 percent of schools in the same state" (Lipscomb et al. 2017a, p. vi). In comparison, 24% of students without disabilities attended low-performing schools (Lipscomb et al., 2017a). Disability-specific data showed students with ID were the second most likely disability subgroup to attend a low-performing school (34%). Students served under the IDEA category of "deaf-blindness" had the highest attendance at low-performing schools with 38% doing so (Lipscomb et al., 2017a).

2.9.7.2 Dual Credit Course Completion

Sometimes high school students take college credit bearing courses that may be transferable to both 2- and 4-year institutions of higher education (IHEs). These courses may be dual credit courses where credits are earned simultaneously in both a LEA and institution of higher education, as well as Advanced Placement courses which are high school credit courses that allow for college credit to be earned once a student takes and receives a specific score on an Advanced Placement exam upon course completion. In a study of 115,000 students, Taylor (2015) showed of the students who participated in community college dual credit or dual enrollment courses while in high school, 91% later enrolled in college. Comparatively, 63% of students who did not participate in these college credit bearing courses while in high school

later enrolled in college. The NLTS 2012 showed students with disabilities having an IEP were less likely to take high school courses that offered college credit than students without disabilities while in high school (9% and 29%, respectively) (Lipscomb, et al, 2017a). This may be related curriculum tracking and the practice of "ability grouping" within LEAs (Perna, 2005, p. 126). The NLTS reports did not provide information on participation in college credit bearing courses by disability subgroup.

2.9.7.3 Academic Performance

Emphasis on high academic performance at the high school level for some IHEs' admittance criteria may be another barrier. Students with ID may have deficits related to reading and other academic skills (APA, 2013). As discussed earlier, academic performance also may be negatively impacted by having dominant educational placement outside of the general education classroom (Buckley et al., 2006; Canadian Council on Learning, 2009). Curricular tracking and ability grouping has been shown to result in less rigorous academic preparation in students not in "high-ability" groups or classes (Perna, 2005, p. 126). Students with ID, by the nature of their disability, also may struggle with skills related to academic performance generally such as memory and reasoning—areas assessed using IQ tests (Colom, Escorial, Shih, & Privado, 2007; Kaufman, 2009).

2.9.7.4 Graduating with a Regular High School Diploma

A key step in accessing higher education is successfully exiting secondary school as evidenced in part by receiving a high school diploma or its equivalent. Students with disabilities are more likely than their peers without disabilities to take longer to graduate from high school

and are less likely to complete high school (Butrymowicz & Mader, 2017). The OSEP (2018) reported the graduation rate for students with disabilities was 69.9% and the dropout rate was 17.5% for the 2015-2016 academic year. This graduation rate is an improvement of almost fourteen percentage points compared to the 2006-2007 academic year. When accounting for disability subgroups, students with ID were the least likely disability subgroup to graduate with a regular high school diploma (OSEP, 2018).

The pursuit of higher education for students with ID has been found to be hindered by the type of credential received from high school—diploma or an alternative (Grigal, Hart, & Weir, 2012). A regular high school diploma is described as "the standard high school diploma awarded to the preponderance of students . . . that is fully aligned with State standards" (OSEP, 2017, p. 49). It does not include diploma equivalents such as general equivalency diplomas, certificates (related to completion or attendance), or "similar lesser credential[s], such as a diploma based on meeting IEP goals" (OSEP, 2017, p. 48). Using data from state files for the 2017-2018 school year—excluding Vermont for which data cells showed "data not available" for all categories—majority (51.6%) of students served by special education having the diagnosis of ID who exited high school that year either received a certificate (31.9%), dropped out of school (14.3%), or "reached maximum age" (5.4%) causing them to age out of services (U.S. Department of Education, n.d.). The same data set showed less than half (47.9%) of these students graduated with a regular high school diploma (U.S. Department of Education, n.d.). As one article highlighted in The Hechinger Report, students who exit the public educational system without a regular high school diploma face barriers to college admissions and employment (Klein, 2017).

2.9.7.5 College Entrance Exams

Students with ID may face barriers to accessing college due to institutional admittance requirements including scoring above particular cut scores on college entrance exams.

Although general admission requirements vary by institution (Plotner & Marshall, 2014), such requirements typically include having earned a standard high school diploma and performing above cut scores on college entrance exams (i.e., the ACT and SAT) (Grigal, Hart, & Weir, 2012). The NLTS 2012 showed 42% of students with disabilities having an IEP reported previously taking any college entrance or placement test (Lipscomb et al., 2017a). In comparison, 70% of students without disabilities engaged in this college preparatory step. The NLTS reports did not provide this information by disability subgroup.

Performing above cut scores on entrance exams is often a part of admissions considerations for 4-year institutions but not 2-year institutions. Not taking college entrance or placement tests results in students "only being eligible for open-access institutions...almost all of which are community colleges" (Blagg & Chingos, 2016, p. 12). In addition to the community college, students with ID may access higher education regardless of standard admission requirements by attending HEPSSIDs including CTPs and TPSIDs. These programs "target participants who do not meet the academic program admission requirements used by traditional degree-seeking students" (Plotner & Marshall, 2014, pp. 50-51).

2.9.8 Feasible College Options

The first college transition programs to support students with ID appeared in the 1990s, and by 2005 there were approximately 50 colleges and universities with HEPSSIDs (Schmidt, 2005). With the passing of the HEOA in 2008, the appropriation of grants to TPSIDs, and other

legislative and social changes, the number of HEPSSIDs rose to 284 programs in 2021 (Think College, n.d.-a). One hundred and nine of these HEPSSIDs were housed at community colleges (Think College, n.d.-a), which is roughly 10% of all community colleges nationally (AACC, 2019). While this increase in HEPSSIDs expands collegiate options for students with ID, the availability of programs is still limited when compared to the broader national higher education landscape where there are approximately 4,324 postsecondary institutions (The Carnegie Classification of Institutions of Higher Education, 2019).

2.9.8.1 Comprehensive Transition Programs

Think College National Coordinating Center (TCNCC) approves programs as CTPs that meet the requirement to "[p]rovide at least 50% of the program time in academics (college courses for credit or for audit, or internships) with other students without intellectual disabilities" (Think College, n.d.-c, para. 1). Designation as a CTP is important as this is required for students with ID to receive federal financial aid which includes work-study programs and grants but not student loans (Papay et al., 2018). In a report by the THECB (2016) regarding students with ID at Texas public colleges, "lack of financial aid for students enrolling in certain types of transitional programs," referring to programs not approved as CTPs, were reported barriers in accessing PSE (p. 2). In summary, if a student wants to attend a college that is not an approved CTP, then the student may not have access to federal financial aid. For students with ID who have higher poverty rates compared to their peers without disabilities, access to grants may be especially important in financing higher education (Liu et al., 2018; Zusman, 2005).

While attending a CTP allows students to access higher education and federal financial aid, the programs may have their own exclusionary criteria. Admission criteria at some of the

CTPs listed in the TCNCC database restrict applicants to those diagnosed with a mild severity level of ID (Bouck, 2014). Although this would include approximately 85% of students with ID, it excludes 15% of students with ID. In addition, some CTPs only admit students who are still eligible for funding under IDEA. This eligibility, which continues up to age 22, requires students to not have already graduated from high school (Bouck, 2014). This practice thus excludes students who have "aged out" of special education services with their LEA and/or have graduated from high school.

2.9.8.2 Geographic Location

Geographic location has been found to impact college choice (Hillman & Boland, 2019). Approximately two-thirds of undergraduate college students attend an institution within 25 miles of their permanent home address with community colleges students being the most likely to live within 25 miles of campus at a rate of 83% (Hillman & Boland, 2019). Socioeconomic status has also been linked to college location choice with students from low socioeconomic backgrounds being more likely to attend an institution closer to home compared to students from high socioeconomic backgrounds (Hillman & Boland, 2019; Wexler, 2016). Geographic location may be particularly important for students with ID pursuing higher education who have been shown to access higher education via the community college, have higher poverty rates, and who may need to receive functional and academic support services provided by their social network including their parents (Anderson & Butt, 2017; Emerson, 2007; Schmidt, 2005).

When seeking to access higher education by attending a HEPSSID, geographic location may limit higher education access and choice for students with ID. As of August 13, 2021, ten states had ten or more HEPSSIDs—New York (32), Florida (26), Massachusetts (19),

Pennsylvania (18), California (17), Maryland (15), Illinois (15), North Carolina (15), Texas (15), and New Jersey (10) (See Table 2) (Think College, n.d.-a).

Table 2

Number of Higher Education Programs Designed to Serve Students with ID by State

| State | Number of HEPSSIDs | State | Number of HEPSSIDs |
|---------------|--------------------|----------------|--------------------|
| Alabama | 8 | Montana | 2 |
| Alaska | 1 | Nebraska | 2 |
| Arizona | 2 | Nevada | 2 |
| Arkansas | 5 | New Hampshire | 2 |
| California | 17 | New Jersey | 10 |
| Colorado | 4 | New Mexico | 2 |
| Connecticut | 6 | New York | 32 |
| Delaware | 1 | North Carolina | 15 |
| Florida | 26 | North Dakota | 1 |
| Georgia | 8 | Ohio | 8 |
| Hawaii | 1 | Oklahoma | 2 |
| Idaho | 3 | Oregon | 1 |
| Illinois | 15 | Pennsylvania | 18 |
| Indiana | 7 | Rhode Island | 2 |
| lowa | 5 | South Carolina | 5 |
| Kansas | 2 | South Dakota | 1 |
| Kentucky | 2 | Tennessee | 6 |
| Louisiana | 5 | Texas | 15 |
| Maine | 1 | Utah | 3 |
| Maryland | 15 | Vermont | 3 |
| Massachusetts | 19 | Virginia | 3 |
| Michigan | 5 | Washington | 3 |
| Minnesota | 4 | West Virginia | 1 |
| Mississippi | 1 | Wisconsin | 5 |
| Missouri | 3 | Wyoming | 0 |

Source: Think College (n.d.-a) "College Search" Database (Retrieved August 13, 2021).

The number of HEPSSIDs in a state is not necessarily reflective of disability population. For example, New York has more than double the number of HEPSSIDs than Texas (32 and 15, respectively), but Texas has approximately 55% more people with a disability than New York (CDC, n.d.-c; Think College, n.d.-a).

Twenty-five states had three or fewer HEPSSIDs as of August 13, 2021 (Think College, n.d.-a). When nearby programs do not exist, Papay and Griffin (2013) recommend educators supply families with information on program development. Families are then in turn supposed to use that information to approach colleges with a request to begin a program. This type of advocacy effort may not be feasible for parents, although it likely was suggested as it has successfully occurred in the past (Shah, 2011).

2.9.8.3 Housing

Most adults with ID live with family members (Larson, Scott, & Lakin, 2008). For students seeking on-campus housing options, availability of housing may be a potential barrier to accessing higher education for students with ID. If a student chooses to attend one of the 284 HEPSSIDs, less than half (112) offer housing for students with ID with 7 of those being at community colleges (Think College, n.d.-a).

2.9.8.4 Curriculum

Students may also face difficulty pursuing higher education depending on desired program of study. Pursuing a desired program of study has been shown to be rated as an important institutional factor on students' college choice along with academic quality and reputation (NCES, 2018). This is a limiting factor that warrants discussion and inclusion in this

section even though not a direct barrier to accessing higher education, as it does limit the access a student has to courses of study and majors offered by IHEs.

Traditionally, transition programs for students with ID limited students to training in menial jobs related to "food, filth, or flowers," meaning fast-food, janitorial, or landscape work (Schmidt, 2005, p. 2). While HEPSSIDs offer training and education in a wider range of disciplines; their differences in curriculum offerings, rigor, and program design may not support students' desired areas of study (Grigal, Hart, & Weir, 2012). Papay and Griffin (2013) encourage administrators to use TCNCC to find appropriate models for program design and development. However, some programs may have been founded before the production of these resources or may not utilize them. So, while a traditional college student may enter higher education with an array of choices regarding an area of study, a student with ID accessing higher education via a HEPSSID may be limited depending on design and curriculum.

A goal of Congress in forming the TCNCC was to have the entity create "recommended standards" for the inclusive postsecondary education of students with ID (Grigal et al., 2015, p. 2). Resources are made available by TCNCC to help implement the created standards. The grant-funded TPSIDs are more likely to have different courses of study available because these programs have specific components that must be included in program design. Specifically, the U.S. Department of Education requires TPSIDs to support "services for the academic and social inclusion of students with intellectual disability in academic courses, extracurricular activities and other aspects of the IHE's [institution of higher education] regular postsecondary program" (U.S. Department of Education, 2010, p. 4). TPSIDs must also "focus on academic enrichment, socialization, independent living skills" and use "person-centered planning in the development

of the course of study for each student" (U.S. Department of Education, 2010, p. 4). The requirements for person-centered planning and academic inclusion are two drivers that lead to TPSIDs supporting access to many course offerings and courses of study available to typically enrolled college students at IHEs.

Comprehensive Transition Programs (CTPs) differ from TPSIDs in criteria required to meet CTP designation, although there are some similarities. The HEOA states CTPs need to "be offered by an institution of higher education that is participating in Title IV Federal Student Aid," "be delivered to students physically attending the institute of higher education," and "be designed to support students with intellectual disability in preparation for employment" (Think College, n.d.-c, para. 1). In addition, CTPs must have a curriculum structure that allows for "at least 50% of the program time in academics (college courses for credit or for audit, or internships) with other students without intellectual disabilities" (Think College, n.d.-c, para. 1). The curriculum may be "instructional time" that is merely "equivalent [to] clock or credit hours" which often results in the design of courses specific to the program (Think College, n.d.-c, para. 1). No requirement for person-centered planning and flexibility to design program-specific courses means CTPs may be limited to a few courses of study coordinated by the program instead including the variety of courses offered by IHEs.

Programs that are not CTPs or TPSIDs, referred to in this study as HEPSSIDs, have the most flexibility in program design and curriculum. These programs have no requirements for minimum time in academics with students without ID, do not have to meet criteria set forth in the HEOA, and may not use person-centered planning. As such, these programs vary widely from one another in course offerings, curriculum, and area of study offered (Thoma, 2013).

2.10 Outcomes of Higher Education for Students with ID

Bouck (2017) in a review of educational outcomes concluded "postsecondary education programs for students with mild intellectual disability provide for many, if not all, of the various research-supported and best practices for educating this population" (p. 376). Bouck is not alone in supporting PSE of this student population based on positive outcomes. Outcomes of PSE for students with ID found in the literature include increased employment rates and meaningful employment (Grigal et al., 2014; Grigal et al., 2015; Sheppard-Jones, Kleinert, Butler, & Whaley, 2018; Think College, 2018), expanded peer networks (Eisenman, Farley-Ripple, Culnane, & Freedman, 2013; Sheppard-Jones et al., 2018), increased community involvement (Sheppard-Jones et al., 2018), greater well-being (Hughson, Moodie, & Uditsky, 2006; Ryan, 2014; Sheppard-Jones et al., 2018), and development of independent living skills (Ryan, 2014).

2.10.1 Increased Employment Rates

Employment is an important outcome for individuals with ID as the employment rate tends to be low for this population. In 2011, the employment rate for individuals with ID ages 16-21 was 18% (Butterworth et al., 2013) compared to 91.8% for young adults without ID that same year (National Conference of State Legislatures, 2019). When accounting for adults with an intellectual or developmental disability regardless of age, the employment rate in 2014 was 17% (Papay, Trivedi, Smith, & Grigal, 2017).

Postsecondary education has been shown to increase the employment rate of individuals with ID. Think College (2018) reported students with ID "enrolled in higher education saw 135% increase in employment, compared to peers" (p. 1). Data from the

academic year of 2012-2013, showed 42% of students with ID obtained their first paid job while participating in a TPSID (Grigal et al., 2014). The length of time students attended TPSIDs was positively correlated with employment rates when viewing data from 2010-2014, meaning "the longer students attended, the more likely they were to be employed" (Grigal et al., 2015, p. 3). Grigal, Hart, Smith, Domin, and Weir (2016) in a review of TPSIDs for the 2014-2015 academic year found 40% of students were engaged in paid employment at the time of exit with 39% having paid employment while attending a TPSID. Looking at employment rates for students with ID who attended a TPSID during the 2015-2016 academic year, results were even higher with 61% having paid employment in the community one year after exiting the program (Papay et al., 2017).

Qian, Johnson, Smith, and Papay (2018) conducted a study looking at predictors of paid employment for 228 students with ID who attended community college TPSIDs between 2011 and 2015. Overall, 32% of the students in this study were employed while attending a TPSID earning at least minimum wage (employment at sub-minimal wage was not reported). This is lower than the reported 50% of students who had "prior employment experience" (Qian et al., 2018, p. 336). This could suggest employment rates decrease while students are in TPSIDs, students with ID with employment experience are more likely to enroll in TPSIDs, or some students cease working while enrolled in TPSIDs. The reason for the percentage change was not explored in this study but the results show employment rates higher than the national average for this population (Papay et al., 2017). Other results in the Qian et al. (2018) study showed attending social events, doing volunteer work, and taking only inclusive courses while attending a TPSID were activities with the strongest correlations to the outcome of current employment

with earnings at or above minimum wage.

2.10.2 Social Networks and Community Involvement

Individuals with ID have been shown to have smaller social networks compared to same-age peers which may limit relationships (Condeluci, 2014), social capital (Putnam, 2000), and employment opportunities (Eisenman et al., 2013). These social networks may also look differently than same-age peers and be comprised primarily of family members, other people with disabilities, and professional service personnel (Eisenman et al., 2013). Attending an inclusive TPSID program may increase the peer network of students with ID as seen in a study by Eisenman et al. (2013). The study showed the TPSID students' networks were also denser, meaning individuals in the students' networks were more connected with one another. A denser network is a shift from doing an activity with one person then another activity with another to having some of the same individuals present across various activities.

Sheppard-Jones et al. (2018) studied the outcomes of 19 students with ID (referred to as "student group") who accessed higher education via one of five different Kentucky college campuses that "participat[ed] in the state's supported higher education project for students with ID" (p. 70). Whether these were CTPs, TPSIDs, or general HEPSSIDs was not specified. The study's comparison group was 158 young adults with ID in Kentucky who took the same survey as the student group. Results showed the student group had favorable outcomes related to employment and positive quality of life indicators in areas of relationships, health, autonomy in choices regarding one's life, and community participation (Sheppard-Jones et al., 2018). Results showed the student group was more likely than the comparison group to report having friends (83% versus 54%), having a best friend (78% versus 62%), and being able to date (94% versus

39%). Engagement in exercise was higher for the student group versus the comparison group with 94% of the student group reporting exercising at least thirty minutes a day versus 44% of the comparison group (Sheppard-Jones et al., 2018). The student group was more likely than the comparison group to report having good health (83% versus 62%) and feel in control over how their free time was spent (100% versus 76%). The student group was also more likely than the comparison group to be involved in volunteer work (67% versus 24%) and be employed in the community (37% versus 13%). The comparison group was more likely than the student group to take at least one psychotropic mediation (69% versus 50%), chose where to work (35% versus 33%), chose what to buy (71% versus 63%), be alone with visitors (89% versus 72%), and not have their mail read without permission (3% versus 21%) (Sheppard-Jones et al., 2018). A limitation of this study was the researchers did not control for variables of family resources and quality of secondary schooling.

The findings by Sheppard-Jones et al. (2018) support ones found in an earlier participatory action research study by Hughson et al. (2006) which showed students with ID in Canada who participated in PSE experienced increased well-being, social inclusion, self-determination, and interpersonal relationships. A review of a TPSID at the University of Vermont indicated similar social benefits such as feeling included and accepted by staff and peers which increased emotional well-being (Ryan, 2014). One student remarked she was also able to better deal with stressful situations.

2.10.3 Skills Development

Growth in knowledge acquisition and skills development are other important results for students with ID who attend a PSE program (Grigal, Hart, & Weir, 2013; Ryan, 2014). Students

who attended the TPSID mentioned previously at the University of Vermont developed independent navigational skills and experienced academic inclusion with peers (Ryan, 2014). Unlike sheltered employment options, PSE increases knowledge in disciplines and areas of student interest alongside peers; this is especially true for students with ID attending HEPSSIDs that utilize person-centered planning (Grigal et al., 2013). Bouck (2017) stated PSE programs develop independent living and academic skills, whereas secondary school settings tend to offer either a functional or an academic curriculum for students with mild ID.

2.11 Summary

Yosso's (2005) cultural wealth model frames this qualitative study as students utilize different types of capital that influence the college-going pathway--aspirational, familial, social, navigational, resistant, and linguistic. In exploring the history of disability in America, it was evidenced how students with ID have been systematically excluded from and denied benefits of full participation in society including public education. This has changed largely in the past few decades with the gained access to public education, and the increase in college-going behavior among students with ID since the HEOA of 2008.

Of the approximately 2 to 8 million people in the U.S. with ID, few have accessed higher education, especially when compared to the overall college-going rate of other students with and without disabilities. The expectation to attend college is lower among students with ID compared to other student groups with and without disabilities, although preference has been shown for accessing higher education via the community college. Three ways students with ID are accessing higher education are as a traditional student, through a HEPSSID, or in conjunction with LEAs as part of transition under IDEA.

Factors found in the literature that impact college-going behavior among students with ID include affordability, viable college options including factors related to location and housing, IEP transition goals, educational preparation in primary and secondary school and the quality of these schools, high school extracurricular participation, parental involvement with schools, parental expectations, parental education level, parental marital status, students' health, obtaining a high school diploma, and taking college entrance exams. Postsecondary education of students with ID has been found to produce positive outcomes including increased employment rates and meaningful employment, expanded peer networks, increased community involvement, greater well-being, and the development of independent living skills including navigational skills. Increased employment rates are particularly important for this population that typically have employment rates estimated between 17-18%.

CHAPTER 3

METHODOLOGY

Students with intellectual disability (ID) are the least likely student disability population to go to college (Grigal et al., 2015; NCES, 2017). College attendance has increased for this population starting in the 1990s partly as a result of federally mandated public education since the 1970s. The Higher Education Opportunity Act (HEOA) (2008) with its authorization of federal financial support and focused efforts on expanding inclusive higher education for this population has resulted in significant growth in this area (Grigal et al., 2015; Think College, 2016). As of August 12, 2021, there were 284 higher education programs designed to serve students with ID (HEPSSIDs) in existence—a 1,036% increase since 2004 (Schmidt, 2005; Think College, n.d.-a).

Even with this growth, students with ID are still largely underrepresented in higher education (Bouck, 2014; Grigal, Hart, & Weir, 2011; NCES, 2017). Given the current, dominant transition pattern of individuals with ID from secondary school to unemployment (Bureau of Labor Statistics, 2018; Butterworth et al., 2013; Winsor et al., 2021), research is necessary to understand the cases where individuals with ID pursued and enrolled in higher education. The purpose of this qualitative study was to identify factors that influenced and enabled students with ID to pursue, access, and enroll in higher education, with a specific focus on community colleges given their open admissions policies and preference for these institutions by students with ID (Bouck, 2014; Grigal, Hart, & Migliore, 2011; NCES, 2017).

3.1 Research Questions

This study sought to explain the phenomenon of how students with ID successfully

pursued pathways to higher education via the community college post high school. The following central research question guided this study:

How have students with ID successfully pursued pathways to postsecondary education via the community college?

The following sub-question was used in relation to the central research question:

What obstacles have been overcome in pursuit of transition to postsecondary education via the community college for students with ID?

3.2 Research Design

Qualitative inquiry is warranted when there is a need for a "deeper understanding" of issues especially in areas that are fairly new or understudied such as college-going behavior among students with ID (Shank, 2002, p. 183). Creswell (2013) suggests using qualitative inquiry when the problem is complex, needs details to understand, and there is a need to identify factors not easily quantifiable. Case study research is a type of qualitative inquiry "which involves an empirical investigation of a particular contemporary phenomenon within its real-life context using multiple sources of evidence" (Robson, 1993, p. 146). Case study research is appropriate to use to gain "in-depth description and analysis of a bounded system" (Merriam, 2009, p. 40), when the focus is to understand "specific mechanisms and pathways . . . rather than revealing the average strength of a factor" and when each bounded system (case) is a phenomenon (Blatter, 2008, pp. 68).

3.2.1 Case Study Design

The single case study design is used when "there are no other cases available for replication" such as with a specific school, program, or person (Zainal, 2007, p. 2). Multi-case

(also called multiple case) study research involves "single case[s] . . . of interest . . . [that] share a common characteristic or condition . . . and [are] categorically bound" (Stake, 2006, pp. 5-6). This shared characteristic or condition, called *quintain* by Stake (2006), is what makes each case of interest. The quintain is how the individual cases are "categorically bound together" as a "group, category, or phenomenon" (Stake, 2006, p. 6). In multi-case research, both the individual cases and the quintain are studied.

This study utilized a multi-case design. Given the vast underrepresentation of this student population, each case of a student with ID accessing the community college is considered a phenomenon. Each case brought individual value to understanding pathways students with ID forge to the community college. By using a multi-case design, I was able to capture and present the uniqueness of the individual cases while simultaneously explaining this complex phenomenon across cases. Valuing both the individuality of the single cases and the interest in the quintain is shown in Chapter 4 through study results which include descriptions of the individual cases and the presentation of themes from cross-case analysis.

There are three types of multi-case studies—exploratory, descriptive, and explanatory (Yin, 2003). An exploratory case study is utilized when defining hypotheses for developing or future studies (Mills, Durepos, & Wiebe, 2010; Yin, 2003). A descriptive multi-case study results in a "complete description of a phenomenon within its context" (Yin, 2003, p. 5). Explanatory case study research primarily "investigat[es] and explain[s] complex phenomena" (Mills et al., 2010, p. 371), focusing on answering how the phenomena happened (Yin, 2003). This study took a predominantly explanatory approach with some attention to description, as seen in Chapter 4 with the individual cases, to better understand and explain the phenomena of how

students with ID created pathways to higher education via the community college.

3.2.2 Sampling

Sampling in multi-case studies involves two levels (Merriam, 2009). The first level is setting the criteria for cases to be studied; a process of identifying the unit of analysis, bounded system, or quintain (Merriam, 2009; Stake, 2006; Yin, 2003). The second level is selecting cases based on those criteria (Merriam, 2009).

The interest of this study was to gain a deeper understanding of student pathways resulting in college-going behavior among a specific disability subgroup—individuals with ID. The disability college student subgroup of students with ID attending the community college or a HEPSSID at a community college is the quintain. Each case is a "family unit" consisting of the individual with ID and at least one parent or legal guardian.

Inclusion of parents/guardians in this study is done for four reasons. First, parents/guardians may be familiar with previous educational goals, academic preparation, and transition plans. This is especially true for parents/guardians of students receiving special education services in public education as they are required to sign consent for special education services as outlined in IEPs drawn up yearly until the student receiving special education services exits the local public K-12 educational system. Second, parents/guardians may petition courts for guardianship, allowing the parent/guardian to make key decisions in the life of the individual with ID. Third, parent engagement has been shown to impact college-going aspirations, preparation, and behavior in marginalized and disability student populations (Anderson & Butt, 2017; Tierney & Auerbach, 2005). Lastly, individuals with ID may have difficulty with communication (Brahm et al., 2014), and parents have been found to be "familiar

listeners" who understand their child more than a listener unfamiliar with the speaker (Flipsen, 1995; Lagerberg, Hellström, Lundberg, & Hartelius, 2019; Van Doornik, Gerrits, McLeod, & Terband, 2018). In survey research of students with ID attending a college program in Kentucky involving 19 student participants with ID, one participant's parent filled out the survey by proxy (Sheppard-Jones et al., 2018). Although the reason was not given for this action, the parent was able to provide student information on a variety of quality-of-life indicators.

3.2.2.1 Participants

The sampling strategy utilized for this study in selecting participants was purposeful sampling (Merriam, 2009). Purposeful sampling involves "select[ing] a sample from which the most can be learned" to gain insight and understanding (Merriam, 2009, p. 77). While participant criteria were used to determine cases, the focus was on "[s]electing information-rich cases to study, cases that by their nature and substance will illuminate the inquiry question" (Patton, 2015, p. 264).

The main purpose of this study was to gain an in-depth understanding of the college-going pathway for individuals with ID who attended a community college or HEPSSID at a community college post high school. For this purpose, participant criteria included the following four "essential" criteria (Merriam, 2009, p. 77): 1) eighteen years of age or older and 2) completed, graduated, or exited from high school; 3) has an intellectual disability (i.e., was eligible for special education services by a local education agency (LEA) under the category of "intellectual disability," has ID listed as the disability determination with Social Security Administration, or has a condition associated with cognitive impairment such as Down syndrome); and 4) enrolled currently or previously as a student at a community college or in a

HEPSSID offered through a community college. This fourth criterion looked ideally for students who were currently enrolled and expanded to those enrolled recently, which was defined as the past three years.

It is important to note that Frank's case was initially included in this study as a pilot to evaluate interview protocols. It was used for this purpose which brought about the continued approach to interview parent/guardian participants before student participants. Frank is over 18 years old, exited high school, has ID, and attended the community college seven years ago. Although this meets essential participant criteria, the time he attended the community college was outside of the desired current to past three-year enrollment period mentioned above. His case was ultimately included in the results of this study as it proved to be information-rich and provided insight into differences between traditionally enrolled students and students who attended HEPSSIDs—a finding that emerged in light of data from Captain's case (Patton, 2015). Frank's enrollment in a university HEPSSID after the community college, also made this the only case to have a transfer component.

Criterion 4 allows for the inclusion of participants in HEPSSIDs as well as generally enrolled students because participants in a HEPSSID operated by a community college may or may not be regarded as an enrolled student with the institution. This might be the case in scenarios where students in HEPSSIDs are program participants only and not formally students with the college. Criteria 1, 2, and 4 ensured student participants exited high school and accessed higher education separate from dual enrollment arrangements through the LEA. All five student participants had exited high school with either a regular high school diploma, an alternative diploma, or a certificate (Smith Lee et al., 2018). One student participant, Jane,

exited high school with a certificate and moved into a transition program through her county's Office of Education while simultaneously and separately also enrolling in a HEPSSID at the community college (i.e., this student was not accessing higher education via a dual enrollment program). All five student participants attended the community college or HEPSSID for at least one semester.

Participant criteria for parents/legal guardians were assessed in conjunction with determining student participants and included the following: 1) are the parent and/or legal guardian of the student participant, and 2) participated in at least one IEP committee meeting while the student participant was still receiving special education services from the LEA (when applicable). This second criterion was included to increase the possible familiarity of the parent/guardian participant with supports and goals related to preparation by the LEA for transition post high school. The second criterion was not applicable in Minnie's case with Apple who was the legal guardian of her younger sibling, Minnie, and as such did not attend IEP meetings. The other four cases included parent participants where each had participated in at least one IEP meeting. Attending IEP meetings applied to these cases as all student participants attended public schools and received special education services.

Participants were solicited through multiple means. The first effort in recruitment involved creating a contact list of HEPSSIDs' directors found in the "Find a Program" Think College online database. Advanced search options of "2-year community college or junior college" under the "types of school" category, and "intellectual disability" under the "disability" category were used. This list produced 85 potential contacts, of which 71 were used to recruit participants. Twelve contacts were outdated; eight of those contacts were able to be updated

using online information and three were contacted by phone. Five listings were a repetition of the same program and/or contact person listed at different campuses/locations. One program only served students receiving IDEA funding through the LEA and another program was "community based" being outside the community college system. These two programs were excluded being outside of the criteria described earlier. Six programs were no longer in existence.

Recruitment started with emailing the first ten contacts on the program list generated as described above. Recruitment was halted after the first ten emails as the decision was made to submit an IRB modification to offer a drawing to participants. This change was feasible due to being awarded a UNT Bill J. Priest Center for Community College Education Dissertation Stipend in the amount of \$500 (USD).

When the UNT IRB approved the modification, recruitment resumed. Seventy-one contacts with HEPSSIDs were emailed. Each email included a personalized introductory message addressing each contact by name followed by the UNT IRB approved recruitment flyer in electronic format in the body of the email. Programs that did not respond were contacted a second time three months later by phone except for two programs that received a second email.

Additional recruitment efforts involved using professional connections. Think College and the Down Syndrome Guild of Dallas announced the study and how to participate in enewsletters. A former HEPSSID director reached out personally to three former colleagues who are current HEPSSID directors at community colleges asking for their cooperation in disseminating study participation information. The founder of Ruby's Rainbow, a nonprofit

organization providing college scholarships to individuals with trisomy 21, provided study participation information to potential participants. Additional efforts were made by contacting two Texas community college disability services office employees (one current and one former director), but neither of those contacts responded.

Snowball sampling, the practice of asking participants to refer other participants, was utilized to try to identify additional participants (Merriam, 2009). To protect disability status, the parent participants from the first four cases were asked to pass along information about the study and my contact information to other potential participants (instead of being asked to provide me information about other possible participants). Two parent participants responded with a desire to assist in this method of sampling, but no participants were generated from this effort. One parent could not think of a potential participant that fit the study criteria, so the parent asked a disability organization to disseminate information about the study. This disability organization contacted me and stated they would not assist with recruitment due to a general policy to not assist with research. Snowball sampling may not have been an effective recruitment strategy in this study, in part, because the results from the study show in each case the students were one of the only, or the only, among their peer group of individuals with disabilities to access higher education post high school.

To achieve depth and "reasonable coverage" (Patton, 2015, p. 314) while maintaining "the benefits of multicase study" (Stake, 2006, p. 22) the target number of cases was between four and ten. This range is suggested when using multi-case study research design so as not to have too much "uniqueness of interactivity" (Stake, 2006, p. 22). Recruitment efforts produced eight possible cases. Five of these cases met the criteria for participation, engaged in the data

collection process, and are included in the results of this study. The three remaining cases had parent participants that expressed a desire to participate via email. One potential parent participant withdrew after a medical issue developed with her spouse. Another potential parent participant and her daughter were found to not fit participation criteria during the screening interview portion of the recruitment process. The daughter had a developmental disability (autism spectrum disorder) but not an intellectual disability; the mother stated the daughter's global IQ score was about 85 or higher. The third potential parent participant had a student with trisomy 21 who received a scholarship from Ruby's Rainbow to go to the community college. The parent contacted me via email and stated a desire to participate. Two follow-up emails were sent to the parent and for an unknown reason there was no reply.

There were at least two participants (the individual with ID and his/her parent/guardian) per case. Three cases included the mother as the parent/guardian participant. One case included both the mother and the father as parent/guardian participants. One case was the student's adult sibling as the parent/guardian participant.

Due to the COVID-19 pandemic, data collection was required by UNT IRB to be done virtually. Doing data collection virtually meant recruitment was limited by location only with the bound of residing within the United States (done for consistency in the educational system and educational laws). This resulted in participants from different parts of the United States, and organically produced students residing in different major regions in the United States. Zoom conference software was used to conduct screening interviews, where the ability to consent was assessed, and for the recorded interviews. Using video conferencing software allowed for virtual face-to-face engagement; and the ability to see body movements (mostly upper body),

facial expressions, and a small area of participants' residences limited to what was seen in the background (which included outdoor patios, bedrooms, and kitchens). Table 3 shows demographic information for each student and parent/guardian participant by case. The request for age was not responded to by Chris and Evie for unknown reasons so this information was estimated using public information available online (i.e., birth years).

3.2.2.2 Colleges

Community college institutional type was selected for this study given multiple factors. First, students with ID have shown a preference for accessing higher education via 2-year institutions compared to 4-year institutions (Bouck, 2014; Grigal, Hart, & Migliore, 2011). Second, community colleges' open enrollment policies may allow for more accessibility regarding students with ID to enroll in higher education compared to 4-year institutions that have selective admissions policies (Blagg & Chingos, 2016). Lastly, students with ID are less likely to take 4-year college preparatory steps such as taking college entrance exams or dual credit courses (Lipscomb et al., 2017b).

Each HEPSSID attended by student participants was listed in the TCNCC college search database under the search filter "community college." Programs in the TCNCC college search database are previously vetted before being added to the database by TCNCC staff to be "a program of or directly affiliated with an accredited institute of higher education (IHE) and . . . support students with intellectual disability" (Think College, n.d.-b, para. 13). All five cases started their journey of accessing higher education at the community college, with three cases being redirected to the community college's HEPSSID.

Table 3

Participants

| Case | Participant Pseudonym | Marital Status | Age | Race/ Ethnicity | United States Regional Location | Enrollment | Disability Diagnosis | Medical Diagnosis | Household Income Range & Employment Status | Highest Level of Education (Parent/ Guardian) |
|---------|--------------------------|-------------------|-----|---------------------|---------------------------------------|-----------------------------------|--|-------------------------------|---|--|
| Frank | Frank | Single | 30 | White | South-eastern | Community college, Traditional | Intellectual disability | Trisomy 21 (Down syndrome) | | |
| | Kim | Married | 61 | White | South-eastern | | | | \$70k-99k; Employed | Doctorate |
| Minnie | Minnie | Single | 39 | White | South-western | Community college, HEPSSID | Intellectual disability | Cerebral palsy | | |
| | Apple | Married | 33 | White | South-western | | | | \$50k-60k; Employed | Bachelor's |
| Captain | Captain | Single | 20 | White | Mid-western | Community college, Traditional | Speech impairment | Trisomy 21 (Down syndrome) | | |
| | Betty | Married | 60 | White | Mid-western | | | | \$200k+; Employed | Doctorate |
| Martin | Martin | Single | 29 | Hispanic | Mid-Atlantic | Community college, HEPSSID | Intellectual disability and autism spectrum disorder | (none reported) | | |
| | Mary | Married | 53 | Hispanic | Mid-Atlantic | | | | \$60-90k; Employed | Master's |
| Jane | Jane | Single | 19 | Mexican American | Western | Community college, HEPSSID | Intellectual disability | Trisomy 21 (Down syndrome) | | |
| | Chris | Married | 60s | Mexican American | Western | | | | \$120-145K; Employed | Some college; certificate |
| | Evie | Married | 50s | Mexican | Western | | | | \$120-145k; Employed | Some college; certificate |

Each student participant attended a community college different from other participants, resulting in five institutions total. The Carnegie classification for each institution was verified using *The Carnegie Classification of Institutions of Higher Education's* (n.d.) online "institution lookup" feature. Four institutions were categorized under the category "Associate's Colleges." One was categorized under the category "Baccalaureate/Associate's Colleges: Associate's Dominant."

3.2.3 Data Collection

UNT IRB approval occurred before participant recruitment. Information in the informed consent form was reviewed with each participant before data collection, including the time expected for participation and the right to withdraw from the study at will (Creswell, 2015). Signed consent forms were either received via email or through the secure electronic signature service DocuSign. For confidentiality purposes, participants were asked to choose a pseudonym; or if the participant preferred, I created one for them (Creswell, 2013). Three student participants and one parent/guardian participant chose their pseudonyms.

Interviews were digitally recorded through Zoom. Screening interviews where informed consent and criteria for participation were reviewed were not recorded. The digitally recorded interview files were stored through Zoom using a password-protected professional account.

Transcriptions were created from these files. Transcriptions used participant pseudonyms, and other identifying information (i.e., family names, addresses) was removed during the transcription process. A copy of participant names, assigned pseudonyms, and signed informed consent forms were/are stored in a locked filing cabinet in my home that is only accessible to me. One parent participant provided IEP paperwork from the student's twelfth-grade year and

a full individual evaluation from a psychologist. Data was taken from these documents; then, they were shredded and the emails that had the documents as attachments were deleted.

Researcher notes, handwritten on paper, were rewritten on transcripts, excluding any personal identifying information. Lastly, UNT IRB requires electronic data to be stored on a UNT secure server under a faculty member after study completion for three years.

The expectation is this research will be published and presented; therefore, information regarding the colleges and location of colleges was changed to solely a reference to the general regional location within the United States. This is done to protect participants from being identified since the average number of students with ID enrolled tends to be so low that disclosing institutional name and location along with basic participant information (i.e., disability, age, and gender) may be sufficient to identify student participants. Destruction of data may occur, but not until three years after study completion.

Individuals with ID have limitations in adaptive functioning which may impact language, reading, and communication skills (APA, 2013) including receptive and expressive language skills (Brahm et al., 2014). Individuals with ID have also been found to have difficulty with narrative coherence (Barton-Husley et al., 2017) and narrative language competence, or "the ability to generate or retell a personal or fictional story" (Channell et al., 2015, p. 1). Given the possibility of these limitations combined with the qualitative focus of this study to gain insight through personal narratives and interviews among the target population of students with ID, it is acknowledged that the accuracy of information obtained through interviewing may have challenges. Taylor (2018) mentions difficulty with memory and reasoning for individuals with ID "may indeed affect their ability to provide accurate testimony" but says this should not be a

reason to exclude individuals with ID from research as exclusion altogether is a form of injustice (p. 13).

Planning for these possible challenges, narrative coherence was aided by including parent/guardian participants. Also, when unintelligible speech from the perspective of an unfamiliar listener (which in this study would be me) was present, the parent/guardian was present during the student interview (Flipsen, 1995; Lagerberg et al., 2019; Van Doornik et al., 2017). Two student interviews were conducted individually (Captain and Frank). Two student interviews had a guardian/parent present for the entire interview (Martin and Jane). One student interview had a guardian present part of the interview and only minimally when the participant wanted help (Minnie).

A possible disadvantage of having the parent/guardian present during a student interview may include the student self-filtering information shared. Another possible disadvantage is the parent/guardian "speaking for" the student. The former was not observed (and would be difficult to observe), and the latter was observed occasionally in the interview with Jane. Jane's father sometimes corrected comments Jane made or would give leading statements. Martin's mother would rephrase some of my questions using different terms which appeared to assist Martin in understanding my questions as evidenced by his answers. Minnie's sibling provided help when Minnie desired, and one time disagreed with a comment about how Minnie's tuition was paid but did not correct Minnie's statement but instead stated she recalled that "differently." The benefit of having the parent/guardian present during the interview was that it increased my understanding (i.e., of intelligible words), and it appeared to increase student participants' understanding of my inquiries/questions.

3.2.3.1 Documents

During the data collection process, documents were requested, and in one case collected (Creswell, 2015; Merriam, 2009). The types of documents included (a) IEP (Individualized Education Program) documents showing educational goals, placement, transition goals, and minutes from transition IEP committee meetings; and individual psychoeducational evaluation reports or Full Individual Evaluation documents. Captain's parent provided an IEP from Captain's twelfth-grade year and a psychoeducational evaluation report. Minnie's sibling never had possession of these documents. Martin's, Frank's, and Jane's parents did not provide these documents.

Captain's IEP document had transition goals, an academic performance summary, a record of performance on state standardized assessments, and showed educational placement settings. It also showed disability diagnosis. Captain's psychoeducational evaluation report was reviewed in the case of Captain as Captain was never given a diagnosis of having ID due to a unique learning profile (described later in her case). The document did show that if the score would have been interpretable, Captain's global IQ score would be below 70. Captain's psychoeducational evaluation report was also mentioned by Captain's parent as being instrumental in the decision to enroll at the community college instead of a HEPSSID at a 4-year institution during the interview making this document important. Both documents were scanned by the parent participant and emailed to me. I coded, recorded the data and codes, and transferred this information to note pages with the pseudonym. Notes were attached to the corresponding case transcript. Original documents remained in the possession of the owner(s) (Merriam, 2009).

3.2.3.2 Participant Interviews

Student interviews were semi-structured and guided by an interview protocol with picture support (see Appendix B). The student interview questions were reviewed by a public school teacher with the following State of Texas certifications: EC-12 Special Education and EC-6 General Education. This was done to provide feedback on the wording of questions given student participants may have reading levels below a collegiate level, and the educator stated she did not have any recommended changes. I offered to send the interview protocol questions via email for student participants to review prior to the interviews. Captain utilized a printed form of this document during the interview. Student interviews were conducted one-on-one with Captain and Frank, with a parent present with Martin and Jane, and with a guardian present for part of the interview as requested with Minnie. The presence of the parent/guardian was to act as a familiar listener to facilitate communication and allowed for clarity when intelligibility posed a barrier to effectively understanding the speaker (Booth, Colomb, & Williams, 2008; Creswell, 2015). Parent/guardian interviews were semi-structured, guided by an interview protocol (see Appendix C), and conducted one-on-one with the exception of Chris and Evie who desired to be interviewed together.

The interview protocols helped to prevent questioning participants "aimlessly," but were not used as a script (Booth et al., 2008, p. 82). Some additional questioning was used based on information provided by the participants such as dialogue/inquiry of the parents/guardians' view of disability and/or of inclusive education. The interview protocols included open-ended questions created from and guided by the literature review and research questions (Kelly, 2010). The first open-ended question was a "grand tour" question to help

participants relax, to increase motivation to engage in the interviewing process, and for participants to freely share what they viewed overall as the contributing factors to the student participants' collegiate pathways (Creswell, 2015, p. 224).

Interviews occurred virtually using the video conferencing software Zoom, a web-based synchronous conferencing tool. This allowed for following local and federal guidelines due to the COVID-19 pandemic and also allowed for the participant and researcher to have undue burdens related to travel, time, and cost (Creswell, 2015). All interviews were recorded using Zoom's internal recording software. These recordings were stored in Zoom as audio and video files. I transcribed the first case, Frank and Kim's interviews, by listening to the recordings and simultaneously typing the words into a Microsoft Word document. The other interviews from the following four cases were transcribed by downloading the transcription provided through Zoom and then listening to each interview and editing those transcripts in Microsoft Word as needed.

Interviews were scheduled in two-hour blocks, which encompassed the guardian/parent and student interview. The first interview conducted was with Kim, a parent/guardian participant. Interviewing the parent first allowed for a greater understanding of names, topics, and events described afterward while in the interview with the student participant, Frank. From this experience, each proceeding interview was scheduled to interview the parent/guardian participant first and then the student participant. All student participants resided with their parents/guardians making this approach feasible.

Interviews did not need to be broken into separate, shorter interviews as planned for in the initial data collection design. The parent interviews lasted about an hour to an hour and a

half. Student interviews lasted no more than forty minutes. One interview, Minnie's interview, was the only interview that showed discomfort on the part of the participant for a brief moment when asked the second to last question. This did not result in participation withdrawal or scheduling another time to interview. In summary, Minnie responded to a question about how college was being paid for. Minnie's sibling, Apple, was sitting nearby. Apple's facial expression showed astonishment and when I asked Apple about the facial expression she stated, "I'm like obviously we remember things very differently, but that's okay though." After this comment, Minnie appeared frustrated. Apple asked that we wait "a second" and she spoke to her sister about "having a moment" and suggested she get a drink of water and take a deep breath. Minnie took a drink of water then said, "Sorry." I assured her there was no reason to apologize, told her there was one question left, rebuilt rapport by sharing a short personal story about my grandmother and college, and reassessed her comfort. Minnie appeared at ease and finished the interview of which the remaining time was less than one minute.

The target number of interviews was at least two per case (one with the individual with ID and another with the parent/guardian). In the case of Jane, Jane's parents, Chris and Evie, desired to be interviewed together. The decision of when to stop interviewing was determined by assessing for the obtainment of "a rich and holistic account of [the] phenomenon" (Merriam, 2009, p. 51).

Rapport was established with student and parent/guardian participants through "off-topic" conversations regarding common interests (Ryan & Dundon, 2008, p. 446). Rapport was also found to be established during the screening interviews on Zoom; this was an unintentional consequence. The screening interviews (ranging from about fifteen to thirty

minutes) involved discussing details of the study, asking and receiving questions, and assessing for student's ability to consent; resulted in a natural connection and building of trust between myself and the participants. In the case of student interviews, this provided students with time to meet me and become familiar with my personality and facets of interviewing with me on Zoom. The unintended result was expressed joyful anticipation for the interview, and/or comfort with speaking with me during the interview. While not a reason when creating this study design, this positive and unanticipated outcome from meeting casually over Zoom in an open and relaxed dialogue format prior to longer semi-structured interviews may be a strategy for other researchers to explore when conducting research with participants with ID.

Connecting via common ground with participants occurred mostly from similar experiences in the cases where the student participant had trisomy 21. In the screening interviews, I identified as being a parent of a child with trisomy 21. I also expressed empathy (mostly in the form of sharing similar experiences when applicable), openness (through self-disclosure of personal information such as allowing participants to virtually meet my daughter after the interview, when asked), and gratitude (such as thanking participants for their time and sharing results) which continued to build rapport through the interview and data collection process (Ryan & Dundon, 2008). Rapport building did not cease upon completion of interviews evidenced by further discussions with Chris post-interview about the role he sees entrepreneurship having for this student population and inquiries from Mary post-interview regarding how to find HEPSSIDs (to which I provided the reference to Think College's website).

3.2.3.3 Observations

Observations at college sites were not utilized as the phenomenon being studied is historical—the pathway to the community college and corresponding decisions made related to college-going behavior occurred before the present time. I observed interactions and conversations occurring naturally before, during, and after interviews including interactions and conversations between students with ID and their parents/guardians (Creswell, 2013). Since each participant engaged in the Zoom video conference from his/her residence, observational notes of the surroundings were recorded. Reflective notes were made after interviews were completed (Creswell, 2013).

3.3 Data Analysis

Data analysis included case descriptions, and in-case and cross-case analysis. The objective was to produce an explanatory description of how the phenomena happened in each case, followed by cross-case analysis to discover themes common to all the cases (Yin, 2003).

Research questions were constructed from the literature review, and the theoretical framework provided the overall lens through which data was interpreted.

3.3.1 Individual Cases

Interview transcripts, observations and reflective notes, and information obtained from documents (referred to collectively as *data*) were grouped by each case for the purpose of conducting in-case analysis (Creswell & Poth, 2018). Data from each case was analyzed thematically by hand (Creswell, 2015; Shank, 2002). Data was read and reviewed for familiarity (Creswell, 2015). Familiarity was also achieved by listening to each interview during the

transcription process. Open coding was used to (1) segment and label "any unit of data that might be relevant to the study" (Merriam, 2009, p. 200), and (2) generate a code list (Creswell, 2015). Interconnections between codes were identified (Merriam, 2009; Strauss, 1987), similar codes were grouped, and then the data was reviewed again using the reduced code list to evaluate if the data supported those codes (Creswell, 2015). The similarity of codes from the revised list was used to identify themes for each case (Creswell, 2015).

Themes and codes were organized into a hand-drawn data tree to easily identify connections as well as codes that did not fall under the main themes (Office of Data, Analysis, Research, and Evaluation, 2016; Richards, 2005). Interpretation of the themes and text was aided by relating codes to the research questions, theoretical framework, and literature (Gibbs, 2010). Each case also was reviewed to generate a visual diagram of key findings that may have contributed to accessing higher education via the community college or HEPSSID at a community college. These steps were done to compile "a comprehensive and consistent picture of" each case (Blatter, 2008, p. 70) with the outcome being case descriptions, identified themes (Creswell & Poth, 2018), and explanation of the phenomenon (Yin, 2003).

3.3.2 Cross-Case Analysis

After each case description was completed and case themes were identified in the within-case analysis, I conducted cross-case analysis (Creswell & Poth, 2018). The cross-case analysis allowed for the understanding of the quintain and was the final step in analysis (i.e., assertions) (Stake, 2006). The cross-case analysis included "examining themes across cases to discern themes that [were] common and different to all cases" (Creswell & Poth, 2018, p. 322). This process included identifying themes related to the research questions (Stake, 2006). Notes

were recorded regarding the prominence of each theme and findings in support of the themes (Stake, 2006). Assertions were then generated related to identified themes across the individual cases resulting in a multi-case report.

3.4 Credibility

This qualitative study is designed with strategies to increase credibility (Merriam, 2009).

Techniques to enhance credibility included member checking (sometimes referred to as respondent validation); triangulation (Flick, 2017; Merriam, 2009; Office of Data, Analysis, Research, and Evaluation, 2016; Patton, 1999; Shank, 2002;); and peer debriefing (Janesick, 2015) using a peer reviewer (Merriam, 2009). Each of these strategies are discussed below.

Member checking is the act of requesting feedback from participants about emerging findings (Merriam, 2009; Richards, 2005). Parent/guardian participants received a copy of their individual transcripts via email. Kim provided edits to her transcript and emailed the edited document, which then replaced the original transcript. Each parent/guardian participant also received a vertical blending process chart with key words and picture support displaying key findings that may have contributed to the student with ID accessing higher education. These documents were emailed to the parent/guardian participants who were also asked to share these documents with student participants and provide feedback via email within one week of reception (Shank, 2002). Additional follow-up questions (ranging from one to three questions) directed to parent participants in each case were included in these emails. Mary, Kim, Betty, and Apple responded to the questions. No feedback was received on the charts.

Methods triangulation was achieved via the data collection process. This process utilized documents, interviews, and multiple participants within each case (Patton, 1999). Having

multiple participants also allowed for "two points or perspectives" (Flick, 2017, p. 445).

Peer debriefing is a process involving a peer reviewer who after reviewing "transcripts, emerging and final categories from those transcripts, and the final themes or findings" (Janesick, 2015, p. 1), "assess[es] whether the findings are plausible based on the data" (Merriam, 2009 p. 220). Peer debriefing has been used in case study research in the field of education (Janesick, 2015) as a strategy to ensure internal validity and dependability (Merriam, 2009). Merriam (2009) suggests the peer reviewer may or may not be familiar with the research topic. However, Janesick (2015) suggests it is "good sense" to choose a peer reviewer "who has at least the methodological expertise, if not also the content expertise" (p. 1). I asked Dr. Charles Cook, provost of an urban community college district with a HEPSSID listed with Think College and who is familiar with educational research, to serve as a peer reviewer. Dr. Cook reviewed the transcripts, initial code lists, theme lists, and pathway diagrams. We met for a virtual conference lasting approximately one hour on Zoom. Dr. Cook provided feedback during this time, of which I incorporated. Dr. Cook's letter received post this conference with his conclusion of credibility related to this study is provided (see Appendix D).

3.5 Reciprocity

Research participants provide valuable information, sacrifice time, and expose personal aspects of their lives. Recognizing these actions, a small token payment seemed fitting to offer for participation. However, UNT IRB protocol required the collection of participants' social security numbers to offer a gift card, cash, or similar. Given the nature of social security numbers and because I find it inappropriate for a non-financial institution to request this information, an alternative was sought. The decision was made to provide a drawing for one of

two touchscreen Chromebooks. The Chromebooks were chosen as these items had the potential to support individuals during the COVID-19 pandemic when much of education and work was moved to virtual settings. The drawing was completed after the end of data collection. The Chromebooks were mailed to the participants whose names were drawn after confirming mailing addresses via email. A video recording of the drawing using pseudonyms was also sent to parent/guardian participants serving as notification the drawing occurred. Immediate appreciation for participation was also provided verbally during interviews and later in the emails related to member-checking efforts. A long-range goal to "give back" to the participants will be to publish and present findings of this study at a national conference to add to the discussion and awareness of college-going behavior among students with ID.

3.6 Reflexivity

In taking upon myself a qualitative study involving disability and a marginalized student population in higher education, I understand the importance of recognizing my positionality. I have personal experiences, ideas, values, and beliefs that impact my interpretation of information, research, and the world around me. Some of these beliefs related to disability specifically, I explored earlier in Chapter 1. Other beliefs related more to education and inclusion are explored below. In terms of study design, I tried to offset my biases as much as is reasonably possible in this work by staying aware of my biases (reflexivity) (Merriam, 2009), using methods triangulation and member checking (Flick, 2017; Merriam, 2009; Richards, 2005), and peer debriefing (Janesick, 2015; Merriam, 2009).

I have a deep commitment to inclusion with the embedded belief that every person is of equal value. This stems from my religious beliefs and childhood experiences being raised in a

family that promoted spiritual growth and respect for individuals regardless of differences. I was encouraged to be inclusive in daily life, especially relationships with others. As a youth, I was bused downtown to attend a predominantly Latinx elementary school, then purposefully sent to a middle school and high school where the majority of the student body came from low socioeconomic households.

Growing up in Texas, I also have/had a lot of friends with Mexican ancestry. This bias of Mexican-American culture related to Latinx individuals came out in the interview with Martin where I did not understand a statement he made and assumed it was related to Mexican-American culture and his mother, Mary, corrected his statement that was not what I assumed. It was a humbling experience and reminded me of the diversity within the Latinx community.

In college, I grew in awareness of racial tension and the lack of inclusive values in some communities and society at large. This was not congruent with my family's values that had become my values as was difficult to process. I believe it was in my undergraduate years that I finally realized the privilege I had both from a financial and racial standpoint.

Then, and probably most importantly regarding this study, at the age of 24 I became a parent of a child with trisomy 21 (known as Down syndrome). In a large part because of my religious beliefs, being her mother brings feelings of great joy and enormous responsibility but not grief. Most of the pains I have had as her mother are because of the oppression facing my daughter from outside of our home—segregation, mistreatment, ableism, and prejudices. It started the day she was born with denial of health insurance and soon was followed by rejection from a daycare center and exclusionary practices from a LEA. These experiences led me to pivot more fully into promoting inclusivity and advocating for others on the margins of

society, especially in education as I see schools as mechanisms capable of increasing inclusion or promoting segregation. The value of education and inclusion was interestingly held by many of the participants in this study.

Another perspective I maintain is education is valuable. My childhood home consisted of three educators—my father, mother, and maternal grandmother. They each instilled in me the value of education lies in its ability to improve your own life. Then, you should use that education to help others. My grandmother was the first person in her family to go to college and was a devout Methodist. She viewed education as important personally and religiously, and in both direct and indirect ways relayed that message to me through actions such as buying me pajamas with an ivy league university on them when I was in elementary school to taking the time to tutor me when I struggled at school. I was well aware of how grateful she was to have been able to go to college. My father was also a first-generation college student and belonged to a religion that promoted learning and education. His example was slightly different, however, in that he would tell me stories about his childhood in Idaho which to me seemed quite impoverished. I am not sure if this was the case, but I do know that he changed his economic status considerably compared to his childhood. Lastly, my mother's accomplishments were daily observed. She would allow me to help in the office with consulting projects and take me with her to conferences sponsored by the university where she taught graduate courses. Being raised by these educators, I grew to value education.

The combinations of these values, diversity and education, are also heavily influenced by my religious beliefs. It is my religious belief that whatever knowledge I gain in this life carries

with me after death. I also believe in stewardship—the concept that any talents and opportunities you have are to be used in the service of God and humankind.

To serve others I often defer to areas of strength, such as being an educational advocate. Some situations improve by disseminating information; other situations seem beyond my ability to change. One situation with my daughter's education resulted in our family relocating to another major city for better educational opportunities. This experience came to mind in this study when Jane's family also relocated for the purpose of accessing better educational opportunities for Jane.

The life experiences of being an educational advocate for my daughter, especially for inclusive education in primary and secondary school, has resulted in a very strong belief towards inclusive educational placement for students with ID. This surfaced while interviewing with Chris and Evie who advocated very strongly for inclusive social experiences for Jane but not for general education placement in the public school system. The way I phrased a question and the response from the parents alerted me to this bias regarding educational inclusion in K-12 schools. I rephrased the question, listened to understand, and was able to hear another perspective—one that I am glad to have learned. By being aware of my bias and positionality, I was able to seek to understand their perspective of seeing a lack of properly supported students in the general education setting and other issues such as safety.

In summary, my experiences as well as my beliefs, despite my best efforts, impact the way I interpret the world around me. To offset my personal biases in data analysis as much as is reasonably possible; I have stayed aware of my biases (reflexivity) (Merriam, 2009), used methods triangulation and member checking (Flick, 2017; Merriam, 2009; Richards, 2005) and

peer debriefing (Janesick, 2015; Merriam, 2009). I believe using a theoretical framework as a lens in data analysis also assisted in this process. I also leaned on skills gained as a former police department forensics intern, case manager intern, home studies caseworker, and counselor to write the individual case descriptions in a case note/report style with focus on statements and information directly from the data.

3.7 Summary

The purpose of this multi-case study is to identify factors that influenced and enabled students with ID to pursue, access, and enroll in higher education. Specific focus on pursuing higher education via community colleges is warranted given open admissions policies and preference shown in the literature for these institutions by students with ID (Bouck, 2014; Grigal, Hart, & Migliore, 2011; NCES, 2017). This qualitative study used data collection methods of interviews and a review of documents to produce an explanatory description of how the phenomena happened in each case (Yin, 2003). This study used multiple methods of data collection and member checking to increase credibility (Merriam, 2009; Patton, 1999; Richards, 2005). Individual case analysis was followed by cross-case analysis to discover themes common to the cases, related to the research questions constructed from the literature review, and through the lens of the theoretical framework used in this study.

CHAPTER 4

RESULTS

A total of five cases and eleven participants were a part of this study. A rich description of and themes generated from each case and across cases are provided in this chapter. The case descriptions are organized by headings using students' pseudonyms. Themes from individual cases and across cases are presented after the case descriptions.

The case descriptions and themes were produced utilizing data from parent and student interviews; documents (Captain's case); and information/feedback provided via email from Martin, Minnie, and Frank's guardians/parents. All data collection was conducted during the COVID-19 pandemic which may have impacted employment, household income, and/or other factors. The pandemic also caused recruitment and data collection efforts to be done virtually instead of what was initially desired (i.e., being in-person). This resulted in having geographically diverse participants, and at the same time limited benefits of in-person interviewing such as increased rapport building and observation of familial interactions and the environment.

Another change from initially desired study design was from the criterion for student participants to be "enrolled currently or within the past year," to "enrolled currently or within the past three years." This change was made to allow for participants who perhaps unenrolled due to COVID-19 concerns or related issues. Despite this change, four of the five student participants were currently enrolled as a traditional student at a community college (i.e., Captain) or as a student in a higher education program serving students with ID (HEPSSID) at a community college (i.e., Minnie, Martin, and Jane) at the time of interview.

One participant, Frank, was the only student participant to not be currently enrolled. He also attended the community college more than three years ago but attended a university HEPSSID within the past three years. This case was included in the study's results being information-rich, as described in Chapter 3, due to the uniqueness of having a transfer component (to a university HEPSSID) and for being one of two cases that traditionally enrolled at the community college but the only student participant to do so as a non-degree seeking student (Patton, 2015). A benefit of including his case was it provided greater understanding of differences between students who traditionally enrolled (i.e., Captain and Frank) compared to those who enrolled in HEPSSIDs (i.e., Minnie, Martin, and Jane). Frank not being currently or recently enrolled at the community college also posed a problem of impacting results with information that may no longer be applicable. Similarity with other cases during cross-case analysis suggests this may not be the case, but it is something for readers to be aware of when reviewing the results from this study.

4.1 Frank

Frank and his mother, Kim, were the first two participants interviewed. Frank attended a community college seven years ago, four years outside of the desired three-year time period criterion for participants. As discussed above, Frank's case is included in the results of this study as his case had the unique differences of being the only student participant to enroll first at the community college then later enroll in a university HEPSSID and to be a traditionally enrolled non-degree seeking student.

Frank is a 30-year-old White male who at the time of the study resided with his parents in the southeastern part of the United States. He has two siblings and is the oldest out of his

siblings. Frank and his siblings were described by Kim as having "various disabilities." Frank received special education services through the public school system having a diagnosis of ID. He also has the genetic condition trisomy 21.

Kim was interviewed as part of the case study. Kim is a 61-year-old White female. She is married to Frank's father, and they have three children. Her highest level of education is a doctoral degree. At the time of this study, she worked in what she referred to as "soft money" at a university as the director of a federal TPSID grant and the annual household income was between \$70k-\$99k.

Frank stated he wanted to go to college "[b]ecause [he] wanted to learn new things" and he "really liked being out in the community." He said he was able to "learn new things" at the community college and was "really glad" that he attended. Frank stated he enjoys college but "did not enjoy high school" pointing out that in high school he was "in a lot of trouble with the principal," but in college he is "just like" the other students. He explained, "I was just like them, so when I get in trouble I was the same thing like anybody else. . . . So the adults had to treat me differently." He also described what he liked about his experience at the university as follows: "College is, well college is like staying up late and going to tailgates; yea, kind of freedom right there."

Frank stated it was "mostly family" that talked with him about college, and not teachers or peers. Kim stated his peers "from the general ed. classes were going to college" and she believed this along with one peer in particular contributed to the college-going pathway. The one peer she was referring to was Frank's best friend, another individual with trisomy 21, who discussed college with Frank. This friend went to a university HEPSSID post high school. Kim

says Frank wanted to go where this friend was going but the program was not affordable at that time. Kim stated, "[M]y answer to him going to college was starting some classes at the community college." In terms of enrolling in the university program specifically, this friend informed Frank "it was hard work." This university program is the one Frank later attended.

When asked what helped the most in terms of going to college, Frank responded, "Oh, my family." Frank commented that his family talked with him about doing "work" and being "responsible" particularly regarding attending "all [his] classes." Kim stated a key factor she believed that contributed to Frank attending the community college was "[h]igh expectations on [their] part." Kim also mentioned she and her husband "have pushed [Frank] a lot to be assertive and self-determined." Kim described how she and her husband are intentional about fostering self-advocacy skills in part by "reminding each other not to speak for [Frank], [and] let him speak for himself."

Kim's expectations were discussed in relation to her experiences with her younger sibling who has "significant cognitive disabilities" and was diagnosed as "profoundly mentally retarded" at one time and another time as "severely mentally retarded." Kim stated she "grew up with the assumption that [her sibling] can do anything." Kim remarked their mother taught this sibling using a typewriter resulting in the ability to speak and write "20 words." Kim remarked that her sibling's "cognition level is so much higher than we give her credit for." Kim's life experiences have shaped "this understanding in [her] that there's so much more there if we as educators can find a way to help the individual to express it." The example of her mother and her experiences with her sister was attributed to her perspective of "[k]nowing there's more if we just give them the opportunity, they rise." This life experience was also related to her

"rationale for higher ed." to which she concluded, "There's no reason to put a ceiling on their opportunities. We just have to provide the opportunities. There's so much more people with intellectual disabilities can do." Concerning her son attending college, Kim stated the following, laughing at the end.

Because why shouldn't he go to college? I mean, . . . his friend was going and so he wanted to go and so I said, "How about this?" You know. "Let's try this." That was, you know, why shouldn't he go? . . . He kind of enrolled himself, almost on the sly . . . and they didn't know what to do.

Frank enrolled at the community college as a traditional student. Frank filled out the college's online application, registered, and picked his courses. Overall, Frank described the enrollment process as "a little hard." Frank mentioned his mother helped him enroll in the community college generally. His mother stated she helped during the enrollment process by interacting with an employee in the college's Disability Services Office (discussed below) who insisted on speaking and then meeting with her.

The situation during the enrollment process mentioned by both participants started as a phone conversation between an employee in the Disability Services Office at the community college and Frank. Frank stated this employee "was in charge of the class" and during the phone conversation insisted on speaking with Kim instead of Frank. Frank stated he "was a little frustrated and angry" that the employee was asking to speak with his mother instead of him. Kim said this conversation occurred after Frank registered. Kim also remembers Frank was frustrated "because [the employee] kept saying she wanted to talk to [Kim] and [Frank] said, 'But I'm the one going to college . . . you can tell me.'" Frank ended up telling his mother the employee wanted to speak with her, so Kim put the conversation on the speakerphone.

The employee stated Frank could not register because he did not have a regular high

school diploma. Kim stated the employee then said, "Well, if I let him come, . . . will he know how to behave?" Kim responded by asking Frank, "Will you know how to behave?" followed with "He's been in gen. ed. classes all through his schooling career, . . . of course he knows." Kim says the employee also questioned whether Frank would be able to take notes and "refused to see [Frank] at the school without [her] so [she] went . . . [and] sat in the farthest chair away to let Frank sit in the close chair to her because that is who she should be talking to." Despite this effort, Kim recalled, "[The employee] kept asking me questions and I kept looking at [Frank] for him to answer them." Kim stated, "[T]he DSO person from the disability services office completely didn't expect anything from Frank." After this meeting the employee ". . . said she'd have to check with the professor to see if he could take . . . the drama class." Kim recalled, "The professor did call and said it would be okay with her if Frank were in the class." Kim concluded, "And when I look back now there should have been no problem with him taking any classes at the community college, even with a special diploma, but there were for whatever reason."

Frank remarked that he visited the community college campus with his mother "to get the feel of the campus that way [he] won't get lost while [he's] going to classes." Kim stated he also had support through Medicaid in the form of a person who taught Frank how to ride the bus to the college, helped "him orient his way through the campus," and sat with him in class.

This service "faded because [Frank] didn't need her there all the time."

When asked to describe the "pathway" to the community college, Kim said laughing,
"There wasn't one." She elaborated, "No, there was no expectation; yeah, there was no
expectation of college." As a result, Kim stated she started the dialogue about higher education

directly with Frank. Kim said, "... when he graduated I talked to him to see if he wanted to go take some classes at the community college and he said, 'Yes.' He was excited about going to college, so he went online to register."

Kim stated she first started thinking about college for Frank "the year after he graduated" from high school. She explained, "I didn't start thinking about it because there was nothing in our area happening around college, and I knew [Frank] would need support so we had to get the support person or people . . . lined up before we could do anything like that." She followed with, "He doesn't need his mother going to college with him, or his father."

Discussions with the LEA at IEP meetings did not include higher education "at all." Kim stated the transition discussions at the IEP meetings were mostly about "getting into vocational rehabilitation for job placement." Kim stated Frank's "transition meetings were a joke." Kim remarked, "And I tried to push it, but I just did not have the energy. I said, 'I know what I need to do,' and I just took care of it." Part of this knowledge came from her experience "on the team, the state team to help train educators around the state" in the late 1990s "[w]hen the transition law was first passed."

Frank enrolled in the community college about one year after completing high school at the age of 20. Frank attended the community college for one semester and took two courses—basketball and acting. When asked why he did not enroll for a second semester, he responded, "Well, the classes can be pretty hard" which he also mentioned specifically regarding the drama course. Kim stated the drama instructor had educational expectations for Frank citing the example when "[the instructor] had [Frank] memorize, like all the students, a script to present in front of the class." Kim attributed Frank's decision to not enroll for a second semester to the

community college lacking "the part of college [Frank] wanted" which was living on campus at the university his best friend attended. "And so, after two classes at the community college, that was enough because it wasn't really what he was looking for."

Frank repeated two grade levels before starting high school and attended high school for four years. In high school, Frank was academically included in general education courses including some advanced courses in science and history. Kim stated she wanted him to take advanced courses to be around "role models." Kim stated there was a ninth-grade center, but she insisted Frank go directly to the high school and the principal agreed. This meant Frank took tenth-grade courses twice. Kim explained her belief that this inclusive educational placement helped prepare Frank for college.

So, I think a lot of that helped him. Whereas you have students now who are coming to college who are coming from a segregated environment and they don't know what to expect. They don't know how to [motions hands making quotation marks in the air] 'behave' in that class because they've never been in a gen. ed. class where you've taken notes. They don't know how to take notes. They might not have been as detailed as anyone else might would've done but he knows how to take notes. He knew what that skill was.

Frank was involved in marching band, newspaper, and drama at his high school. Referencing marching band Kim stated:

That more than anything prepared [Frank] for adulthood, for college, for whatever, because when he left in the morning he had to have his equipment . . . his dinkles . . . a lunch and a snack because they stayed after 'til like 5 or 6 . . . after school like three days a week. So, he had to know what days to bring extra food and extra stuff and once the whole school year I had to bring something he'd forgotten. He always remembered.

Kim attributed this outcome to the band director who set the expectation and explained participation would not occur if Frank was not prepared. Kim stated, "It was the first teacher that held him accountable, really well" and as a result, Frank grew in "understanding

responsibility and having to get things done." Outside of school, Frank participated in Boy Scouts and earned the rank of Eagle Scout, a rank his father had also attained when he was in Boy Scouts.

Kim estimated Frank's reading level to be "at about a fourth-grade level depending on the content" having the ability to "read higher if he is familiar with some of the words because he has a good sight word vocabulary." His mathematics skill level was described by Kim as being "very low" with difficulty doing "one on one counting."

Frank's early educational experience included attending a private "general ed. preschool." Transitioning to kindergarten, Kim took Frank to the local public elementary school office where Kim requested to meet with the school principal. Kim recalls this encounter as follows:

[The principal] said, 'Oh, we don't do kindergarten for him." I said, "You don't have kindergarten?" She said, 'No, we don't have kindergarten for kids like him." I said, "I don't want kindergarten for kids like him, I want kindergarten, regular kindergarten." "No, I'm sorry ma'am, we don't do that."

Kim got a district representative involved and Frank attended that school in an inclusive educational placement until fourth grade. In fourth grade, Kim was at the school because a staff member called and asked her to substitute teach that day. Kim was speaking to this same principal when a teacher approached and spoke with the principal to which the principal responded, "Good, the [Frank] problem is taken care of." Kim stated after this incident she transferred Frank to another school nearby for two years "that had a phenomenal reputation for inclusion." Frank was supported in his inclusive educational placement at both elementary schools by a paraprofessional, although this was not Kim's "first choice" but rather something she "was willing to do . . . because [Frank] needed to be in the general education classrooms."

In middle school, Frank was teased by peers who "[made] him say things that weren't appropriate." Kim stated he would also skip class to go "to the library to read skateboarding magazines and nobody would stop him because he had a paraprofessional and surely the paraprofessional was taking care of it." Kim stated one administrator was the only one at the school that "held him accountable for everything that he should be held accountable for."

Starting in sixth grade, Frank's only course not in a general education placement was mathematics. Kim stated the teacher for this mathematics course would take the students to play football during class every Friday. Then, she laughingly noted she spoke to the principal about this and "that teacher didn't stay." General education placement for every course except mathematics continued through high school. Kim mentioned inclusive educational placement does not occur in their state "unless the parent pushes it."

The student and parent attended and participated in IEP meetings. Frank exhibited self-determination skills in one high school IEP meeting when he requested to be in the marching band. Kim previously "told him he couldn't be in band" due to the "horrible" reputation of the band director. The night before this IEP meeting, Kim asked Frank what things he wanted to discuss, and she wrote down a few things then handed him the paper/list. At the meeting, Frank asked when he would have a turn to speak, and his mother said "now." Frank pulled out the piece of paper that he had brought in his pocket and the "first thing he [said was], 'I want to be in band." Frank said, "[A]II my teachers looked at my mom and . . . my mom looked at me." Frank affirmed he wanted to join the band and his mother supported his desire. The "staffing specialist" at this IEP meeting said, "Well, we can ask." A new band director happened to be hired that year and was described by Kim as "amazing."

Frank was not employed during high school nor before attending the community college. Frank participated in "job experience training" during tenth grade, but Kim removed Frank from this "because they were giving him two-liter bottles of coke if he did a good job, and candy bars, and he only worked for like 30 minutes bagging groceries." Kim concluded this "avenue... for kids with intellectual disabilities" was "doing more damage to him about what work is like than helping." She described this experience as "job un-training." Kim stated she tried working with the vocational rehabilitation person to get Frank on "the other avenue... [for] typical kids who were working during high school.... [but] they wouldn't let him in" telling her that Frank "had to be in the other 'job experience' program." After attending the community college in his early 20's, he did volunteer at the YMCA and gained work experience there mostly in janitorial-related duties.

There was no mention of outside resources used to support Frank with accessing higher education other the one with Medicaid discussed earlier. Vocational rehabilitation services through the state were brought up, but Kim stated, "they said he wasn't eligible" and that it was "a bad experience all the way through for voc. rehab."

Location influenced the decision to attend the community college "because [Frank] could live at home and take classes." Location also impacted the decision to attend the community college in terms of cost as Frank's first choice, the university HEPSSID, was not local and although offered housing it was not affordable for his parents at that time.

4.1.1 Themes

Frank's case and the description of his pathway to the community college presented the following themes: value of and experience in education, advocacy, accessibility, preparation,

influencers, and expectations. Aspirational, social, navigational, and resistant capital were also present. The influence of the parent's view of disability and examples of self-efficacy were strung throughout the codes and the implications of this will be explored more in cross-case analysis and Chapter 5.

4.1.1.1 Value of and Experience in Education

Value of and experience in education, specifically higher education, was a theme present in Frank's case. Frank's experience with higher education and the community college included visiting the campus with his mother. He stated this was "to get the feel of the campus that way I won't get lost while I'm going to classes." Frank also expressed the value of education when part of the reason he gave for wanting to go to college was "to learn new things." Frank's mother, Kim, has a doctoral degree, showing her personal value of pursuing higher education. She appeared to communicate this value to Frank by supporting his desire to pursue higher education and being involved in his primary and secondary education in ways that would academically prepare him with skills to help him be successful in higher education.

Kim's work in higher education at the time of this study was managing a TPSID grant.

She expressed her awareness of HEPSSIDs at the time Frank graduated from high school. It was not discussed if she knew about HEPSSIDs at the time Frank graduated from high school because of her work or if she went into that line of work after that time. Either way, her knowledge of HEPSSIDs and higher education provided navigational capital (Yosso, 2005). She was aware of higher education options for Frank and helped overcome the obstacle Frank faced when trying to register with the community college. Regarding that challenge, both Frank and Kim engaged in actions that were evidence of resistant capital (Yosso, 2005). Frank told the

college employee she needed to speak with him. Kim insisted the employee speak to her son by putting the employee on speakerphone, then later sitting in the chair farthest from the employee and not speaking for Frank. Aspirational capital was also present as both of Frank and Kim continued to pursue higher education despite this obstacle (Yosso, 2005).

When Frank was younger, Kim worked as a substitute teacher at his school, giving her experience in K-12 education. The experiences she described in seeking and requesting various placements (i.e., general education and advanced courses) with both dismissing and accommodating administrators was evidence of navigational and resistant capital (Yosso, 2005). Kim's persistence with Frank's education also showed the presence of aspirational capital as she maintained her expectations for Frank's education despite obstacles (Yosso, 2005).

4.1.1.2 Advocacy

The theme of advocacy was present in actions by the parent and student. The student was a self-advocate in IEP meetings as evidenced by his participation and determination to be heard regarding his desire to join the band in high school.

I wanted to be in marching band . . . and my teachers looked at my mom and said, "Are you serious?" And my mom looked at me and she said do I want to do it? And I said, "Yeah."

Engaging in this self-determination behavior regarding band also is evidence of aspirational capital as he sought out this goal among a committee of individuals with authority who could have rejected this request (Yosso, 2005). Frank advocated for his aspirations again when he voiced his desire to pursue higher education to his mother. He then assisted in the enrollment process by filling out the application, engaging in "interviews," and choosing his courses.

Being a self-advocate and engaging in self-determination may also have impacted his

transition to higher education versus enrolling in a transition program or vocational rehabilitation program through the LEA. It appears Frank expressed the desire to not attend high school past his senior year to Kim. Kim stated, "And there's was no way . . . you were going to get him to stay in high school because he knew he was a senior and he was graduating."

Frank's mother, Kim, was an educational advocate for her son as shown in her attending and participating in IEP meetings; and being involved in her son's education including placement, course selection, schools attended, and engagement with administrators. As discussed earlier, engaging in these actions showed the presence of navigational, resistant, and aspirational capital (Yosso, 2005). In the exert below, social capital was also present as Kim used other resources to advocate for her son's educational placement (Yosso, 2005).

And then I wanted him to go to an inclusive Pre-K but I waited 'til he was 5 and I couldn't convince our Pre-K district person to allow him to stay because Pre-K was 4, the age of 4 and not 5, and she said, "Absolutely not, he can't be in." I said, "But he's not ready for kindergarten." So, they wouldn't allow it. So, he couldn't go into that, so I just kept him in the private preschool that I had him in which is a general ed preschool. And then his elementary school years I met with the principal and told her that my son; I walked in telling as opposed to asking and that kind of irked the principal. Told her that my son had a disability and we just wanted him to be in kindergarten . . . and she said "Oh, we don't do kindergarten for him." I said, "You don't have kindergarten?" I said, "We just want kindergarten." She said, "No, we don't have kindergarten for kids like him." I said, "I don't want kindergarten for kids like him, I want kindergarten, regular kindergarten." . . . So, I brought in the district person who was very supportive and he basically told the principal this is what we needed to do. So, [Frank] was in [general education] classes through 4th grade."

Additional educational advocacy actions related specifically to higher education was present in this case. Kim supported her son during the enrollment process when the college's employee stated Frank could not enroll in the community college without a regular high school diploma. Kim also found resources to support Frank as he transitioned to higher education in aspects such as transportation and navigating the campus. Acquiring these resources is

evidence of social and navigational capital (Yosso, 2005).

4.1.1.3 Accessibility

Accessibility was a theme present that influenced the pathway to the community college. Location, transportation, and affordability were all factors that contributed to the decision to enroll at the community college. Kim touched on the relationship between cost and location as follows:

Well, in regards to location, so the [university] he would have had to live there and we couldn't afford it. The [community college] nearby us he could live at home and take classes. And so that was why location was important because he could live at home because right now we couldn't afford him to go to school, to move away and go to school . . . the [university] was very supportive, they had a program that would support the students in their independent living and their coursework and stuff but we just couldn't afford it.

The availability of support services through a Medicaid waiver program concerning transportation and navigating the campus also added to the accessibility and feasibility of Frank attending the community college. The lack of these support services could have been a barrier as services through vocational rehabilitation were denied. The college staff member's actions of first denying Frank enrollment and the difficulty of the interviews during the enrollment process were obstacles related to accessibility. This was overcome with the support from the professor to be willing to have Frank in their course, and the persistence of seeking enrollment by Frank and Kim.

4.1.1.4 Preparation

There was a theme of preparation in Frank's case. Academic preparation included attending private pre-kindergarten, inclusive educational placement in elementary and

secondary schools, and taking advanced courses in high school. Requesting inclusive placement and advanced courses also is related to the theme of advocacy and showed Kim's acquisition of navigational capital in educational spaces (Yosso 2005).

[W]hen we went to high school I said he will be in all advanced courses. And I was lucky enough to have an assistant principal that said of course.

Part of preparation included development of various skills. Frank developed skills of organization, planning, and independence through activities such as Boy Scouts and band, and learning to use public transportation. Recalling an experience involving independently using public transportation that shows acquisition of skills related to planning and independence, Kim stated the following:

I think a lot of that, the self-determined behaviors we've really tried to instill in him. I think that is a huge part of it. When he, the fact that we were willing to let him take the city bus. Now we travel trained him. You know we did the travel training but that's a big deal. And one day he came, he was supposed to be home like 1 o'clock and it was 2 pm and he wasn't back yet and so we were panicked. He wouldn't answer his phone. Finally, about 2:30 pm or so he showed up on the bus and we're like, "Where were you?" And he goes, "Well I stopped to get lunch at McDonald's" and he just didn't tell us. But I thought, "Isn't that we want? For him to make choices on his own" He knew he could get off the bus at McDonald's and then back on at McDonald's to finish going home. That's what we're looking for. For him to problem solve, to figure it out, to put things together. I think a lot of that had to do with him believing he could do this.

4.1.1.5 Influencers

Another aspect impacting the pathway to higher education in Frank's case was the theme of influencers. There were two key influencers mentioned in the interviews—a peer with disabilities and Kim. Frank's friend influenced Frank's desire to pursue higher education. Kim influenced the pivot to do so at the community college. Frank's utilization of these individuals is evidence of social capital (Yosso, 2005).

Frank's friend was pursuing higher education at a university HEPSSID. Frank expressed the desire to attend the same program as his friend after his friend told him about the caliber of the program. Frank said, "I heard that [the university] was a great school so I wanted to go there." This friend also told Frank it would be "hard work," so it appears these two were dialoguing about higher education. Due to the cost of the residential university program, Kim stated it was not a feasible option at that time for Frank to attend the university with his friend. Kim then influenced the higher education pathway by presenting another option—the community college.

[Frank's] best friend went to a college in [the state]. And so, he did want to go to college . . . but we couldn't afford it. The program in [our state] was going to be pretty expensive and we couldn't afford it. So, there was no option close by us. So that was my answer to him going to college was starting some classes at the community college.

4.1.1.6 Expectations

The theme of expectations was present in this case. Educational expectations may be related to parental view of disability, but this will be explored more in cross-case analysis and Chapter 5. For this particular case, there were expectations for Frank outside of normal or dominant practices for students with his disability, and maintaining these expectations was evidence of aspirational capital (Yosso, 2005).

Kim stated, "high expectations on our part" was a key contributing factor to Frank accessing higher education. Kim mentioned the obstacles she faced in wanting Frank to be included in general education classes during elementary school, as well as the initial denial of admission to the community college by an employee at the college. Frank recalled the experience stating, "Well, there was a lady that was in charge of the class . . . she wanted to talk

to my mom, and I was a little frustrated and angry about it." In one part of the interview, Kim compared the expectations of this staff member to those of the community college instructor who asked Frank to memorize a script and present it in his drama course.

With the help of his support person he did do it and she was just amazed at how wonderfully he did, and you know [because] she expected it. Whereas the DSO person from the disability services office completely didn't expect anything from [Frank] so there was a real dichotomy there of expectations.

Expectations were also shown in practices such as involvement in Boy Scouts attaining the highest award possible—Eagle Award. Fostering self-determination and self-advocacy skills as seen in teaching Frank no one is to speak for him and helping him to state his desires to people in authority (i.e., IEP committee members and the community college employee) is also related to the expectation that Frank is capable of making decisions and life choices. Kim expressed the development of her having expectations and the resulting pursuit of providing opportunities to people with disabilities in reference to what she learned from her family system. She stated, "So it's that, again that expectation. So that's where it came from—my mom and my sister. Knowing there's more if we just give them the opportunity, they rise."

4.2 Minnie

Minnie is a 39-year-old White female who resided in the southwestern part of the United States at the time of this study. She is the oldest of two children. Her parents are divorced, and her father is deceased. Her mother remarried and moved to another country. Minnie resides with her sibling, Apple. Minnie's parents had some college. Her father served in the U.S. military and learned engineering, and her mother taught before being a full-time homemaker after Minnie was born. Minnie was currently enrolled in a HEPSSID at an urban

community college, in her second year with that program, at the time of this study. Minnie is diagnosed with ID and cerebral palsy.

Apple is a 33-year-old White female. She is married with no children. Her wife was unemployed, and Apple worked for the state government at an adult education training center at the time of this study. Apple's highest level of education is an earned Bachelor of Science degree. The annual household income was between \$50k-\$60k.

Minnie stated she wanted to go to college to "be around other people that are special needs" and because it was "a learning thing for [her] to do." She also stated she "was bored at home." Minnie shared this desire was present when she was in high school. When she finishes the HEPPSID, she wants to "[t]each others to go to school." Concerning Minnie attending the community college HEPSSID, Apple stated, "I have [no] idea what I'm going to do once school is over, but . . . for the last year and a half, two years, it's been great."

Minnie stated her "company," meaning the case worker from the group home where she used to live, and her sister, Apple, helped her the most in terms of accessing the community college. Minnie described the enrollment process as "long" and stated her sister assisted her in completing the enrollment paperwork.

Minnie's pathway to the community college took longer than other cases in this study.

Minnie graduated from high school around the age of 18. After high school, Minnie participated in a program for vocational training through the LEA. Apple described the immediate post high school transition pathway as follows:

I mean, it was . . . the pathway that people with ID took. It was, you know, she had her friends from high school in the program, the special education program that she was in, and when everybody graduated from high school that's where they went. They went to .

. . vocational training, . . . and that was the post K through 12 stuff that they could do. And that was it.

Eventually, Minnie "went out in the community," lived in a group home, and went to "day-hab" where she "would do art projects and field trips and movies and things like that."

Apple stated at this time Minnie wanted a job and "college was kind of off the table for her because [they] didn't know of anything that would suit [Minnie's] needs and would be beneficial for her." About the age of 30, Minnie and Apple's father passed away and Apple became Minnie's "point person for the family." They lived in different cities about an hour away from each other until Apple moved Minnie to the city where she resided and into a new group home. This is when Minnie acquired her first work experience at Goodwill Industries at the age of 32. She worked this job "for a while." No other employment or volunteer work was mentioned. Apple commented that Minnie had expressed interest in volunteering at an animal shelter and being a nurse's aide, but "the family never put in a lot of effort into" pursuing these lines of work. Minnie is not currently unemployed.

After Minnie "lost that job," Minnie eventually became part of a program at the community college where individuals with ID were brought to campus for "some sort of educational project for their students to work with people with intellectual disabilities." This resulted in Minnie's awareness of the community college, having been on campus. It was after this exposure that Minnie asked Apple "about going back to school." This request resulted in Apple "looking more seriously into what [her] sister could do, to take, because [Minnie] was like, 'Well, can I take a computer class?'"

Apple went to the college's website to see what options were available. Apple remarked that she looked at the community college instead of "the bigger universities because [she] had

some experience with [the community college]." This experience came when she attended the local community college to earn additional certifications. Apple concluded, "because I had that experience on the [community college] campus and because she had the experience on [the community college] campus, it didn't . . . occur to me to try to look at bigger schools."

Apple stated she looked at adult education courses first, then noticed a remedial math course. While on the college's website, she never became aware of the HEPSSID. It was after "going through two or three people" at the community college while researching the remedial math course and talking with these individuals about her sister that "eventually [she] got directed to the [HEPSSID] and that program was perfect." Apple stated, "It was exactly what we need."

The enrollment process included Apple taking Minnie to a meeting with a HEPSSID employee at the campus. Apple did most of the paperwork needed to enroll Minnie in the program. Minnie discussed her goals and provided input on course selection. Minnie had to interview with an employee from the program before being admitted to the HEPSSID.

Minnie was the only person to enroll at the community college from her group home. The common practice was for the residents to attend a "day-hab program." With no one from the group home attending the community college HEPSSID, peers were not influential in the decision to go to college through conversation or example. The impact peers did have on Minnie was what Apple referred to as "bragging rights." Minnie was proud to tell her peers about her certificates earned upon completion of each class. Apple stated, "So even though it wasn't somebody else pressuring her or socially coordinating to go to college, it still was part of the decision." It gave Minnie "something to brag about."

A concern and factor in choosing the community college was cost. Apple stated, "Big schools mean big tuition costs." Apple also said, "We had to figure out the money" and "make sure that it fit the budget." Apple lamented that it was only recently that she became aware of a state agency that assists with tuition for HEPSSIDs. One contradiction between the two interviews was Minnie expressed there was financial assistance from a specific state disability service provider; but in the interview with Apple, it was stated the cost was covered by inheritance money left by their late father, a "very generous" aunt, and herself.

Apple shared there were no community resources that assisted with cost, awareness of the program, or enrollment. The group home where Minnie resided before moving in with her sister a few months ago did not know about the HEPSSID offered by the local community college before Apple discovering the program. Apple reasoned that although "it is a great program" the HEPSSID does not appear to be "widely known through . . . the group home system."

As mentioned earlier, the group home was involved in Minnie going to the community college campus for the "educational project." This is what made Minnie aware of and familiarized her with the community college. This "project" was part of an agreement between the group home and the community college where the group home brought their residents to the community college campus to interact with community college students.

Apple stated she was unaware of HEPSSIDs locally but also generally. She stated, "It didn't even occur to me to try to search out other schools for programs specifically for ID, because I didn't think they existed." About HEPSSIDs she said, "And so I had no idea that other schools did the same thing, so I didn't know research; that sounds so terrible."

Location and transportation were factors discussed related to accessing higher education. The community college had multiple campuses with one campus being particularly close to Minnie's group home where she resided at the time of enrollment. She did not attend that particular campus because the HEPSSID was offered at another location. Minnie was able to utilize public transportation using a service for individuals with disabilities that dropped her off in front of this campus. This campus also was a large office building and Minnie was able to navigate the campus independently. Without this transportation resource, Apple stated, "[W]e couldn't have done it, or at least not easily because the group home with five . . . residents means that if they need to give somebody a ride, everybody has to pile into the van because they only typically have one staff member on-site at a time." There were a few times where Minnie missed the bus and Apple's employment was "flexible" allowing her to provide transportation. This was important so Minnie would not miss class or become "stranded for a couple of hours."

The other aspect that appealed to Apple in choosing the community college for Minnie was campus size and the relation of this to safety. Minnie explained that university campuses tend to be large, and this could be unsafe for Minnie who "is a sweetheart." Apple remarked, "And I don't want her getting hurt."

In terms of academic preparation, Minnie stated her classes in high school were "for special needs" and no activities or courses were mentioned with the general student population. Apple reported that her mother "didn't want [Minnie] in special education" so Minnie was not "pinged as ID . . . for a while . . . [but] by the time [Minnie] was at least halfway through elementary school, she was already in special education." Minnie stated in high school

she recalled "they taught us to do like a home cook, whatever." Minnie did not remember going to any IEP meetings and stated she "graduated" from high school. Her sister, being younger, was unsure if Minnie had attended any IEP meetings and what type of diploma her sister received. Apple did recall her sister attended a transition program post high school. Through online inquiry, it was discovered this transition center was through the LEA, suggesting Minnie received an alternative diploma when exiting high school as having a regular diploma would have made her ineligible for continued special education services through the LEA.

One extracurricular activity Minnie participated in during high school was bowling with Special Olympics. Minnie also attended church during her childhood and had interactions there with peers in Sunday School.

Minnie stated she did not learn about college from friends or peers. Minnie recalled that her teachers talked about college generally but not specifically in the context of her pursuing higher education. She did recall when her younger sister went to college "a long time ago."

When asked what feelings she had when her sister went to college, Minnie responded, "That I want to start going to college." Apple stated similarly as follows:

I went to college and go my bachelor's and she saw me do this, and she was happy for me but sad because she couldn't do that herself because she really wants to be normal. You know, she's not blind to the fact that she's got an ID.

Apple stated similarly earlier in the interview: "She wanted to do the things that I was doing. She wanted to be, to follow the normal path." This awareness resulted in Apple having feelings of "being sad on [Minnie's] behalf and disappointed on [Minnie's] behalf because there wasn't a way for [Minnie] to do what [Apple] was doing and in a way that she could succeed at." Regarding the pursuit of higher education, Apple stated, "It was kind of a given that I would

go, and she would not."

Apple recalled that her mother "thought my sister was very limited." She stated, "the family and me even . . . downplayed the idea of [Minnie] going to college because we have and I have . . . ideas about what her limitations are." Apple explained, "I do assume her limitations and act accordingly, so when I was looking at colleges at her request, you know, I was automatically looking at remedial classes. . . . I wasn't expecting her to like take standardized tests or anything like that to try to actually like enroll in like a big university." This expectation was described by Apple as stemming from assumed "limitations . . . due to . . . ID" which was related to "doctors" who communicated the following:

It's one of those things where the doctors say, you know, never ride a bike, never live on our own, never do this, never do that. And I think that's the message that we got a lot and so it's hard to break out of that narrative.

During childhood Apple recalled Minnie would be given the opportunity to engage in activities like riding a bike, but not until Apple was learning to ride a bike. It became a family practice to "[not] give to one kid without giving to the other." Apple stated, "[T]he assumption was that [Minnie] can't do it until she can prove that she can." Minnie "gained a measure of independence . . . living in a group home with five other residents and a helper."

When asked about the key factors that contributed to Minnie going to the community college, Apple responded she believes it was "[a]n introduction to the college campus in general" as a result of the "educational project" agreement between the group home and the community college mentioned earlier. She continued that the "big one" was "not being told, 'No,' and not being told outright, 'No, you can't do this.'" Apple expressed she had planned to support her sister's desire to attend college even if the HEPSSID was not available, and "[e]ven

if [she] had to go to school with her." She attributed this to feeling "responsible for" and "very, very close" to her sister after their father died as well as following an incident of "negligence" at the group home that resulted in Minnie moving in with Apple three months prior to this interview. Apple stated the following:

If I don't advocate for her, then my sister has a very hard time speaking up. And so, I want absolutely what is best for her and when she says she wants something, no matter what it is, . . . it is very much, "Alright, how can I get this done for her?"

Apple concluded, "I want to see her happy. I want to see her succeed."

4.2.1 Themes

The pathway to the community college in Minnie's case presented seven themes—value of and experience in education, motivation, support, self-determination, safety, preparation, and accessibility. Aspirational, navigational, and social capital were present among some of these themes (Yosso, 2005). The themes including forms of cultural capital are discussed below.

4.2.1.1 Value of and Experience in Education

The theme of value of and experience in education was seen in Minnie's case with Apple and Minnie. Apple graduated from college and sought additional training at the community college "to try to get some additional certifications and such." This provided personal experience in both higher education sectors and the navigational capital to assess the various pathways to higher education for Minnie (i.e., university or community college, and traditional or remedial course offerings) (Yosso, 2005). Minnie's mother and Apple also showed the value of education by their choice of employment. Minnie's mother worked as a teacher and, at the time of this study, Apple worked in a different industry but in a position related to education

and training.

Minnie's group home had her and other residents on the community college campus acting in roles to assist future educators. This gave Minnie experience with higher education—observing college students and being on the community college campus. This experience appears to have reignited a previous desire to go to college. Maintaining this dream is evidence of aspirational capital (Yosso, 2005). Minnie expressed this desire and her value of education by requesting to go to college. For Minnie, college was important and, as Apple observed, "something to brag about."

[Minnie] is and was extremely proud of being able to go to school and she loves each one of her certificates that she gets at the completion of each class of the semester and about just making good grades in general because she generally does. And so, I'd say that, you know, it gives her something to talk about, something to brag about, and it's really good for her. So, even though it wasn't somebody else pressuring her or socially coordinating to go to college, it still was part of the decision.

4.2.1.2 Motivation

The theme of motivation was present in this case and includes two types—extrinsic and intrinsic (Ryan & Deci, 2000). Extrinsic motivation for attending the community college was described above with Minnie being able to "brag" to her peers about attending college. Intrinsic motivation was also present when Minnie stated she wanted to engage in "a learning thing."

The theme of motivation was also present with Apple. Apple expressed extrinsic motivation "to attain [a] separable outcome" of her sister attending college (Ryan & Deci, 2000, p. 60). This was partially fueled by her recollection of how she felt when she went to college:

[Minnie] wanted to do the things that I was doing. She wanted to be, to follow the normal path. . . . I remember the feelings that it gave me of being sad on her behalf and disappointed on her behalf because there wasn't a way for her to do what I was doing

and in a way that she could succeed at and . . . it was kind of a given that I would go, and she would not.

Apple explained once their father passed away and she became the "point person," she moved Minnie to her city. Apple got Minnie set up with a state service that "managed to get her a job," but "eventually she lost that job and so she asked [Apple] about going back to school." It was at this time that Apple acted.

And so that is when I started because she asked me to; that's when I started kind of looking more seriously into what my sister could do to take because she was like, "Well, can I take a computer class?"

Apple stated that even if the HEPSSID did not exist, she was dedicated to helping her sister go to [the community college], "[e]ven if [she] had to go to school with her." Apple's motivation to support her sister surpasses that of educational goals and is applied to life generally.

I feel very responsible for my sister. . . . And when she says she wants something, no matter what it is . . . it is very much, "All right. How can I get this done for her?"

These statements and actions taken to support her sister's collegiate pathway are evidence of motivation for helping her sister achieve her goals including the goal of going to college.

4.2.1.3 Support

Actions resulting from motivation are tied to the theme of support. Support was seen as described above in the actions Apple took to honor Minnie's goals/desires for going to college. It was also present in practical terms such as family members paying Minnie's tuition. Tuition assistance came from money from their late father's inheritance, a "generous aunt," and Apple. Apple also helped with transportation, searched online for collegiate options for Minnie, led the enrollment process, and assisted with enrollment. Minnie recalled the enrollment process by saying, "My sister had to help me sign papers for it." In terms of transportation assistance,

Apple stated, "[T]here was a couple of times where [Minnie] missed the bus and I . . . had to go pick her up and drop her off . . . and my work was very flexible with me when it came to that."

Other supports included Minnie's case manager at the group home where she resided at the time of enrollment, and one or more community college employees. Minnie stated her case manager helped by being "the contact" for the HEPSSID. Minnie also stated the group home provided financial support; Apple disagreed stating the previously mentioned funding sources.

One or more community college employees provided social capital and supported the collegiate pathway by directing Apple to the college's HEPSSID, a program Apple was unaware of (Yosso, 2005).

And so [Minnie] was like, "I want to take classes. I want to go to [the community college]." And so, I started looking at [the community college] and . . . going through their website and I at first looked at like the adult education classes . . . and then like I saw remedial math, and so I didn't know about [the HEPSSID]. I didn't know about the program they had specifically for people with ID. And it took me going through two or three people in [the community college] because I was researching like remedial math. . . . And listening to me talk about my sister, they're like, "This doesn't sound like the program for her. We want her to be successful." And eventually, I got directed to the [HEPSSID] and that program was perfect. It was exactly what we needed and . . . we did get her enrolled which was fantastic."

Apple was unaware such programs existed locally and nationally which may have become an obstacle without this information. The program also has a "variety" of built-in "comprehensive supports" for students with ID, as described on their website (reference withheld for confidentiality purposes). With these intra-program support services in place, transportation and tuition assistance were the only areas of need mentioned in this case study that Minnie and Apple had to address for Minnie to successfully access and engage in PSE via the community college.

4.2.1.4 Self-Determination

Self-determination was present in this case in two ways—expression and fostering.

Minnie showed self-determination by expressing her desire to go to college. Apple fostered self-determination by placing value on Minnie's petition and honoring her desires. Apple said,

I want to see her happy. I want to see her succeed and we're working to get her to use her words and to be more vocal and to know that she can advocate for herself.

Fostering self-determination may not have been present when Minnie was in high school as she did not recall attending IEP meetings or being present in meetings where her parents and teachers were there together.

4.2.1.5 Safety

Safety was a theme that emerged that was important in choosing the community college. Apple showed concern for Minnie's safety when she remarked, "[The university] campus is enormous . . . downtown . . . and [Minnie] is a sweetheart. And I don't want her getting hurt and so it would be a little daunting." The community college campus where the HEPSSID was located was smaller in size than the nearby university campus, and the layout was such that Minnie could successfully navigate the campus to get to class independently.

So, for [the HEPSSID], they're not on the main campus. They are in [a building]. And so that's a building all off on its own, right. And so, the only thing that she had to learn to navigate was inside the building, what floor and elevators and things like that.

The smaller campus and the ability for Minnie to navigate that campus were issues of safety that influenced the decision to attend the community college HEPSSID.

4.2.1.6 Preparation

Areas of preparation impacting the college-going pathway positively and negatively

were seen in Minnie's case. Minnie completed high school, had prior work experience, and had aspects of social inclusion (i.e., attending the "educational project" through her group home, Special Olympics, and church). Hinderances to college preparation may have included low expectations from doctors, parents, and LEAs; being in a self-contained educational placement in primary and secondary school that Minnie described as "[m]y class was for special needs;" having what appears to be an alternative diploma; and attending a LEA transitional/vocational rehabilitation program instead of higher education post high school. These hinderances were overcome by the academic accessibility of the community college and the HEPSSID, the supports mentioned above, and self-determination.

4.2.1.7 Accessibility

Accessibility was a theme shown in this case related to the community college and the HEPSSID. When Apple first started to look at how to meet Minnie's request to go to college, she was drawn to remedial courses offered by the community college. Following through with this point of access, Apple was informed about the HEPSSID at the community college. The HEPSSID provided another access point with a variety of built-in support services for students with ID.

In addition to academic accessibility, the community college was financially accessible.

Affordability was important to Apple who stated she took on the responsibility of paying for

Minnie to go to college after using what funds were available from the inheritance left by their

late father and contributions from one living relative, an aunt.

And so when [Minnie] went to school, we had to make sure that it fit the budget of what she had in her trust fund from her inheritance from my dad and which, you know, it was nice to have but at the same time, it was limited and so it didn't occur to me to go to big schools not only because I didn't have the connection to them, didn't even know they

had the program of may have had the programs and honestly . . . big schools mean big tuition costs.

Cost may have been less of a concern if Apple and Minnie had been informed about a state service agency that pays for PSE related to employment preparation for individuals with ID.

Apple stated,

We had to figure out the money and I only learned very recently that the [state service agency] has a tuition help for the [HEPSSID] students. And I'm like, "Well, that would have been nice to know a year and a half ago, two years ago, when I started paying a grand a semester for my sister."

Geographic accessibility was another aspect present in this study. This was related to transportation needs as the community college location allowed for the ability to utilize a public transportation service provided to people with disabilities.

And so [Minnie] can't ride the regular city busses, but she has the bus pass to do the special bus. . . . But so if we hadn't have had that transportation resource, we couldn't have done it, or at least not easily because the group home with five of the residents means that if they need to give somebody a ride, everybody has to pile into the van because they only typically have one staff member on site at a time."

Apple stated Minnie will "set up drop off/pick-up times . . . herself."

One obstacle to accessibility was the enrollment process. Minnie described this process as being long, which may have been in reference to the meetings/interviews. This was overcome by Minnie and Apple working together during the enrollment process with various tasks as described in the case study.

4.3 Martin

Martin is a 29-year-old Hispanic male who is in his third year at a community college HEPSSID. He resides in an urban area in the midwestern part of the United States and lives at home with his mother, father, and younger siblings—a brother (age 18) and a sister (age 21),

who only resides there when not at college. Martin has three siblings total—one older sister who attended college, one younger sister in college, and one younger brother in high school who receives special education services through the LEA. Martin is diagnosed with ID and autism spectrum disorder.

Mary, Martin's mother, is a 53-year-old Hispanic female. She is married and has four children. Her highest level of education is a master's degree in business administration. Her husband graduated from high school and then earned a certificate in woodworking. The annual household income is between \$60k-\$90k. Mary currently works as an office manager for a religious organization.

Martin stated he wanted to go to college to "learn" and began attending the community college program approximately five years after exiting high school. Mary recalled Martin first asked about going to college while in high school when his older sister went to college. He told his mother, "When is [Martin] going to college?" Mary stated, "I always thought about college for [Martin]." This was related to her desire for Martin to feel happy and confident. Even if Martin was not taking college classes, Mary sees it as important that he has experience at college. Mary expressed her concern if Martin "would be able to manage . . . different classes" at college. No friends or peers were mentioned as influencing the desire to go to college.

Mary thought the key factors to Martin accessing the community college were faith, expectations, family, discipline, and love. Concerning discipline, Mary expanded on how there is a schedule (such as they "go to sleep at one time") and there is no television, games, or computer in Martin's bedroom. In terms of faith, Mary described how Martin is "integrat[ed] into our community of faith." She stated there were "hard times" and she and her husband

"knew that [they] had a challenge, but [they] didn't let that stop [them] from bringing [Martin] into [their] life because it was harder."

Expectations and love were expressed in various ways. Mary commented that she "never hid" Martin and would take him with her "wherever" she went such as to Target or other stores despite "tantrums" that would occur when Martin was young. She said she "dealt with those" and "was willing to do that and more . . . for him to experience that there's a world outside." Martin's father included Martin in his profession and taught Martin how to paint and use some of the woodworking machines. Mary stated Martin's father "never treat[ed] him as if he didn't know how to do things." Martin's father also taught Martin how to sweep and clean the yard.

Mary found the HEPSSID while "looking for new things for [Martin]" on the internet. She stated this is something she "always" does, but this time she was looking specifically for academic programs that would teach reading and mathematics. She looked at community colleges in the area. When she noticed there was a program designed to teach students who had exited high school how to read, she "went to the college to ask about the program." Martin took a test while there. Afterward, a college employee phoned Mary and told her about the HEPSSID that had started a year prior at the community college. She invited Mary to visit the campus and "see" that program to assess "fit." Mary stated she was "happy" when she noticed the program included daily living skills and exercise, and students were "not segregated like in a room where nobody sees them." The students were a part of the "community" accessing the college facilities including the library, gym, and "everything that the other kids have."

Mary filled out the program's online application and described the enrollment process

as "simple." Martin and Mary went to the campus together to register him after the online application was completed, and Martin was "very happy." During this visit is when Mary met two other mothers who had children in the program. Mary stated these parents said only "good things" about the program.

Martin works at his mother's employment assisting with data entry and counting "the collection" (i.e., monetary church donations). Martin began this job after he exited high school because the religious leader agreed Martin could assist Mary with office work. Mary stated currently she takes Martin with her to work about once a week since his classes are online this semester. Before the COVID-19 pandemic, Martin worked at one of the community college's cafeterias. This arrangement was provided for selected students in the HEPSSID.

Martin attended high school for five years and was in a "self-contained" placement for the majority of his courses. Mary stated she thought inclusive educational placement is "the best thing that could be given to a child with disabilities if they provide the assistance they need." Mary recalled when Martin was younger, she "used to struggle with this with the school." Mary did not request an inclusive educational placement for Martin at the start and middle of elementary school explaining "his autism at that age was profound" and her preference was for "a small classroom." Around "fourth or fifth grade," Martin had developed in ways that Mary then "insist[ed] that [Martin] be included in a general classroom." Mary described how the school "was already like they didn't; the case manager said they didn't have money." Mary countered this with, "[T]hat's not my issue; I'm talking for my kid." She concluded, "[T]hey figure[d] out they couldn't convince me," and the result was Mary received a phone call from a district-level employee. Mary described this conversation as follows:

Even a district person told me . . . that I had too high expectations for my son, that I was thinking about myself, but I was not thinking in the other kids. She said your kid . . . could be disturbing to others and so you're not thinking about them. They cannot concentrate with your kid making noises.

Martin was not included in general education during elementary school.

In middle school, Mary noticed Martin "was getting depressed." So, in seventh grade when there was a change to a new special education teacher who "was more willing to be speaking for the student" even if this meant "at times during the IEP meetings there was some friction between him and the caseworker," Martin began being "introduce[ed] more into the general classroom for math." This continued and for Martin's first and second year of high school he was "integrated" for mathematics in the general education setting for Algebra supported by an "assistant." Mary explained that Martin was "good at math . . . but only computational math."

Martin had a dominant "self-contained" educational placement. Mary described Martin's "class" at school as being with students who had difficulty writing their names. Martin stated he learned "folders" in high school which were described as "color pencils, markers, notebooks."

For four years in high school, Martin participated with the band. He was not a member of the band and did not play an instrument; rather he attended the class to listen to the music and at least twice Mary said he conducted the band. Martin's special education teacher arranged for Martin to be "the mailman for the high school." In this role, Martin "distribute[d] letters to the different teachers."

Outside of high school, Mary stated Martin was involved in various activities. Martin participated in Special Olympics and took social skills and cooking classes on Saturdays through

the city's parks and recreation department. Martin also took individual drum lessons at a music school for three months.

Martin mentioned one teacher spoke to him about college but responded with the teacher's name when asked what was discussed so it is unknown if this was about college generally or specific to Martin. Martin did not take the ACT or similar as his teachers told his mother he was "excused from taking those." Martin also was excused from taking the state achievement tests typically required for graduation.

Mary was unaware of conversations with Martin about college from his teachers, observing there were "good teachers" but the public education system was overcrowded. She could also not recall a time when a counselor spoke with her about college for Martin. She expressed, "I don't think they pay the attention they should, and they focus more like on if you have, if they have a disability, you know." Mary discussed how this results in educational placement stating, "I even feel they get segregated, or they used to . . . on those years."

During high school, Martin participated in job training. This came from the result of his mother "insist[ing] a lot." Mary was told by "the person in charge . . . that it was not possible; that [Martin] wouldn't make it because he was too nervous, too anxious." Mary countered with, "Well, you don't know if you have not given him a chance." The school district employee responded, "only to prove [Mary] wrong, she [would] give him a chance." Then, the first week Martin participated, the employee phoned Mary and said, "I told you, your son is not gonna make it" and listed the things Martin was doing such as "wandering" and "not understanding." The employee offered to allow him to come for one more week. Mary spoke to Martin and told him, "[Y]our mom has been trying hard but you're not trying hard and . . . you're gonna go back

to your classroom and . . . you're not going to go out anymore" (referring to going out for job training versus staying inside the school). Mary tearfully recounted this experience saying, "Sometimes I have to be hard with him because I need him to understand that life is not, that I, you know, that I will not be here for all his life." Martin returned the next week and the teacher phoned Mary to say how much he had changed; he was able to continue in the job training program.

Mary stated she did not volunteer at the school. With IEP meetings, she "made sure" to attend. She took "some training" through a nonprofit to help her know how to "represent" her son and become familiar with "some issues."

Regarding transition IEP meetings, Mary stated, "He didn't have really a transition" and stated college was not discussed. The conversation that Mary did recall was a teacher who said, "You know what, [Martin] is transitioning, but . . . I think he should stay in high school rather than graduating so we're going to transfer him . . . to a vocational school." Mary explained, "At that time I was not very much aware of all the jargon and all the rights, you know." She continued, "[W]ith whatever I knew I always fought."

Martin did not earn a regular high school diploma and went to this vocational school until he was 21. At the vocational program, they had "a woodwork program and kitchen food program." Mary said, "They just threw him there because . . . I had nothing else for him." Mary described this vocational program as "a waste of time because he couldn't get a certificate in woodworking . . . or . . . the cook certificate." After this vocational school through the LEA, and prior to attending the HEPSSID, Martin utilized the city's park and recreation system that offered daily living skills programs and related courses.

Mary said geographic location was a factor in choosing the community college. The community college was near their residence (less than 20 minutes away) while another program she looked at was "very far" (about an hour and a half drive). Mary stated, "That was not something that I could do." Related to location was the need for transportation. The HEPSSID did not offer transportation; however, Martin was able to use a public transportation program that picked him up and took him to the college.

The cost of the community college was another consideration. Mary stated there was a private program that she found but it was "very expensive." The community college HEPSSID was affordable.

Program design, offerings, and operations were other considerations important in choosing the community college HEPSSID for Mary. As stated earlier, Mary wanted the program to include a learning component. Mary visited the campus and liked the teachers and how engaging they were with the students. She stated, "And they don't . . . babysit them; they treat them as adults."

No community resources that provided awareness of the HEPSSID or assisted with enrollment were mentioned in this case. Mary said that in her "case it has been [her]self trying." She did mention involvement with two parent organizations "but what [she] found in one of them . . . was a lot of pampering and a lot of, 'Oh, we feel sorry.'" She said smiling and with a small laugh, "That's not what I was looking for." She said she did not like "be[ing] a victim" or having someone tell her they felt "sorry." She wanted her kids "to have something in life; be independent . . . so [she] didn't go back to that parents' organization."

4.3.1 Themes

The pathway to the community college in Martin's case presented the following six themes: value of and experience in education, advocacy and support, goal-directed behavior, preparation, influencers, and accessibility. The case also had aspects of aspirational, navigational, social, and resistant capital (Yosso, 2005). The goal-directed behavior theme is related to parental view of disability and will be explored in cross-case analysis and Chapter 5.

4.3.1.1 Value of and Experience in Education

Mary has personal experience in higher education, having completed a master's degree. This personal experience likely equipped Mary with navigational capital necessary to maneuver through higher education spaces which she used to research PSE programs and be engaged in the enrollment process (Yosso, 2005). Martin was personally exposed to higher education when his sister left for college as well as when he visited the community college campus with his mother. Martin also has two sisters who went to college, so there appears to be a value of education, including higher education, within this family.

The value of education was evident in this case through various actions. Mary was active in Martin's primary and secondary education, engaged in activities to learn topics that might help her be a better educational advocate for her son, and desired higher education as well as engagement post high school in educational programs for Martin. Mary also faced challenges related to education as described in the case study but continued to be an educational advocate for her son, efforts that resulted in Martin's engagement in an inclusive mathematics course and a work program. This was evidence of resistant capital (Yosso, 2005).

Mary also stated, in regard to higher education for Martin, "I always thought about

college for him." Maintaining this goal and dream is evidence of aspirational capital, which Martin also displayed in requesting to go to college many years before he actually did (Yosso, 2005).

The value of education influenced the collegiate pathway as Mary stated the path to the community college started when she "was looking for [Martin] to learn more reading and more math."

I'm always, you know, I like looking for new things for him and I think I found it just looking for different, in different community colleges, see if they had a program. . . . I did see that [the community college] had a program for teaching the kids . . . how to read . . . even if they finished high school. . . . And so I heard about that program and I went to the college to ask about the program.

Martin's father also showed the value of education when he taught Martin aspects of his trade and various other household related tasks. Mary described this as follows:

And, but he always had expectations for Martin as well like he taught him how to paint. He taught him even how to use some of the woodwork machines. He taught him to sweep, to clean the yard. He never treat him as if he didn't know how to do things.

Taking the effort and time to teach his son these skills may also be evidence of aspirational capital in the form of maintaining expectations for Martin to gain employment (Yosso, 2005).

4.3.1.2 Advocacy and Support

Related to value of education seen through efforts of encouraging educational growth and skills development, the pathway to the community college HEPSSID in this case had the theme of support and advocacy. When the LEA/high school did not foster a pathway to higher education, Mary continued to independently pursue educational opportunities for Martin which ultimately led to his enrollment in the HEPSSID at the community college. She maintained aspirational capital is this regard, then used navigational capital to assist Martin

with the enrollment process which provided Martin with support in that process (Yosso, 2005). Mary also showed her support of and advocacy for education by attending IEP meetings and challenging the LEA for a more inclusive educational placement for Martin as described earlier.

Supports provided by the HEPSSID were not mentioned in the interviews. Information on the college's website and HEPSSID's Facebook page did not detail specific types of supports provided by the program. A phone call was placed to the HEPSSID director to inquire about supports but this individual was unable to be reached.

4.3.1.3 Goal-Directed Behavior

Another theme present was goal-directed behavior. Mary expressed an ultimate goal of Martin "com[ing] up to the challenge" present in life acknowledging she will not "be here for all his life." Preparing for life included continuing education post high school.

Mary described qualities of "faith," "love," and "expectations" that impacted the college-going pathway. Early in the interview, Mary stated her expectation of higher education in her statement, "I always thought about college for him," a goal she maintained which shows presence of aspirational capital described earlier (Yosso, 2005). She acknowledged Martin had difficulty with "communication" and her concern with his ability "to manage . . . different classes" at college. Mary exercised "faith" and "love" in deliberate efforts to help Martin reach her goals for him of preparing for life and developing educationally. The way she helped Martin with his communication showed resilience.

He was not verbal; . . . he was more pointing or grabbing and he was not looking at me. So, I think . . . somewhere between nine and ten years was the first time that he, you know, that he said I think he said, "Mom." Where he asked me about something, and it was like [Mary smiles and raises both hands]. But that's something that I do remember always doing, was not every day but very often. I would go to his room at night, and I

would talk to him. And I would grab him from his face, so he could try to look at me, but he didn't look at me. He, you know, he eyes were everywhere but he would not focus his sight on me. But I always told him that, that we love him [Mary's eyes became watery], and that we were here. And that we were waiting for him. . . . I spent many, many times."

Mary also purposefully engaged in activities that gave Martin experiences in the community.

Just integrating him into our community of faith and integrating him in wherever I go, wherever, you know. I never hid him. Sometimes I have, I had hard times. When I took him with me to the, for example, Target or to the stores when he was young he will do some tantrums. But I dealt with those, you know. I was willing to do that and more but for him to experience that there's a world outside. And they need to learn how to distinguish and know his surroundings.

Her husband showed similar actions in teaching Martin his trade and "how to use some of the woodwork machines." Mary stated, "He never treat him as if he didn't know how to do things." This shows an expectation of learning, followed by deliberate actions of teaching.

Pursuit of the goals related to education and life preparation also utilized resistant capital (Yosso, 2005). Regarding expectations, one time when Mary was advocating for inclusive educational placement, she recalled, "Even a district person told me that . . . I had too high expectations for my son." Her desires for inclusivity, learning, and real-life experiences for Martin may partly explain why when Mary decided on the community college program, it was influenced by observing the students were treated "as adults." She stated,

And this college . . . I like that the teachers who are offering the program are very engaging with the kids. And they don't treat them like, they don't babysit them. They treat them as adults.

Mary talked about her personal experience with a disability parent organization where she stated she "found . . . a lot of pampering and a lot of, 'Oh we feel sorry.'" Mary continued, "That's not what I was looking for. . . . I don't like to be a victim of anything. I want my kids . . . to have something in life; be independent. I don't want someone telling me you know, 'We feel

sorry' or this or that." She concluded that she did not return to that parent organization. This, and the previous example, shows behavior aligned to expectations and goals.

4.3.1.4 Preparation

The theme of preparation, including obstacles to preparation, was present in Martin's case. Academically, Martin took Algebra and was included in the general education setting for this subject. He had socially inclusive experiences including participation in the high school's band class, taking drum lessons, Special Olympics, and a cooking class. He also gained work experience and training, contributing to the development of skills related to independence. This was in part from the LEA, and part from his parents who developed employment skills by having Martin work in the office of Mary's employer and learn his father's trade.

An obstacle to preparing for higher education was the LEA's lack of academic preparation followed by a focus on a transition pathway to vocational rehabilitation instead of PSE. As discussed in Chapter 3, a dominant placement in self-contained educational settings may have provided less academic preparation than an inclusive educational placement. The LEA also engaged in actions related to transition that did not involve PSE nor credentials for employment. Mary expressed the following regarding the LEA's transition focus:

They didn't, he didn't have really a transition. I think, at that time, I was not very much aware of all the jargon and all the rights, you know. That I know some and . . . with whatever I knew I always fought. I wasn't like, I wasn't aware, the teacher just said, he said, "You know what, [Martin] is transitioning, but he, I think he should stay in high school rather than graduating so we're going to transfer him to a vocational school."

Mary addressed this focus on transitioning to vocational rehabilitation and "never" speaking to her about transitioning to PSE later in the interview as well, including her frustration with the vocational program not offering credentials.

So, basically when they transferred him to the vocational school they said, well, they have like a woodwork program and kitchen food program. And so, at that time, I was kind of upset because I said, "Well, if you know . . . this program was available why wasn't he . . . there the four or the six years?" You know, why if you saw no other; I felt like they weren't; so I felt like it was a waste of time because he couldn't get a certificate in woodworking . . . or in the cook certificate something. You know? I stopped. They just threw him there because . . . I had nothing else for him, too. So, no. No, I don't . . . never spoke up a college. They never spoke to me about college."

This lack of credentials and focus on a vocational rehabilitation pathway was overcome by Martin maintaining the desire to go to college and Mary continuing to search for educational options including those at the community college for her son once he exited the public education system—actions that required aspirational and navigational capital (Yosso, 2005).

4.3.1.5 Influencers

The next theme impacting the community college pathway in Martin's case were influencers—people who significantly influenced the collegiate pathway. Influencers included Martin and Mary (as described throughout this case) but also Martin's older sister, a community college staff member, and parents of students in the community college HEPSSID. Martin influenced the pathway by verbally expressing his desire to go to college, engaging in self-determination. Mary influenced the pathway by responding to this request and having the similar aspiration for her son. Mary recalled Martin's request first occurred when Martin's older sister went to college—"And he said, 'I want to go to college. When is [Martin] going to college?" This suggests Martin's sister influenced the pathway for Martin by providing exposure to higher education and possibly self-efficacy through vicarious experience.

Besides Martin, Mary, and Martin's sister who each influenced the desire/goal of going to college, there were influencers who impacted the decision to access community college via a

HEPSSID. Mary's initial inquiry into the community college was regarding classes/a program she found focusing on "basic math" and reading.

I did see that they had a program for teaching the kids who, like helping them how to read, you know. Even if they finished high school. They said they found that some kids cannot read or cannot do basic math. And so, I heard about that program, and I went to the college to ask about the program.

Then, Mary was redirected by a community college employee to the HEPSSID. This employee provided Mary with information about the existence of the HEPSSID. In an internet search, even with the name of the HEPSSID, I found it difficult to locate information about the program on the college's website or elsewhere using Google's search engine. The program is limited to one small paragraph on one page within the college's website. To locate contact information for the program, I needed to go to Think College's website. Given this difficulty in locating the program and the lack of providing information about this program by the LEA or disability parent organizations, it appears this new person in Mary's network provided social capital (Yosso, 2005).

And [Martin] took like a very, a test, but then they were looking for a mentor for him. And then the lady call me and she says, "Oh, you know what," because I did mention that he had a disability, and she said, "You know what, we're beginning this program and we began this program about a year ago," I think, she said. And she said, "If you're interested, you can come and see it and see if that interests you." And so that's how I got to know a little bit more about the program.

Mary followed the community college employee's suggestion; looked into the HEPSSID; and was pleased with the design of the program because it included daily living skills, access to the library and gym, exercise, and work experience on campus. The information provided to Mary about the HEPSSID by the community college employee redirected her attention to that program.

Mary decided to register Martin for the community college HEPSSID and went to the college. Vetting the program more, she inquired with parents present during registration about the quality of the program.

Outside of the college, like the day that I was registering him, there were other parents. So, I said, "You know, so I'm new here. How long have you been here? What do you like about the program? Is there anything that you don't like about the program?" And all I heard was, you know, good things.

These positive parent reports were the last influence prior to the registration of Martin in the community college HEPSSID that reinforced this pathway to the community college.

4.3.1.6 Accessibility

Accessibility is a theme that influenced the pathway to the community college. As mentioned above, the initial access point was the community college's program for individuals struggling with reading and mathematics. This program being academically accessible resulted in Mary looking into the community college and taking Martin to the college for testing. Then, the community college HEPSSID provided another academically accessible point, and the application process was "simple" and able to be completed easily.

Location, transportation, and cost were other aspects related to geographic and economic accessibility. Martin lives with his parents at home and utilizes public transportation services. Mary stated, "Through the city . . . he has public transportation for him. They can come and pick him up." The community college, being "about 20 minutes" from their home, was not only close enough to utilize public transportation but also was an affordable option.

Comparing the HEPSSID Martin attends to other programs, Mary stated the following:

It's a little bit near my house. I had look at all the programs. One was private, but it was very expensive. It was very expensive. And the other one was very far.

The community college HEPSSID was accessible in terms of location and cost. Each of these factors contributed to the overall theme of accessibility influencing the pathway to the community college HEPSSID.

4.4 Captain

Captain is a 20-year-old White female who lives with her mother and father in the midAtlantic part of the United States. She is the youngest of two children. She is a typically enrolled
full-time student at a community college and receives accommodations from the community
college's disability support services. At the time of interview, she was in her second year and on
target to graduate with an associate degree at the end of that academic year. Captain
previously received special education services through the LEA under the diagnosis of "other
health impairment" and has the genetic condition of trisomy 21.

Betty, Captain's mother, is a 60-year-old White female. She is married and has two children. Her highest level of education is a doctoral degree and at the time of the interview worked as a tenured professor. Her husband's highest level of education was an earned associate degree, and he works in the field of cyber security. The annual household income is over \$200k.

Captain stated she wanted to go to college "to have fun and get more education." She also said, "I wanted to meet people of different cultures." Betty stated that the desire to attend college was not "driven by [Captain] so much." Betty explained, it was not "a dream of hers that we then jumped on and made come true. It was kind of this not an expectation, but it was just sort of everybody she knows is going to college."

When asked if anyone discouraged her from going to college, Captain responded:

There was some people when I was born saying I couldn't go to college and I can't do certain things and they also asked me if I needed help all the time because of my disability. . . . It's people who don't really know me at all. You know, they always tell me you know you need help all the time. . . . And I don't really need help, you know, like I can do things by myself."

Captain selects her courses/classes. She said, "Yes, people like me, sometimes I would say, are mixed in with other students." Captain likes picking her classes and added "but I also know that is has to [be] related to the classes that I need." When asked about college she stated, "I love college. You know. I get to meet all kinds of different people and it's been fun."

When Captain graduates from college, she stated she might become a YouTuber. Betty stated she is not sure "if having an associates degree will make one whit of a difference in terms of what [Captain's] employability will be." Betty explained,

It probably will make a difference, but I don't know how much. You know. If she applies at the local movie theater as a kid with a high school diploma or a kid with a associates degree like will that make a difference? I don't know.

Captain is currently involved with a club she founded in 2020 with the focus of performing random acts of kindness. She is the president of the club, which has over 80 individuals. Captain explained she started the club because she "realized that our world needs kindness back." She continued, "and I'm wanting to spread kindness."

Betty stated residential college HEPSSIDs have internships and job supports as part of the program, but the community college has less of this. Although Betty wanted internships and job supports which were present in HEPSSIDs, she believed residing at home provided her the ability to support Captain in finding part-time employment. Employment was important as Betty expressed Captain "needs to learn how to work." Betty stated they were in the "process of applying for jobs" until the COVID-19 pandemic had "everything shut down."

Related to employment, Betty expressed that having a regular high school diploma did "harm." Betty explained it resulted in Captain being "cut off from all these other services."

Betty concluded that "people when they meet [Captain] will assume that she did not graduate from high school."

In terms of accessing college, Captain said her mother helped her get into college. She explained that as a professor her mother is "always helping [her] with college stuff." One way she did this was by assisting Captain with the college application, which they did together. Betty described the process as "very joint." When asked about the process to enroll in the community college, Captain stated, "[Y]ou have to fill out an application and then go to college and see how you do, you know? That's how easy it was." Captain remarked a "hard" part of the enrollment process was "so many meetings." However, Captain did not clarify which meetings or with whom. This may have been in reference, in part, to the Disability Services Office where Betty and Captain went through accommodations using her high school IEP as a reference.

Captain also filled out an application for a program that provides college students with support such as counselors and other check-ins. The program supports students in earning an associate degree locally and then transferring to a university. Captain heard about the program from high school and Betty and Captain talked about it at home. Captain filled out the online application while at high school and submitted it. This "surprised" her mother. Captain said, "She didn't really help me with that. . . . I told her, 'I've already turned in the application.' She's like, 'What?'" The application required an essay which Captain also stated helped her access college. Captain previously wrote a personal essay about her family and herself, including when she was born and her genetic condition, in an English course. She submitted that essay with the

application. When asked if anyone told her the application was due that day, Captain responded, "I told myself." No teachers or staff were reported as assisting with the application, or the actual submission although it was something that Captain was made aware of from school. Captain was accepted into that program and Betty regarded the "little extra guard rails" provided by this program as something contributing to choosing the community college.

Acceptance into the above-mentioned program provided what Betty described as a "sort of entrée into the community college system." Then, Betty found out about another program that had recently come to the community college campus near their home that I will refer to as *College Connect*. This program provided student-centered support for students with disabilities on campus utilizing peer mentoring and other collaboration including someone inclass to help with notetaking or other assistance. Captain interviewed with them and with this support the community college "emerged as the right thing to do" from Betty's perspective. In the current online learning design during the COVID-19 pandemic, Betty offers some of the assistance College Connect provided when Captain was attending in-person prior to the pandemic.

Captain shared something else that helped her access college was "a big test" she took in high school, referring to the state standardized tests required for graduation. Captain stated passing the subject area tests allowed her to earn her high school diploma. She did not take alternative assessments for the state testing. Captain had a mathematics tutor for one summer to help her pass the Algebra test, but she was a few points shy of the cut score. However, her score was sufficiently close to the cut score that she was able to qualify for locally verified credit. The teacher who helped Captain study for one particular test which was difficult for

Captain was mentioned by Captain as a factor that enabled her to access higher education because this led to her earning a regular high school diploma. Captain did not take college entrance exams outside of the ACT offered at school by the LEA. Betty stated this was not necessary since Captain was not "applying to a typical college program like a four-year college program at which that would be a requirement."

Betty stated the county supports went away when Captain graduated from high school. She believed this contributed to the college decision since the "little work-study programs . . . the federal things" that serve students with ID until the age of 22 were not available. When Betty "looked around for something for [Captain] to do," she noticed the "fabulous community college system nearby."

A representative from the college came to Captain's high school, but Captain stated she did not get to meet that person. Through a means she could not recall, she knew that representative was on campus. This representative provided information about "getting into college."

Captain heard about college "a little bit" from peers generally, but not one in particular. Some of her peers from high school also attend the same community college, including her exboyfriend, but these friends were not mentioned as influencing Captain's decision to go to the community college. Betty did not think peers/friends "played a huge part" in going to college as "most of her friend group" went to county-based transition programs for individuals with disabilities. Betty stated these programs were "almost exclusively . . . where her friend group went." Although Captain developed friends at school through activities like being the manager for various sports teams, Betty stated Captain did not do "stuff outside of school" with this

group and Captain was "the mascot," referring to these peers not developing a genuine friendship outside being invited to birthday parties. Betty surmised that Captain "was unique in her peer group in that way." The one peer that Betty did mention as contributing to the decision to attend this particular community college was someone who was a global messenger for Special Olympics with Captain. Betty stated she "knew of that family" and how this acquaintance enrolled at the community college that Captain is now attending with assistance from the College Connect program.

Captain stated she learned about college from her teachers but did not recall any specifics such as if it was about enrollment or filling out applications. The exception was one educator, a paraprofessional who supported Captain in English class, who talked about college with Captain. After Captain passed the last of the state standardized tests, Captain recalled this educator stated to her, "You're going to get that diploma and you're gonna go in college. I'm proud of you."

Betty described the high school's transition teacher as "terrible." Betty stated they "never really heard from her" and "had terrible transitions support." Betty recalled there was "the occasional thing" sent home such as information on Medicaid waivers, but no "personalized transition support." She reasoned that this teacher was perhaps assisting other students "who needed more support." Alternatively, Betty looked at county resources and found, then attended, a half-day workshop about transition for students with disabilities exiting the public school system "religiously" for four years. She stated each time there would be "something new" she would learn. Covered topics included social security, employment, and programs for individuals with disabilities. Betty noted that other transition teachers from high

schools were there except the transition teacher from Captain's high school.

Betty shared that her involvement in higher education was a factor in Captain going to college. Betty stated, "[M]y grandfather was a professor. A sister of mine was a professor. I had an aunt who was a professor. Like our family believes in higher education." All of Betty's siblings went to college. When the prenatal diagnosis of trisomy 21 was given while Betty was pregnant with Captain, Betty remembered it "didn't change that basic fundamental fact of who we are that [higher education] would be . . . something that we should shoot for." This was exemplified with Captain's parents setting up a 529 college fund "early on." Betty and her spouse reasoned, "You know, wouldn't it just be the case that [Captain] gets old enough and is capable enough and we say, 'Oh, we didn't think you could go so we didn't set aside any money for you. . . . Who wants to be in that situation?""

Something that contributed to this "mindset from the beginning" was a book Betty read that discusses disability as part of "the continuum of human condition." As a result, when Captain was prescribed various therapies like speech or occupational therapy, Betty looked for inclusive and natural ways such as enrolling Captain in The Little Gym and having her take gymnastics class for physical therapy. Betty stated the following:

I was pregnant with a child with Down syndrome. I knew zero. Right. So, I didn't know anything and so . . . reading [the book] and having it have such a strong effect on me as to what was appropriate, like what was right in terms of thinking about this and belonging and abilities and like it was just, it was really pivotal to the, my mindset and sort of from then on we looked for the natural supports and the most natural environment.

Betty expressed annoyance with adaptive swim classes for babies, stating "no baby" knows how to swim so there is it not necessary to create a separate swimming class for babies with disabilities. Betty concluded the following:

It just, that's just been my attitude since she was born, was that let's just make this kind of as normal life as possible.

Betty first discussed college with Captain when she was in high school. Betty stated, "I think it was probably in our mind as a possibility but maybe not a possibility, like we really didn't know and yet we tried to be prepared for it." Betty noted that HEPSSIDs were "new" and "didn't exist when [they] were thinking about [college] early on so [Betty] didn't know if there would be a way for [Captain] to do anything related to higher education or not." Betty and her spouse did focus on "preparing [Captain] for an independent life" and on building confidence. Betty stated that "wanting an independent life and thinking about higher education . . . are consistent." General independence and development were mentioned later in the interview by Betty as reasons she desired higher education for Captain.

With the existence of HEPSSIDs by the time Captain was in high school, Captain and Betty discussed college and went on a college road trip Captain's junior year of high school. They visited different HEPSSIDs located in the eastern part of the United States that were listed with Think College. The result of this trip was a decision for Captain to attend a university-based HEPSSID that she "loved." This plan changed after Betty had a private psychoeducational evaluation done while Captain was in her last year of high school. The recommendation from the psychologist on the report resulting from this evaluation was to engage in a "gradual transition to the demands of college." From this recommendation, the university HEPSSID was put "on hold for a year" and sights were switched to the community college. This change was described as occurring at "the last moment" during Captain's senior year of high school. Betty expressed the following:

But the community college sort of emerged . . . not as [a] second rate option, you know,

not go to a 4-year school or go to the community college which for a lot of kids it is. It became sort of a steppingstone for [Captain] like this would be a great interim step and let's take her out of the supports of the high school system and see how she does in a system with fewer supports, frankly.

The new plan was Captain would enroll at the local community college for one year and then attend the university HEPSSID. That changed with how close Captain became to receiving an associate degree, so the decision was made for Captain to continue another year at the community college and finish that degree. Betty stated that she would still like Captain to have the experience going to the university program and living on campus as that would be "huge for her growth."

Captain had all general education courses from elementary through high school except for mathematics courses in middle school and one study hall course in high school that were in a self-contained setting. The study hall period was requested to be in a self-contained setting as the study hall for the general student body was "chaos" and having someone to help Captain with homework seemed more beneficial than what was being provided to the general student body for that class period.

Betty stated they "tried very, very hard . . . not to have . . . separate classes." Betty also remarked that "pull out stuff made [her] nuts when they would come and pull . . . [Captain] out for speech therapy or something; she missed half a history lesson. [She] was like, 'How is that helping her?' You know? So, [they] did everything [they] could. [She] even turned down stuff so that they wouldn't do that." Betty likened the request for general education placement to fighting a "little battle" and expressed the following:

[S]ometimes it's the special ed people who are your worst enemy because they've "[d]one this for years." "They know about these kids." "They know where they belong." Like, you know, have you met my kid?

Betty concluded that "to some extent it is . . . built into the schools' structure without them even thinking about it. . . . when they have these set-aside classrooms and set-aside this and that, pull-out this, and all the that the other."

In high school, coursework included Algebra along with the other core classes of English, history, and science. She also took two years of Spanish and one year of sign language. She attended the same high school for four years and did not use special education transportation.

Captain was the manager for the girls' basketball and volleyball teams during ninth grade. During eleventh and twelfth grade she was the manager for the softball team. Captain also was a teaching assistant in "fashion class" where she helped "the students if they needed help with fashion stuff like making pillows," and was part of the Best Buddies club. When asked about high school, Captain said, "I loved every moment of it because of the sports I managed and the fun I was having in the classes." Betty stated Captain loves to learn and loved her high school teachers and even had special permission to each lunch in the teachers' lounge.

Captain participated in Girl Scouts (starting as a Brownie) and Special Olympics (i.e., swimming, basketball, softball, and golf). She was involved with her church and her church's youth group. Captain went on mission trips with her youth group. Betty stated this fostered independence and learning including "that [Captain] can be a helper . . . and not always be the one getting help." Betty also stated she encouraged this "overall building into her following her heart and doing her thing." Betty related the mission trip experiences to college in this way:

She would go on these work camp trips and . . . she wouldn't bring nails or painting or whatever, but she would connect with the homeowner whose home they were fixing and sit and chat and make that homeowner feel blessed and important . . . like that's her gift. . . . [T]his is so what's best for them, you know, it was being independent because I never then had a moment's hesitation about sending her off to college

campus in the sense that, you know, she has been away from us; she has learned to talk for herself.

Captain attended and participated in IEP meetings. She stated, "I told them one of my goals is to get to college." She explained she did not specify a particular campus at that time. Her IEP from her senior year has a postsecondary goal of "After exiting high school, [Captain] will complete a 4-year college or vocational program of study in the area of allied health services." Betty stated she "never put much stock" in goals but the accommodations "were the important thing" to her as it was what "would help [Captain] in the classroom." This IEP also showed Captain and both of her parents were present at that meeting. Betty stated they purposefully scheduled IEP meetings at times so her husband could attend and they "would go together." Captain and Betty both recalled Betty bringing cookies from a local bakery to IEP meetings.

Work-related experience before attending the community college was limited. Captain acquired some volunteer work experience during high school as a physical therapy assistant.

She did this part-time and said it came about after her mother sustained an injury and required physical therapy at this clinic. Captain's long involvement in Girl Scouts also provided the opportunity to be a Counselor in Training. However, due to the COVID-19 pandemic participation in this program did not occur as previously scheduled.

The cost was not a factor in choosing the community college, although Captain did receive two \$500 scholarships from Ruby's Rainbow (a nonprofit organization that provides scholarships for higher education to individuals with trisomy 21). Betty stated this was important because it meant Captain "had some skin in the game if [they] had her apply for scholarships." Betty said this financial assistance was not necessary and said she would "expose

privilege" in stating the money was not needed to send Captain to college. The cost of attending the community college was, however, "more reasonable than anything else [they] could have done."

Betty described "proximity" or location as a "big" factor contributing to Captain attending the community college because of transportation. Captain lives with her parents and their residence is not "on a bus line." Captain does not have a driver's license. Since the community college was "local," Captain was able to access a county transit system that comes to their residence, picks Captain up, and takes her to the college campus that is five minutes away. Betty stated Captain independently "handle[s]" this transportation system in regard to paying for the service. Betty makes weekly phone calls to arrange the rides.

As an infant and toddler, Captain received services through Early Childhood
Intervention, attended a daycare/preschool starting at age two in a private setting, and then
went to a private kindergarten. The preschool was where Captain's older sister attended, so
Betty asked the director about Captain going there and she agreed even though they had not
had a student with her genetic condition before. This ended up being an inclusive experience
where Captain "played around the creek" with her peers and "potty trained right along with all
the other kids." Betty recalled "the special ed preschool, you know, wanted to have her there
all the time; we were like, 'You know what, no. She's going to this other preschool.'"

Eventually, Captain attended the LEA's preschool program for students with qualifying disabilities to "get into the county system" but this was part-time. Other activities related to education included Captain watching Signing Time videos that are intended to enhance communication and language. Captain also did neurofeedback and craniosacral therapy.

After preschool, Betty put Captain in a private kindergarten. Betty thought with the public school's kindergarten being half-day that it "just didn't seem like it was going to be challenging enough" for Captain who was already reading. At this time Captain was also reevaluated and she no longer qualified for special education services.

Captain entered the public educational system in first grade. In elementary school,

Captain was ineligible for special education services for about three years (first through part of third grade). Then, Captain was provided special education services under the category *other health impairment*. Psychological testing during high school showed "significant cognitive deficits" and borderline impaired adaptive skills. Captain has never been diagnosed with ID because while her global IQ score is below 70, the diagnosis is "inappropriate" because her subtest scores on the intelligence testing instrument used fell under a unique circumstance where the range from her highest subtest score to her lowest subtest score is too wide. This range was rare in the standardization sample for this instrument. Per instructions provided in the instrument's manual, the diagnosis of intellectual disability is, therefore, inappropriate and is not to be issued. Captain's highest subset score was in verbal comprehension at the 75th percentile. In comparison, her lowest subtest score was in the 0.1th percentile.

In fourth grade, Captain took the state standardized tests and did not pass them.

However, Betty wanted Captain to take these tests while the "stakes" were low because in high school "the stakes [would] be higher if [they'd] like to seek higher education or a traditional degree." Betty intentionally wanted to provide this "scaffolding time."

During childhood, Captain served as a Junior Park Ranger for a couple of years and took hip hop dance classes. In middle school, Captain ran for class office and won. To this

accomplishment, Betty remarked, "It's an attitude you give the kid as much as it is attitude you give the school." Betty stated the "list" of activities Captain was involved in as a youth "is way longer than" what she was able to share because they had Captain "in every kind of possible camp or music of this or that."

Betty was "always involved" with the schools Captain attended from volunteering to being at IEP meetings. She was not part of the PTA but volunteered in tasks such as making copies for teachers and working the Book Fair. She said this did not occur when Captain was in high school "because nobody wants parents in high school" and "they didn't want [her] there anymore." It was this involvement that Betty attributes to "collaborative" IEP meetings since they were "a known quantity." She said, "It never felt like an us versus them, ever. Maybe as an educator I was taken more seriously."

Betty supported Captain's education in everyday, practical ways. Betty described developing a color-coded notebook system to help Captain with organization skills during high school. Betty also bought two backpacks as the school operated on an "A" and "B" rotating schedule, so there was a designated backpack for "A" days and another for "B" days. Reflecting on challenges in education, like organization, Betty remarked, "[W]e just find other ways." Betty also would look over Captain's essays and provide support at home such as help with homework.

Betty fostered independence through practices such as having Captain attend Girl Scout camps. They even tried a "hoity-toity girls camp" not a part of the Girl Scout system one summer, but "when [Betty and her husband] went to pick [Captain] up, they took [Betty and her husband] aside and said, 'It's probably not, you know, she probably needs to find

someplace else that can meet her needs a little more." They continued with Girl Scout camps as Betty said she "never heard one peep from the Girl Scouts about how much extra help [Captain] needed." Captain was a Junior Counselor for a couple of years. These experiences were important to Betty for Captain because it was "this idea of spending time away . . . and developing away from [Captain's parents]."

4.4.1 Themes

The pathway to the community college in the case of Captain presented the following eight themes: experience in, knowledge about, and value of higher education; educational support and involvement; preparation; student characteristics; influencers; expectations; accessibility; and higher education supports. Aspirational, navigational, and social capital was also present in this case (Yosso, 2005). Some of the coded data in these themes also seemed to be related to aspects of self-efficacy and parental view of disability. However, the previously listed themes were a direct representation of the coded data addressing the research question for this case. Self-efficacy and parental view of disability emerged as stronger themes in crosscase analysis and are explored in that section at the end of this chapter and in Chapter 5.

4.4.1.1 Experience in, Knowledge About, and Value of Higher Education

Experience in, knowledge about, and value of higher education was a theme present in Captain's case. Betty has a doctoral degree and currently works in higher education as a professor. This achievement shows a personal value of higher education. Betty's value of higher education was discussed during the grand tour question starting the interview with Betty where she began with the following:

Okay, so, you know, I might begin, and it's a weird place to begin, but I might begin with the fact that I'm in higher ed., right, because I think and my like; I've had my grandfather was a professor. A sister of mine was a professor. I had an aunt who was a professor. Like our family believes in higher education. All my siblings went to college. So, it just, it's just part of who we are. And so, yes, we had a prenatal diagnosis . . . but [it] somehow didn't change that basic fundamental fact of who we are that would be, you know, that's something that we should shoot for. . . . But it just was a mindset from the beginning.

It appears the value of higher education provided aspirational capital to maintain the goal of Captain going to college starting when Captain was young (Yosso, 2005). Betty's experience in higher education likely provided the navigational capital necessary to create a pathway to higher education (Yosso, 2005). Betty was aware of HEPSIDs evidenced by Captain and Betty visiting HEPPSIDs listed with Think College during Captain's junior year in high school. As discussed in the case, Betty and Captain also knew of collegiate support programs and the college's disability services.

4.4.1.2 Educational Support and Involvement

A theme of educational support and involvement was also present in Captain's case.

Betty and Captain attended IEP meetings, and Betty volunteered in Captain's schools.

And I was always involved in school, you know, just sort of volunteering here and there and that made us familiar, so IEP meetings were more collegial and collaborative than us versus them.

Betty also mentioned, "It never felt like an us versus them, ever. Maybe as an educator I was taken more seriously. I mean, I have no idea." Fruitful advocacy efforts with Captain's education, starting with requesting Captain attend a private preschool that had not had a student with trisomy 21 before, shows presence of navigational capital within educational spaces.

Betty also supported Captain's education at home such as providing homework assistance and creating a method of using colors that helped Captain be organized during high school.

And it became apparent that her primary challenges were organization. So, we've developed all kinds of color-coded notebooks and you know all of this. So, it was great. Math was always red, you can ask her to this day. And English was yellow, and science was green. You know, like that. So, everything matched so she could keep herself organized in her backpack. She had two backpacks, for A and B days because that's what they do here.

Betty also secured tutoring services for Captain to assist Captain in passing the mathematics state standardized test required for a high school diploma. Engaging in these direct support efforts may be evidence of aspirational capital as Betty maintained goals for Captain of academic achievement and accessing higher education despite obstacles or challenges (Yosso, 2005).

4.4.1.3 Preparation

Related to support was a theme of preparation. As stated above, Betty was involved in Captain's education. Betty's actions fostered Captain's academic preparation for college, which included gaining access to a private preschool.

So, we had my older daughter had been at this fabulous preschool. It was on the farm and there were animals and, you know, whatever. And so, I went and I talked to the director there. We have way too many stories for an hour. But we went and talked to the director there, but this is all foundational information. Yeah, about having [Captain] there because it was our first child with Down syndrome. Like, I don't know. And so, the director there knew us as a family, right. And because I've been there, and I'd help with the board and all of that sort of stuff. And she said, "You know what, it will be our first time to but we'll give it a try. And if it doesn't work. It doesn't work." And so [Captain] . . . went to preschool when she wasn't . . . walking yet."

A dominant inclusive educational placement continued in kindergarten and through

twelfth grade, utilizing paraprofessional support. Captain's courses in high school included Algebra and two foreign languages—Spanish and sign language. Captain took the ACT that was offered at her high school, passed or received locally verified credit on the state's high school exit exams, and graduated with a regular high school diploma. Captain's academic preparation appears to have equipped her with the skills to be successful in earning an associate degree as evidenced by her near achievement of that degree at the time of interview.

Preparation for college was also social. Captain was the manager for various sports teams in high school; and participated in her church, Girl Scouts, Special Olympics, and dance. These social activities developed independence skills.

So anyway, but the Girl Scouts. There's a camp [at this one location] . . . and she started going there soon as she was old enough, really, and then spent you know summers there doing this and that. I never heard one peep from the Girl Scouts about how much extra help she needed or you know, like, "Don't know if this is the right thing for her," you know nothing. It was the smoothest most seamless thing. And so, [Captain] started spending more and more summer camps there. Got up to; she was a junior counselor for a couple years. And this last summer when the world went to whatever, she was supposed to be . . . a CIT, counselor in training, which is a paid position . . . [I]t's the next level where they're going to. . . become a counselor at the camp and she would have been there all summer. And so, this idea of spending time away from us and developing away from us. Also, I chalked up as a success thing. She's been involved in stuff at church for forever, youth groups and this and that. And she went on mission trips with the group. You know, all by herself. We didn't have to go."

Development of independence skills influenced the collegiate pathway as Captain showed self-determination by telling her IEP team she wanted to go to college and then taking steps towards that goal including submitting the collegiate support program and the community college's admission applications. Engaging in these activities may be related to aspirational and navigational capital as Captain showed the ability to maneuver in educational spaces while maintaining the goal of going to college even in the face of having difficulty passing one of the

state's high school exit exams (Yosso, 2005).

4.4.1.4 Student Characteristics

From these and other experiences, it is clear Captain exhibited characteristics that may have influenced the higher education pathway. Present in the data was information showing self-efficacy and self-determination, as well as skills of entrepreneurship and independence.

These skills were evident in her starting a club and seeking "over 80 signatures" as part of that process.

Well, I'm . . . the founder of the club. I'm the president, you know, and I just realized that our world needs kindness back into the world and I'm wanting to spread kindness and that's how the club started.

Captain is aware of ableism and prejudice, but she did not allow that to deter her from expressing her desire for higher education at IEP meetings and pursuing that course—a sign of aspirational and navigational capital as stated above (Yosso, 2005).

There was some people when I was born saying I couldn't go to college and I can't do certain things and they also asked me if I needed help all the time because of my disability. . . . Some people, not all people that know me. . . . It's people who don't really know me at all. You know, they always tell me you know you need help all the time. . . . And I don't really need help, you know. Like I can do things by myself.

Captain did not need help turning in the application for the college support program, which she did unbeknownst to her mother and before the deadline.

4.4.1.5 Influencers

Influencers were another theme in Captain's case. Betty was influenced by the professional recommendation from the private individual psychoeducational evaluation that suggested Captain start the path to higher education at the community college.

So, we had been on this whole college round trip. And we had picked out . . . [a university HEPSSID]. The woman there loved [Captain] and [Captain] loved the college. And so that's what we had thought we do. Then we got the psycho. ed. testing done and it recommended, and we had been thinking also, that a more gentle introduction to the independence of college might be better for her. I don't know if you read that whole thing to the end, but that's one of the things he recommended. And we thought that probably would be good. And we talked to [the university HEPSSID] and they would hold her; they put her on hold for a year and such. You know, they would just defer her, and we could come the next year. So, we thought we'd do a year of community college and see how that went.

Betty was also influenced by a peer of Captain's from a disability organization who had accessed higher education at the community college with the support of one of the same outside collegiate support programs.

[The peer] was a student who was [a part of the disability organization] and he went to the community college. So, we knew of that family that had taken advantage of the [program]. . . . We know of him right, we know of that family. So, with that, you know, that's . . . one more checkbox on why this particular program at this community college."

The psychologist and the peer mentioned above may also have been the source of social capital, in the form of providing information (Yosso, 2005). Another form of social capital is emotional support which was seen by another influencer discussed earlier regarding the theme of support—Captain's high school paraprofessional (Yosso, 2005). Captain stated, "He likes to talk about college with me." She continued, "And after I passed the test [referring to the state exam], he's like, 'You're going to get that diploma and you're gonna go in college. I'm proud of you.'"

4.4.1.6 Expectations

The statement by the paraprofessional above also relates to the theme of expectations.

There was an expectation by this educator that Captain would go to college, perhaps related to the IEP transition goal set forth that post high school Captain would "complete a 4-year college"

or vocational program of study." This same expectation was expressed by Betty and may be related to her view of disability being part of a continuum—an assumption that will be discussed in later in this chapter. Collegiate expectations were evident in the data as seen in actions such as taking a college road trip when Captain was in eleventh grade as well as planning for the possibility of higher education in the future starting when Captain was young.

We had set aside, you know, 529s early on, just to drib a little bit into overtime when we had any extra, and we of course set one up for [Captain] because we thought, you know, wouldn't it just be the case that she gets old enough, and is capable enough, and we say, "Oh, we didn't think you could go so we didn't set aside any money for you." You know, like, that's just; who wants to be in that situation?"

It does not appear Captain directly told her parents she wanted to go to college, and then her parents responded in making that goal a reality; although Captain did state she shared the goal for college at an IEP meeting. Suggesting the expectation for college was related to something besides expectations, Betty shared,

She is happy at college, but I don't know that it was a dream of hers that we then jumped on and made come true. It was kind of this not an expectation, but it was just sort of everybody she knows is going to college."

This comment suggests the collegiate pathway was influenced by more than expectations, a notion that is explored more in cross-case analysis.

4.4.1.7 Accessibility

Accessibility was a theme present in this case and included transportation; and the community college's ease of application, cost, and location. Affordability was not necessarily related to the inability to pay for a more expensive university HEPSSID. Rather, Betty stated cost was related to the decision because the community college was a "reasonable" option. Betty stated, "I mean it's more reasonable than anything else we could have done, frankly."

Accessibility of the community college was related to geographic location and availability of transportation. Betty stated, "Proximity is a big one," referring to factors that contributed to choosing the community college.

And then, you know, it was because it's local we were able to get her ADA ride. . . . [W]e're not on a bus line. . . . [W]e don't qualify for or we're too far away from a bus stop or something. I forget what it is. So, . . . she gets rides to campus. On this it's a county transit system and it costs her \$2 a ride or something. So, they come to our house and pick her up and that was possible because literally the community college is five minutes away. . . . So, she doesn't drive; she doesn't have her license. . . . [T]he county transportation system was important for this because she then could handle it.

The other aspect of geographic location was a concern for safety. There was a university HEPSSID that Betty considered before deciding on the community college, but she was concerned about Captain living in the city where that university was located by herself.

Lastly, the community college was accessible by having an "easy" application. Captain said, "Now you know, like, you have to fill out an application and then go to college and see how you do. You know. That's how easy it was." A challenge during the enrollment process that was overcome with perseverance was the "many meetings" that Captain engaged in.

Just the process. Of them like enrolling you in. Like I had to go to so many meetings that was what was the hard part.

Help with this transition to higher education perhaps could have come from the LEA as part of transition services; however, that support was not provided.

4.4.1.8 Higher Education Supports

The theme of higher education supports was seen in practical ways as described earlier with the LEA's paraprofessional and overall support of receiving a regular high school diploma and parental support, to transportation services and various collegiate support services. Betty

provided support with Captain's education including helping with the community college's application and financially planning for higher education. Captain had other higher education supports including a scholarship award, availability and admission to collegiate support programs, and the college's disability support services.

Captain received a scholarship from Ruby's Rainbow, a nonprofit organization supporting students with Down syndrome pursuing higher education. Captain utilized two higher education support services—College Connect and a collegiate program that offers academic support and free workshops specific to that community college system. Captain also utilized the college's disability support services. This may appear to be related more to success in higher education, but having these services and resources created "buy-in" and made the community college an option that had the supports to foster academic success. It was not Betty's intention to have Captain in the community college entirely without such support.

And let's take her out of the supports of the high school system and see how she does in a system with fewer supports, frankly, right.

Betty stated the collegiate academic support program "is the thing that the local community college has set up that gives these just a little extra guard rails for students who need it." Then, concluded, "That was helpful to learn about that." Betty spoke about disability support services and College Connect as follows:

So, [Captain] had someone in one of her classes . . . it's an extra pay for thing right and we did DSS; we did the disability support services also right. And so, she has accommodations. . . . And . . . [College Connect] can provide a mentor to be in a class with a student and help take notes and that sort of thing. If needed, or not, right. . . . Homework, not tutoring, but homework help, in the way that just making sure that everything's getting done and all of that. So, we have had, I think her first semester, she had someone in her English class with her. . . . it depends on the class, you know, depends on . . . how that instructor is because if the professor is highly organized and

has everything they need on their Canvas site and maybe provides guided notes or, you know, like if it's organized. She's fine without somebody in class.

A support that was lacking was from the high school's transition staff member. This may have been an obstacle to transitioning from high school to higher education and receiving the above-mentioned supports. However, Captain and Betty overcame this obstacle by capitalizing on other resources including social capital obtained from the vicarious experience from another family with a son who utilized one of those support services and by Betty attending county workshops on transition (Yosso, 2005). Concerning the lack of transition support from the LEA, Betty shared the following:

See, we had a terrible transition teacher in high school. Terrible. Never really heard from her. . . . She had her doctorate, so she was Dr. so and so. She was terrible. So, we went to our county has this thing . . . it's half a day workshop with all kinds of, you know, SSI and . . . the job search thing. . . . And here's some programs and this and this. And we sat through that religiously for four years. Every time it would came up, we would just go listen because we needed to. You'd pick up something new every time you'd go, right. So, we would just go listen and see if we could learn something. And . . . the other transition teachers from all the other high schools where, they are talking about the stuff they were doing, and our transition teacher was never there. So, we've had terrible transitions support. . . . They sent home the occasional thing. . . . It was every once in a while, blast out some information. But there was not personalized transition support for us, I'm afraid."

The other area that lacked support was government transition support services offered to students who have not yet exited public education and are still being served by IDEA and special education services. Betty stated, "Also the fact that she has a regular diploma probably was more harm . . . in the sense that she got cut off from all these other services." This obstacle did not pose a barrier as Betty and Captain continued with the goal of pursuing higher education, utilizing aspirational capital, and secured other resources to support the transition to the community college, including those obtained through social capital (Yosso, 2005).

4.5 Jane

Jane is a 19-year-old Mexican American female. At the time of interview, she was in her second year attending a community college HEPSSID as well as a separate transition program through the LEA in the Western part of the United States. She lives with her parents and is the youngest of six children. Jane is bilingual. She has trisomy 21 and a diagnosis of ID.

Chris and Evie are married and have six children. Evie is a Mexican female estimated to be in her late 50s (birthdate was not provided as is estimated from online sources). Chris is a Mexican American male estimated to be in his early 60s (birthdate was not provided and is estimated from online sources). Evie and Chris both have some college; neither completed a college degree. Evie works as a real estate broker and has a realtor's license. Evie and Chris run a real estate business together. Chris was teaching with the LEA as a single-subject teacher having an industry-specific license before the COVID-19 pandemic. The annual household income is around \$125K.

Jane stated she wanted to go to college "to be smart." She said she first thought about college in high school and that one teacher in high school talked to her about college, but Jane did not provide specific information about that interaction. Comparing college and high school, Jane stated, "The more fun one is college." When she finishes college and the county transition program, the plan is she will open her own business and/or work in the food industry. She enjoys fashion.

When asked about key factors contributing to Jane accessing higher education, Evie said, "But what were the milestones of her going to college? Just her wanting to go!" Evie and Chris mentioned the impact that media had on Jane developing her own desire to attend

college. One animated movie, *Monsters University*, is when Jane's parents noticed Jane "caught the bug that she wanted to have that experience; she wanted . . . to go to college." Jane would reference wanting to become a "scarer" at Monsters University and would talk about leaving to go live in a dorm. Evie recalls, "So when it came from her, we kind of pushed it even more" and the movie helped because "it was more of a visual for [Jane] to know what college was like."

Another movie, *Toy Story*, had a character, Andy, who went to college. The impact of this movie Chris remembers was Jane stating, "Oh are you going to miss me? I'm going to go to college like Andy." To which both Chris and Evie remarked they would be going to college with her.

Jane's entrée into the community college started when her parents sought to enroll her as a traditional student. Chris and Evie were not aware of the HEPSSID at the community college. Jane toured the campus and "helped with the application with Papa," her father. Jane stated she was "nervous" when she toured the campus. Chris remembered this moment as follows:

When I went to enroll her and wanted her to walk the campus and explain to her that it was the big school now, you know. She loved it. She absorbed it. She thought she was a big girl.

Evie recalls the enrollment process being "the same process that any other student goes through" including filling out financial aid paperwork. During the enrollment process, a college admissions counselor informed Chris and Jane about the HEPSSID. Chris and Jane went to an orientation for the HEPSSID, but the director was not there. At the orientation, Chris and Jane sat in the theater seating and Chris remarked, "[W]e were looking around and it wasn't high school, it was adults with their adult parents." Chris did eventually connect with the HEPSSID director and "interviewed him." Chris liked the director. Jane had an interview with the HEPSSID

director and the HEPSSID director helped with selecting courses for Jane.

Speaking about the HEPSSID, and programs or services in general for individuals with disabilities post high school, Evie expressed they were not the only parents unaware of programs that serve individuals with ID.

The expectations just continue to be so low. And we have met other parents as [Jane] has gone into the secondary program, the transitional program. We met other parents that you know they are in the same spot we were where they did not know a lot of programs that were available. . . . There's not a lot of information and we have to like, it's like crawling up a mountain trying to get information to what's out there; . . . It's not readily available and not if English isn't your first language; . . . it's a lot harder.

Jane's father, Chris, stated he believed their faith in God and loving "God first before anything else," having "loving parents" and family support, being involved with the schools and being advocates for Jane, including Jane in the community, having a "strong" mother who worked with him as a "team" to help Jane overcome low expectations and challenges, and having "high expectations" for Jane were factors leading to Jane accessing higher education.

Chris elaborated on expectations by stating that, "When someone says [Jane] can't accomplish something . . . don't tell her mom that because she'll end up doing it." He gave examples of being told Jane would not be able to walk and then Jane walking at age two, and being told Jane would not "speak properly" and Jane being bilingual. Chris expressed that he and his wife "became [Jane's] biggest advocates." Concerning transitioning out of high school, Chris was intentional and directive with the pathway to take and deducted, "You get one shot at this."

Evie stated she regarded herself and Chris, expectations, Jane wanting to go to college, and a desire for Jane "to experience everything that anyone else experienced after high school" as the key factors that contributed to Jane accessing higher education. Evie also mentioned expectations for Jane and how that was related to the overall expectations for her other

children. She stated she and Chris "wanted [Jane] to experience the same thing that [their] other children experienced." She noted the things that led to Jane attending college were "[t]he same thing[s] that [were] on the path for the rest of [their] kids." Evie continued,

I didn't think that it would be any different for [Jane] so the expectation was always there. It wasn't that she was not going to go to college because she has a disability; it was she was going to go to college because we wanted her to experience that to the best of her ability."

This decision did not just occur "one day" but rather because Evie's other children went to college, she "knew it was just going to happen" for Jane so Evie "never really pushed the issue; [they] just knew that when . . . she graduated she was going to go to [the community college]." Evie stated, "It was never a question; we just knew the expectation was always there that if she wanted to, and if she had the abilities to do it, she was going to experience that." At the end of the interview, Evie also referenced the 4-year university setting stating, "And it's not like she's going to the university, well maybe she will."

Chris and Evie took Jane with them when one daughter left to attend a university out of state. This trip involved being on campus and helping Jane's sibling get settled into her dorm.

Chris described, "We've injected [Jane] into all of the sibling's experiences." Out of Jane's five older siblings, four attended college with two attending the same community college where Jane is currently. Jane's parents also had previously attended this same community college.

In high school, Evie stated Jane "had a very good experience." Jane was part of the cheerleading squad for two years. From this experience, Evie noticed Jane "blossomed" whereas before Jane was "more of an introvert." Chris stated the following:

Jane was a varsity cheerleader because of her parents and help working with her teachers. Jane experienced a few things that should be normal; she should have been

invited anyways with the support of the school district but because of her parents she experienced being a cheerleader.

Jane also participated in the senior fashion show, Bible Club, and homecoming where she was part of the procession as an "ambassador." Chris stated these inclusive experiences would not have occurred without them advocating for them and the help of Jane's special education teacher. Chris' understanding was in the past "the special needs population was . . . never included, never invited, never part of that process" with homecoming. Chris said, "They do have a sense that there is a special population on campus but without . . . people advocating for their families, it's not going to happen." Evie agreed with this saying, "[A] lot of the programs that [the school] had, it was us to make sure that we participated in them and got [Jane] involved." To which Chris added, "To their surprise." Jane noticed "the other parents" of children with disabilities were not "doing it," referring to having their children participate in extracurricular activities with the general student body. Community activities Jane participated in during high school included Special Olympics and A Night to Remember (a prom-style event for individuals with disabilities). Chris also stated Evie is included in "whatever [they] do."

Jane attended the same high school for four years, then exited with a certificate of completion. Evie said, "[Jane] couldn't get a diploma because then all the benefits would erase." Evie expressed, "If she did get a grad., if she technically graduate[d] from the high school then she would not qualify for any regional center's support or any other support because she's basically . . . smart enough to graduate from high school then you wouldn't need anything." Chris stated Jane also "did not meet the state standards, math, reading, English, all that." By getting a certificate, Jane could access "regional center's support," a transition support specific to where they reside.

The high school did not offer direct assistance with transition to college for Jane. One indirect activity was when the high school had a college night open to the whole student body. Jane recalled there were "resource fairs;" however, these were "not geared towards college" but "it was like, you know, art or you know special populations groups or special needs trust." Evie described finding community or similar resources in general "is always . . . us fighting an uphill battle trying to figure out what's available for [Jane]." Chris did not think the school system helped with Jane transitioning to college.

Jane was in a special education resource or self-contained educational placement starting in elementary school. The exception was physical education when in high school Jane's teacher would have her students "go out to P.E. with the regular population." Evie stated lunch was also not with the general student body. There was some time during secondary school that included "reverse inclusion," a practice where students from advanced placement courses came into Jane's classroom. Chris said they "were promoting" inclusive educational placement until he observed an inclusive placement while he was a guest speaker in a public school and the student did not have paraprofessional support. Chris mentioned this was a concern as "students could take advantage" of the student in this type of arrangement, and he described Jane as "very trusting." Evie stated the following:

Do I agree that they should be included more, yes, as long as there is some sort of supervision and not left alone. Yeah, I wasn't comfortable with that for our daughter.

In middle school, the idea of safety came up as well but this time regarding riding the school bus. Jane rode the regular school bus in middle school. There was some bullying that occurred, and Evie said they "clipped that in the bud real quick." Chris said eventually the girls who bullied Jane became her friends and one in particular "ended up advocating for [Jane]."

This experience Chris brought up in the context of how over Jane's life Chris and Evie have "been letting go here a little bit, letting go there a little bit." Evie added to that comment with, "And jumping in when we have to."

Jane gained work experience during high school. She worked in her high school's cafeteria "making the salads" for two years. Her aunt was employed as the cafeteria manager. Evie would take Jane to her office to work. Jane also worked at a fast-food restaurant cleaning tables and chairs and bringing meals to customers. Jane's parents advocated to get Jane this work experience, and this employment was supported by her high school paraprofessional who worked at the high school with Jane and also at this fast-food restaurant.

Chris and Evie were involved in Jane's public education. Chris stated overall he would "in a professional way, challeng[e] the establishment, education, school, school district" and would engage with the principals often, seeking to befriend administrators and "whoever on the campus . . . because you know how hard it is to walk onto a campus." Chris took a job as a teacher while Jane was in high school within the district as a one-subject teacher and stated it was easier to speak with others within the school now having a "badge." Evie said being "big advocates for [Jane] . . . [is] the norm for" them and part of this advocacy role includes having a "standard a lot higher than" the public school.

Chris spoke about one experience where the special education teacher Jane had her ninth-grade year did not have the "mindset" Chris wanted for Jane "coming into the high school level." He remarked, "So, we let [Jane] stay in her classroom for about a year" and then "transferred [Jane] to another . . . teacher." The former teacher and Chris had one experience where Chris asked about what time to arrive for Back-to-School Night. Chris reported this

teacher was taken back by this desire to attend. He recalled the teacher said, "[M]ost parents of special needs, they don't come to Back-to-School Night." To which Chris replied he and his wife do attend these events. The teacher responded by calling him a "helicopter parent." Chris corrected her and referred to himself as a "stealth bomber."

After this ninth-grade year, Chris stated he and his wife "took the reins for the next three years and helped develop [Jane] during . . . high school." Evie stated these types of experiences of advocating for Jane's education occurred since elementary school "pretty much all the time." Evie said the school's "expectations were really low, very standard." Laughing at the end of this statement she remarked, "We just brought their expectations up."

Chris and Evie were not a part of the Parent Teacher Association and did not "do too much volunteering at her school" stating in part because "one of [them] is always having to be with [Jane]." Evie said, "We never volunteered on campus as parent aides or anything."

Chris and Evie supported "any kind of fundraising" and attended IEP meetings religiously. Virtually all of the IEP meetings were of them attending together. Evie described it being "very rare" that they did not attend together because they "made sure [they] were both together." In reference to working with the school system, Chris stated they "understood what [the schools] were doing and how the system works, but [they] wanted [the schools] to know how the [Last Name]'s did it."

Chris and Evie made a life change in support of Jane's education post high school.

Because Jane exited high school with a certificate, she qualified to attend a regional center (a transition school) through the county. Looking at what was available, Chris "wasn't happy" with the options. Chris explained it this way, "They tried to pigeonhole us into a couple of options

within the school district where she was coming out of. That wasn't going to happen." Evie continued, "So we saw a different district in a different city that we really liked and," Chris finishes, "We moved." Chris said he "believe[s] that the Lord had [him] teaching" at this time because it allowed him to be "deep into the system" and have access to speak with top-level administrators. Since interdistrict transfers were not an option, Chris recalled, "So, I said, 'Okay, pack your stuff we're moving.'" Chris expressed he would have moved to other nearby cities if the transition program were to be located there because he and his wife "wanted [Jane] in the best." The move meant relocating from a "big old mansion" to a "two-bedroom dorm" or apartment. This reference to their "dorm," or apartment, was made by Jane as well.

Chris and Evie enrolled Jane into the transition program and simultaneously enrolled her at the community college which was across the street from this transition center. Evie said, "So, it worked out well. We were gonna have her go to the college anyways." Later in the interview, Evie stated they planned for Jane to attend the community college "whether it meant [them] picking [Jane] up from the school and taking her," Chris finished with, "every day." Evie explained the original plan was to enroll Jane directly with the community college and either Evie or Chris "would be there with [Jane], or one of [Jane's] sisters, or [they] would pay an aide to stay in class with her." The transition center ultimately did end up providing an employee to walk Jane to the college campus, sit with her during class, and walk her back to the transition center.

Chris stated the employees at the transition center "were surprised [Jane] was already enrolled" at the community college as students from the transition center typically begin attending the community college HEPSSID their last year at the transition center or later. To the

surprise that Jane was already enrolled at the community college, Chris recalled, "And I go, 'Yeah, that's the way it works in our house." Evie stated, "I don't know why, I mean it's something that needs to get done and it got done." Evie continued, "We get really surprised because we think that everybody's doing what we're doing; we don't think anything's different."

Chris and Evie did not regard cost as a factor in choosing the community college. At first, they had some costs during the enrollment process before being directed to the HEPSSID. Then, once enrolled in the HEPSSID, the cost of that program was offset through a foundation Evie understood as being through the community college. It was mentioned that community college would have been at no cost to them where they live if Jane had a regular high school diploma.

Location was somewhat a factor. Other community college campuses were further out from this particular campus relative to their residence. The community college was referenced as being "five minutes" from their residence.

Peers were not considered influential in choosing the community college. Peers "in [Jane's] circle" from her high school were going to a transitional school which at that time had a gardening focus. Because of this gardening focus, Evie remembers Jane expressing, "No, don't want to be a carrot farmer, I want to go to college." This was understood by Evie as coming from the animated movie, *Zootopia*, where a rabbit leaves the family business of carrot farming to pursue her dream of becoming a police officer.

After this transition program, it was explained the peers were likely to get involved with The ARC or Goodwill, Inc. programs. Evie stated the parents of Jane's peers seem "happy" with

this postsecondary path and doing "art programs." She stated, smiling, "So their expectations are obviously a little bit low."

At the end of the parent interview, participants' view of disability was discussed with Chris and Evie. Evie immediately spoke about her father.

He would say, "She doesn't have Down syndrome; she has up syndrome." He'd say, "There's nothing down about her."

Chris described his father-in-law's influence as follows:

There was nothing too hard for him to be able to accomplish so he passed that kind of like to her. . . . What he was trying to say is "I understand you guys are going to have this the rest of your life, but just look at it this way, she has up syndrome, not Down syndrome."

Evie explained her father "always had the attitude of 'If someone else can do it why can't I?'"

Evie said this approach or attitude transferred to her which she transferred "over to [Jane]."

The couple also spoke about disability in general. Evie said in her family "nobody ever saw [Jane] as having [a disability]." Chris spoke earlier in the interview about how Evie "didn't take kindly" to "the word retarded" that was used before the change to the term ID.

4.5.1 Themes

Jane's pathway to the community college had the following seven themes: preparation, expectations, experience in and value of education, advocacy and involvement, influencers, support, and accessibility. Each of these areas impacted the forging of the collegiate pathway.

Data supporting these themes also showed presence of aspirational, navigational, resistant, and social capital (Yosso, 2005).

4.5.1.1 Preparation

The theme of preparation includes both aspects that assisted Jane in preparing for college as well as hinderances. The academic preparation of Jane included completing high school with a certificate. Evie stated, "She couldn't get a diploma because then all the benefits would erase." Jane also likely gained various skills from her involvement in extracurricular and social activities (i.e., varsity cheerleading, Bible club, a high school fashion show, and homecoming as an ambassador). She had employment-related skills from her various work experiences, and her parents fostered independence by encouraging and providing these work experiences. Independence and perhaps navigational and/or self-advocacy skills were also fostered by Jane's parents having her ride a public school bus, despite bullying that occurred.

So that's another area where there is no assigned person. And she, and she grew up. She grew up normal to; made fun of, and a little bullying going on.

Some obstacles to academic preparation based on research discussed in Chapter 3 may have been Jane's dominant self-contained educational placement that started in kindergarten and the LEA having what was described as low expectations. Chris said, "We just kind of like; we understood what they were doing and how the system works, but we wanted them to know how the [Last Name]'s did it." Evie followed this comment with, "It's just that their expectations were really low. Very standard." This barrier was addressed by Chris and Evie being educational advocates for their daughter's public education in which Evie summarized with, "We just brought their expectations up."

4.5.1.2 Expectations

The term expectation (in singular and plural form) was used 14 times in various

contexts in the interview with Chris and Evie. Expectations related to higher education included the goal of Jane going to the community college and potentially a university in the future. Evie's statement below shows the lack of imposing limits on higher education attainment for Jane.

I honestly just know; I just think it's us, the expectation where we knew she was going to go. And it's not likes she's going to the university, well maybe she will.

Chris touched on the topic of expectations as well stating,

Well, if we're being honest, of course our faith in God and the expectations we have for our daughter. When someone says she can't accomplish something, if, don't tell her mom that because she'll end up doing it. Like not being able to walk, and at the age of two and a half walking; not being able to speak properly, speaking two languages. So, it just, you know, we became her biggest advocates, we see right away that this population is lost somewhere behind the door still, still and we do what we can to not show her off but to give, bring inspiration to other parents that these things can be accomplished.

Addressing low expectations and prejudices as discussed above and in various parts of the case study was also evidence of resistant capital (Yosso, 2005).

When asked directly about what Chris and Evie thought contributed to Jane pursuing higher education, Chris stated, "High expectations," and Evie elaborated, "Just our expectation, yeah, our expectations wanting her to experience everything that anyone else experienced after high school—jobs, school, college." Maintaining these expectations is evidence of aspirational capital (Yosso, 2005). The idea that "anyone else" will experience college may be related to the parents' and family's value of and experiences in higher education.

4.5.1.3 Experience in and Value of Education

Influencing the higher education pathway was the theme of experience in and value of education, including higher education. Regarding secondary education, Jane's father had

experience working in the public school system before the COVID-19 pandemic. Before this employment, Chris was involved in the schools as a guest speaker.

But even before I became a teacher, I was a guest speaker in almost every high school up and down the street.

Experience in higher education included both Chris and Evie attending the same community college where Jane later enrolled. Jane also has siblings that have attended this community college and one sibling was mentioned as accessing higher education at a college out of state. Jane was with Chris and Evie when they assisted in moving Jane's sister to the dormitory at this college, giving Jane the experience of visiting a college campus. Jane also had experience visited the community college campus with her father before enrolling.

When I went to enroll her and wanted her to walk the campus and explain to her that it was the big school now, you know. She loved it. She absorbed it; she thought she was a big girl.

These experiences in education and higher education, in particular, may be related to the theme of the value of education.

By pursuing higher education for oneself and one's children, it may be assumed there is a value of education. This value was evident in Jane's siblings, Chris, and Evie, who had at least some college. Chris and Evie desired higher education for each of their children, Jane included. Evie explained,

Well, the same thing that was on the path for the rest of our kids and we just wanted her to experience the same thing that our other children experienced. I didn't think that it would be any different for her, so the expectation was always there. It wasn't that she was not going to go to college because she has a disability, it was she was going to go to college because we wanted her to experience that to the best of her ability.

Jane expressed her value of higher education when she voiced her desire to pursue that course. One particular moment Chris recalled was when Jane said, "Oh, are you going to miss

me? I'm going to go to college like Andy," referring to a character from the movie *Toy Story*. Showing the value of learning and education, Jane remarked to me that she wanted to go to college "to be smart."

4.5.1.4 Advocacy and Involvement

Jane's pathway to higher education included aspects of advocacy and involvement. Jane was a self-advocate, engaging in self-determination, by expressing her desire for higher education and being a part of that enrollment process. She also attended IEP meetings, although the level of participation in those meetings is unknown.

Chris and Evie advocated for and were involved in Jane's education and overall development. This included numerous examples given in the interview of interactions with public schools; including attending IEP meetings, engaging with teachers and administrators, and requesting socially inclusive experiences for Jane. It was a very strong theme throughout the interview data, which has ties to the previous theme of expectations. One example of both advocacy and involvement is when Chris explained the following:

No, the reason why I say that is because her freshman teacher, when we met her in junior high during transition from middle school to high school, she's a younger persons teaching, and I could, you know I've been around a long time, and her mindset, wasn't where I thought it should be for our daughter coming into the high school level. And so, we let her stay in her classroom for about a year and it wasn't there, so she was surprised when we responded the first week or first month of school when open house, Back to School night, and I told her, "What time would you like us to be here?" And she said, "What? Are you coming?" Yeah, so that led to we will be there, like, why do you ask me that? It's because most parents of special needs they don't come to back to school and so you know we do, so she said, "So you're a helicopter parent?" "No, a stealth bomber." . . . And that's how it started, and then we transferred her to another very mature teacher that just took the reins for the next three years and helped develop Jane during the high school; we worked together as a team.

Chris recounted a situation later in the interview regarding advocating for his daughter's social

involvement at school in the homecoming procession.

I made it clear to them, this is, after the helicopter dad and stealth bomber example, they wouldn't know I was on campus. I'd just leave a mess and leave, and then come back and see what happened. But I said, "Hey, by the way, I already made a commitment to my daughter. She's gonna be part of the homecoming procession; maybe, possibly even homecoming Queen." . . . They kind of took it as a joke.

Jane was involved in her high school's homecoming.

Parental advocacy and involvement during the transition process impacted Jane's access to higher education and related support services. The LEA directed Jane to transition from high school to a gardening vocational rehabilitation program. Evie recalled, "But then Jane saw it, a lot of it was her dad saying, 'No, no, no; want you to have different life skills, want you to be involved in classrooms and not just you separated in a garden by yourself all day."

Chris and Evie addressed this obstacle by relocating. The couple sold their home, a "big old mansion," and relocated to a "two-bedroom dorm" to allow Jane to attend the LEA's transition program across the street from the community college. Chris explained, "They tried to pigeonhole us into a couple of options within the school district where she was coming out of. That wasn't going to happen." Evie continued, "We saw a different district in a different city that we really liked and;" then Chris finished stating, "We moved." Knowing how to maneuver the educational system to achieve this outcome is also evidence of navigational capital (Yosso, 2005). The new transition program was across the street from the community college and would eventually provide collegiate support services. This and previous examples mentioned previously show a theme of advocacy and involvement in Jane's case that provided various social and educational opportunities.

4.5.1.5 Influencers

The theme of influencers that impacted the community college pathway for Jane included both people and things. As described earlier, Chris and Evie influenced Jane's pathway to higher education through their expectations, advocacy efforts, and values. Another influence that was discussed during the interview with Chris and Evie was media, specifically movies. Movies appeared to have fostered Jane's desire for higher education (i.e., *Monsters University* and *Toy Story*) and her wish to not attend the LEA's transitional program that had a gardening focus (i.e., *Zootopia*). In *Monsters University* and *Toy Story*, there were characters who went to college. Evie recalled:

I think the one of the, and I don't know if my husband has a different view, but literally she watched, I mean we had always knew, but it was in the background, we never really pushed the issue we just knew that when it, when she graduated she was going to go to [name of college] or [name of college], but she saw *Monsters Incorporated*. I think . . . the university one, ever since then, . . . she caught the bug that she wanted to have that experience. She wanted to go to school; she wanted to go to college.

Chris added, "That's how it started actually. . . . She wanted to be a scarer. She wanted to graduate from," and Evie finishes, "from Monster's University." Referring to the character from *Toy Story* who went to college, Chris recalls Jane saying, "'Oh, are you going to miss me? I'm going to go to college like Andy.'"

The movie *Zootopia* impacted Jane's choice of transition program. The LEA directed Jane to a transition program that emphasized gardening. In context of the movie Evie said,

But her parents were carrot farmers. And it was right around the time that the whole gardening thing of her going to that other school, and she said, "No, don't want to be a carrot farmer. . . . I want to go to college, and I want to do something else." So, she always have that concept of she didn't want to be in farming.

In reference to the influence of movies, Evie said, "So, that became the whole issue of her, of

her wanting to go to college."

By expressing her desire for higher education as showed in the examples above, Jane acted as an influencer on her parents. Chris recalled, "And she kept threatening that she was going to leave us and go to the dorm." Evie continued, "Yeah, so when it came from her we kind of pushed it even more." By this statement and in light of comments made of parental expectations, it appears Jane's verbal expression of desiring higher education reinforced her parents' desires for the same. By this time, Jane's "siblings already had gone and graduated from colleges." Observing these experiences may have provided Jane with self-efficacy through vicarious experiences.

Another influencer was an employee from the community college. Jane's parents originally sought to enroll Jane directly into the community college as a traditional student. Then, a community college admissions counselor "introduced" Chris to the HEPSSID, providing social capital (Yosso, 2005). Chris recalled, "She said, 'You know what Mr. [Last Name], here's how we're going to do this if you don't mind.'" The result was a pivot in enrollment into the community college HEPSSID.

One area that did not appear to influence the higher education pathway for Jane was peers. Jane did not mention any peers who impacted her decision to pursue higher education. Chris stated peers from their "circle" and Jane's "circle" were not influencers on the decision to enroll in higher education. Evie followed his comment with,

They're happy with their kids going to the transitional school and then, once they finish that going to local you know, over here it's called ARC. So, you know the goodwill programs the art programs.

Chris, Evie, and Jane maintaining the goal of higher education despite this lack of peer influence

as well as lack of direction to pursue this course from the LEA may be evidence of aspirational capital (Yosso, 2005). Knowing how to pursue that pathway required navigational capital likely obtained from the parents and siblings' experiences in higher education (Yosso, 2005).

It appears Jane's peer group are mostly other students with disabilities and although she was not influenced by her peers to pursue the community college HEPSSID, she did influence her peers from the LEA transitional program to pursue this course. Evie stated, "I think the first semester by herself there was no other kids going to the college and then I guess the other kids started figuring, 'Why is Jane going to college? I think I want to go.' So, then . . . there's more students started going so now, I think it was four or five." This suggests networks, such as peer groups, may provide social capital used to access higher education under these types of circumstances (Yosso, 2005).

4.5.1.6 Support

The theme of support present in Jane's case had some similarities with the themes of advocacy and involvement, and experience in and value of education discussed previously that highlighted behaviors supporting Jane's pathway to higher education. This pathway also required specific support needs related to enrollment and access. Chris took steps to enroll Jane in the community college, such as taking her to campus and meeting with the admissions counselor. Chris stated Jane filled out the paperwork, but he and his wife were the ones that created the opportunity for Jane "to be involved with all that."

Since the original plan was to enroll Jane as a traditional student instead of a HEPSSID,

Evie also expressed how they planned to provide educational support. It was not the intention
that Jane would access the community college without academic and transportation support.

Evie stated, "And one of us would be there with her, or one of her sisters, or we'd pay an aide to stay in class with her." This did not end up being necessary as the transition program "across the street" from the community college that Jane simultaneously enrolled in ended up providing staff, in the form of an "aide," to walk Jane to and from class and be present in the class. This support appeared to be necessary for Jane to engage in higher education and coming from a community resource was a form of social capital (Yosso, 2005). Before this was provided, Chris and Evie were willing to take Jane from the transition program to the community college and provide this support.

4.5.1.7 Accessibility

The theme of accessibility was present in Jane's case in multiple ways. First, the pursuit of enrolling Jane, who had a Certificate of Completion, as a typically enrolled student required the higher education institution to be academically accessible. An online inquiry provided information that community colleges in the state of Jane's residence admit students with Certificates of Completion. Second, the community college was financially accessible as Jane's participation in the HEPSSID was paid for by a foundation. Lastly, the community college was geographically accessible. Location was a factor as Jane lives with her parents and "the other community colleges are pretty far out from where [they] live." Related to this was the location of the transition program Jane attended. The purpose of Chris and Evie relocating was for Jane to be able to attend that transition program. The community college being "across the street" made provision of transportation services feasible through this transition program. Each of these three areas of accessibility were factors that contributed to Jane accessing higher education via the community college.

4.6 Cross-Case Analysis

As described in Chapter 3, data from each case was coded by hand. Codes generated from each case were guided by the research questions and grouped, reviewed, and edited by examining if data supported those codes. The revised group code lists were used to produce a list of case themes. Feedback from the peer reviewer was also utilized in finalizing individual case themes.

The cross-case analysis was a three-part process. First, individual case themes were grouped by similarity to produce a list of cross-case themes. Second, a more detailed approach was used by grouping code lists from all cases by similarity and frequency. This process produced cross-case reduced codes. These were analyzed using the lens of the theoretical framework and research questions to produce a list of cross-case themes. Lastly, the final step of cross-case analysis involved using a table to note the presence of patterns. This was done by placing each reduced code from all cases in a table via rows and noting the presence of those codes in each case (listed in the table via columns). Results from each of these efforts are presented below.

4.6.1 General Overview of Themes

The cross-case analysis started by grouping themes from the individual cases by similarity. The analysis showed the value of and experience in education, accessibility, and preparation were present in all five cases. Four cases had the theme of influencers (i.e., Frank, Martin, Captain, and Jane), although the subject of influence was also present in Minnie's case with her experience on the community college campus and the redirection to the HEPSSID by the college's employee. Three of five cases had themes of expectations (i.e., Frank, Captain, and

Jane), advocacy (i.e., Frank, Martin, and Jane), and support (i.e., Minnie, Martin, and Jane).

Grouping in this manner provided a global overview of themes related to the research questions.

To gain a deeper understanding, reduced codes from each case were reviewed and grouped, discerning commonalities and differences between cases. This allowed for detailed analysis—noting the prominence of codes across cases and focusing on the relationship of the codes to the research questions. Twenty-five reduced cross-case codes and three independent codes emerged, each influencing the college-going pathway. These reduced codes are as follows, organized by prevalence: educational preparation, higher education forged pathway and support by parent/guardian, accessibility, parental educational advocacy and involvement, LEA transition, social inclusion, higher education support (environment), ableism, independence, parent/guardian beliefs, "self" skills, student desire for education, peer influence, influencers, HEPSSID awareness, work experience, college-educated parent/guardian, student IEP presence, enrollment process, college-related exams, campus visits, parent/guardian desire for the college experience, parent/guardian educational work experience, employment desire, and alum status. The three independent codes were student's health (Jane), student's enjoyment of high school (Captain), and caliber of program (Martin).

The 25 reduced codes were found to be a more detailed and thorough representation of factors involved in each case compared to only cross-analyzing the themes from each case.

Therefore, these 25 reduced codes were grouped by similarity using the lens of the theoretical framework and research questions. This process produced four cross-case themes—valuedriven grit, pathway knowledge, community support, and accessibility.

A third and final approach to cross-case analysis involved putting cases' grouped codes in a table to look for patterns. Differences were noted between cases involving students who traditionally enrolled (Frank and Captain) compared to students enrolled in a HEPSSID (Minnie, Martin, and Jane). Exploration of these results and the four cross-case themes mentioned above are presented below.

4.6.2 Cross-case Themes

Four themes emerged from the data based on the research questions and using the theoretical lens of community cultural wealth. These four themes include value-driven grit, pathway knowledge, community support, and accessibility; and had aspects of aspirational, navigational, social, and resistant capital. A discussion of these themes is provided below.

4.6.2.1 Value-Driven Grit

The most prevalent theme from the cross-case analysis was value-driven grit. Grit is defined as the "passion for and perseverance toward especially long-term goals" (Duckworth & Gross, 2014, p. 319). To be value-driven is to make decisions based on values. Value-driven grit is when values drive decisions including the creation and pursuit of long-term goals that require passion and perseverance to achieve. This theme was a strong factor associated with how students with ID accessed PSE via the community college. Without this present, it appears unlikely parents/guardians and students would have accessed PSE at the community college before awareness of a HEPSSID (in the cases of Jane, Martin, and Minnie), or despite the lack of a HEPSSID (in the cases of Captain and Frank).

Long-term goals were present in each case. First, the goal of pursuing higher education

was communicated by parent and student participants along with the value of education. The goal of self-actualization defined as "the process by which an individual reaches his or her full potential" (Sullivan, 2019, para. 1), referring to the concept generally and not Maslow's theory, was also present and included value of education as well as values of inclusivity and autonomy. This appeared in actions of developing the student socially, vocationally, as well as educationally. Applying these goals to a hierarchical goal framework, the goal of higher education appears to be a lower-order goal aligned with the superordinate goal of self-actualization.

A superordinate goal in a hierarchical goal framework is the goal "at the top of a well-organized goal hierarchy in which lower-order goals are tightly aligned" (Duckworth & Gross, 2014, p. 321), and is not to be confused with the term used in social psychology related to groups (American Psychological Association, n.d.). Lower-order goals result in actions to achieve the superordinate goal. This was seen as participants focused on developing the individual instead of social expectations related to the students' disabilities.

4.6.2.1.1 Self-Actualization Goals

The superordinate goal of self-actualization was an unexpected finding. It appeared in codes related to parents/guardians' expectations and strengths-based view of disability, and the repeated rejection of low expectations related to the student's disability including references to "faith." It also was related to codes of fostering self-determination and independence skills, seeking socially inclusive experiences, providing vocational opportunities, and involvement in education. It was realized in Martin's case when his mother repeatedly would go to his room and speak to him even though he was nonverbal until the age of 10.

The students exhibited this goal as well. Captain started a club and worked hard at passing the required state exams to earn a regular high school diploma. Minnie pursued higher education as a nontraditional student in her late 30's even though she first had the desire to go to college while in high school. Frank went through all the requirements including a service project to earn the rank and award of Eagle Scout. Jane expressed interest in entrepreneurship and enrolled simultaneously at the community college and a vocational program. Martin, who was described by a former teacher as being unable to continue in a work-based program, changed his behavior to fit the teacher's expectation of what was socially acceptable to continue with that program. He later worked with his mother assisting with office work; and, like all the participants, desired to go to college. All of these actions are related to the same goal of each student reaching their full potential.

This aspiration and goal of self-actualization formed in "familial contexts" and was communicated to the students in this same context instead of from the broader community (Yosso, 2005, p. 77). One way this was communicated was through expectations. This was evidenced in how the parents/guardians had what Jane's mother called "high expectations." Aspirations of higher education for a student belonging to a disability subgroup that has the lowest college-going rate is "high" (albeit only high when compared to the low expectations described in these cases and national post-school outcomes). Comparatively, low expectations were communicated by people outside of the *current* familial context in every case. I refer to the "current" familial context as Minnie's sibling described their parents as having low expectations for Minnie. Interestingly, Minnie spent years unemployed, the dominant postsecondary outcome of individuals with ID. Then, as Apple phrased it, Minnie was not told,

"No," and the result was she enrolled in the community college HEPSID.

Messages of low expectations came from doctors and parents in the case of Minnie; public schools in the cases of Martin, Frank, and Jane; and a peer's parent in the case of Captain. In the cases of Minnie, Martin, and Jane, low expectations were also present simply by how their schools encouraged transitioning to LEA vocational programs instead of discussing and supporting a pathway to higher education. Captain shared her awareness of low expectations for individuals with trisomy 21 related to higher education when she discussed this issue as follows:

There was some people when I was born, saying, I couldn't go to college and I can't do certain things and they also asked me if I needed help all the time because of my disability."

The presence of low expectations in the broader community instead of the family unit was seen when Captain's mother recalled an experience when Captain was in preschool and a mother was surprised when she heard Captain read aloud. Even now, Captain's mother is aware of similar low expectations in society that may impact future employment when she stated, "And people when they meet her will assume that she did not graduate from high school."

"High" expectations likely grew from the parents/guardians' view of disability. The interview protocol did not include a question about disability lens, rather this subject organically emerged in the interviews. None of the parents/guardians alluded to or mentioned any self-pity or sadness in having a child (or sister in Minnie's case) with a disability. Jane's parents even talked about how Jane's grandfather referred to trisomy 21 (Down syndrome) as "up syndrome," a phrase that continued within their family. Captain's mother described

disability as "part of the continuum of human condition" that is "not different," and this belief impacted choices to seek out natural experiences (i.e., gymnastics classes when prescribed physical therapy). Often the parents/guardians' view of disability also impacted actions such as seeking out socially inclusive experiences—including the pursuit of higher education.

Maintaining "consistently high aspirations" (which Yosso (2005) refers to as *dreams*) and continuing to pursue goals despite obstacles and low expectations is evidence of aspirational capital, the goal of self-actualization, and grit (p. 78).

Table 4

Self-Actualization Goals

| Case | Quote |
|--------|---|
| Frank | Kim: "They had job experience training, so he was in that his sophomore year maybe. I took him out because they were giving him 2L bottles of coke if he did a good job. And candy bars. And he only worked for like 30 minutes bagging groceries. I was like really? You are doing more damage to him about what work is like than helping. So I pulled him out of that and tried to go to the VR person to say ok I want him on the job training where he gets a job, he gets paid, and so it's a different avenue. One avenue was for kids with intellectual disabilities and the other avenue was just your typical kids who were working during high school. That was the avenue I was trying to go and they wouldn't let him in." |
| Frank | Researcher: "Why did you want to go to community college?" Frank: "Because I wanted to learn new things." |
| Minnie | Apple: [recalling before Minnie moved in with her] "I would say until I found out about the [HEPSSID] that the family and me even was downplayed the idea of her going to college because we have, and I have particularly, ideas about what her limitations are and I think thatI have a particular idea of what my sister can and cannot do. And so, because of that, I feel like sometimes I assume her limitations and act accordingly. So when I was looking at colleges at her request, you know, I was automatically looking at remedial classes I wasn't expecting her to like take standardized tests to try to actually like enroll in like a big university It's one of those things where the doctors say, you know, never ride a bike, never live on our own, never do this, never do that. And I think that's the message that we got a lot and so it's hard to break out of that narrative." |
| Minnie | Apple: I am at this point after nine years of being her point person, and over the last three months of her living with me, I feel very, very close to her and I feel in a lot of ways a very parental bond at this point and so I want absolutely what is best for her. |

| Case | Quote |
|---------|--|
| | And when she says she wants something no matter what it is, it is very much, 'All right, how can I get this done for her?'" |
| Martin | Mary: "I mean, in my case it has been myself trying. There's a lot of, there's some organizations and I did go to two of them, but what I found in one of themwas a lot of pampering and a lot of 'Oh, we feel sorry,' blah blah blah. That's not what I was looking for [smiling and faint laugh]. I'm not looking for that. I don't like to be a victim of anything. I want my kids, you know, to have something in life; be independent. I don't want someone telling me you know 'We feel sorry, or this or that.' So, I didn't go back to that parents' organization. [laughs]" |
| Martin | Mary: "Even a [school] district person told me that I had too high expectations for my son" |
| Martin | Mary: [speaking about her husband] "He always had expectations for Martin as well like he taught him how to paint. He taught him even how to use some of the woodwork machines. He taught him to sweep, to clean the yard. He never treat him as if he didn't know how to do things." |
| Captain | Betty: "I remember it being, I mean, I was pregnant with a child with Down syndrome. I knew zero. Right. So,reading [the book <i>Disability is Natural</i>] and having it have such a strong effect on me as to what was appropriate, like what was right in terms of thinking about this and belonging and abilities and like it was just, it was really pivotal to the my mindset and sort of from then on, we looked for the natural supports and the most natural environment" |
| Captain | Captain: "There was some people when I was born, saying I couldn't go to college and I can't do certain things. And they also asked me if I needed help all the time because of my disability." |
| Captain | Captain: [speaking about IEP meeting] "I told them one of my goals is to get to college." |
| Jane | Evie: "The expectations just continue to be so low." |
| Jane | Evie: "I remember my dad when [Jane] was growing up and people say, 'Oh [Jane] has Down syndrome.' He would say, 'She doesn't have Down syndrome. She has Up syndrome.' He'd say, 'There's nothing down about her.' Chris: "That stayed in our family. That's how we relayed it to people we talked to." |
| Jane | Chris: [speaking about factors that contributed to Jane going to college] "The contributions that were made were loving parents, parents that love God first before anything else a strong mom when they were, she was told, 'Oh she can't speak,' 'She won't be able to speak' or whatever they said she couldn't do, we work as a team that makes sure she could do it; being involved in her school, making a strong presence or a voice for her in that school; just including her in the community and having to deal with all her setbacks emotionally, psychologically, physically; inclusion. The main things that I told [Evie] was she needs to know that she's loved and she's part of a family unit Every morning when I wake her up I'll say, 'Stand up woman of God.'" |

4.6.2.1.2 Values of Autonomy and Inclusivity

The self-actualization goal is supported by values of autonomy and inclusivity.

Autonomy is the ability to have control over one's decisions and is considered a core human need along with relatedness (Legault, 2016; Ryan & Deci, 2002). Relatedness is "having a sense of belongingness both with other individuals and with one's community" (Ryan & Deci, 2002, p. 7), and is similar to inclusivity; however, inclusivity is generally used when referring to fostering relatedness specific to marginalized groups such as individuals with disabilities. These values are important as simply having goals is insufficient to obtaining well-being if aspirations are not guided by values that support core human needs. Ryan and Deci (2002) explained "attaining one's goal efficaciously is not enough to ensure psychological well-being" and reaching goals may be "detrimental to well-being if they interfere with people's autonomy or relatedness" (p. 8).

The core human needs of autonomy and relatedness, along with competence, were used to create a concept in disability studies called self-determination (Ryan & Deci, 2002). Self-determination is considered important to a person reaching their full potential by allowing for "healthy functioning" (Ryan & Deci, 2002, p. 6). Self-determination is seen in individuals when control is exerted over one's decisions and life. Students exhibited self-determination and the value of autonomy when they requested to pursue PSE and were involved in that process.

Minnie requested to pursue PSE which included suggesting possible courses she could take, despite not having that desire honored earlier in life. Captain showed self-determination (and self-efficacy) when she started a club and assumed the primary leadership role in that club.

Frank's mother fostered self-determination (and self-advocacy) by encouraging Frank to not have others speak for him and to express his desires, which he did at the IEP meeting by requesting to join the band. Having the value of autonomy and expressing this value by

engaging in self-determination appears to have contributed to successfully pursuing PSE.

Related to autonomy, or "acting from interest," were findings suggesting the presence of self-efficacy (Ryan & Deci, 2002, p. 8). Self-efficacy is the belief in one's own ability to accomplish a specific endeavor. Captain, Jane, Minnie, and Martin observed siblings going to college, and Frank's close friend went to a university HEPSSID. These experiences likely increased interest in doing the same as well as the belief they could do likewise. Minnie and Martin voiced the desire to go to college when their siblings went to college, suggesting self-efficacy gained from vicarious experience. This belief in one's ability may also stem from experiences in each case where students were encouraged to develop independence skills (i.e., Frank using public transportation, Jane riding the regular school bus, Martin learning his father's trade, Minnie navigating the college campus, and Captain going on mission trips).

Valuing inclusivity was an unexpected theme in the form that it appeared. The literature review in Chapter 2 showed the possibility of inclusive education impacting academic preparation. What was present in this study was a broader concept of inclusion, which brought to my attention my bias of viewing inclusion as pursuing inclusive educational placement in general education settings within schools. Parents, regardless of the desire for general education placement, had values of inclusion. Each student was engaged in co-curricular, extracurricular, and/or community activities both for individuals with disabilities (i.e., Special Olympics) and the general public or student body (i.e., church, sports, scouts).

Involvement in social activities was common across each case. In high school, Captain was a manager for various sports teams and was a teaching assistant. Frank was in the marching band, and Martin attended band class. Jane was in cheerleading and Bible Club, and

attended homecoming as an ambassador (due to the strong advocacy efforts of her parents).

Outside of school, Jane, Martin, Minnie, and Captain were involved with Special Olympics. Martin took private music lessons and a cooking class. Jane and Minnie attended church, and Jane went to a community ball. Captain went on mission trips with her church, took dance lessons, was in Girl Scouts, and was training to be a counselor with this organization before the COVID-19 pandemic. Similarly, Frank was in Boy Scouts and met the associated requirements to earn the rank and award of Eagle Scout.

Students had inclusive work experiences (i.e., not in the form of sheltered workshops). Jane worked in the high school cafeteria and at a fast-food restaurant. Captain interned at a physical therapy practice. Martin worked in the office at his mother's employment. Frank worked at the YMCA. Minnie worked at a movie theater. As evidenced by these and the above-listed activities, each student was engaged in socially inclusive experiences whether at school or in their communities, showing the value of inclusivity. By viewing disability as the "extension of the natural, physical, social, and cultural variability of the human species" instead of something negative or pitiful, it seems natural the result would be seeking inclusion within society and respecting a person's autonomy (Scotch & Schriner, 1997, p. 154).

Table 5

Values of Autonomy and Inclusivity

| Case | Quote |
|-------|---|
| Frank | Kim: "And just his, you know we have pushed him a lot to be assertive and self-determined. And I think you know by the very nature of him trying to talk to the lady on the phone and not have her talk to me, to talk to him, was really huge because he knew he was the one she needed to talk to. And my husband and I, go back and forth all the time, reminding each other not to speak for him, let him speak for himself." |

| Case | Quote |
|---------|--|
| Frank | Frank: "I wanted to be in marching band and my teachers looked at my mom and said, 'Are you serious?' And my mom looked at me and she said do I want to do it? And I said, 'Yeah.'" |
| Minnie | Apple: "And so that is when I started [looking for college options], because she asked me to. That's when I started kind of looking more seriously into what my sister could do to take because she was like, 'Well, can I take a computer class?'" |
| Martin | Mary: "I was so happy about the program because it not only focuses on daily living skills, but they also do have, like, exercise. And the college lets them use like all the facilities—the library, the gym. They have access to everything that the other kids have and I like that and they are not segregated like in a room where nobody sees them, they are, you know, into the community." |
| Martin | Mary: "Because I had been insisting that [Martin] be included in a general classroom when he was in like fourth or fifth grade somewhere. And she said, 'No.' She said cause the office, the school was already like they didn't, the case manager said they didn't have money" |
| Captain | Betty: "And so when Captain was prescribed physical therapy or speech therapy or things like that, we tried to find things that were more inclusive. I cannot tell you how annoyed it makes me when people look for adaptive swim classes for babies. It's a baby; no baby knows how to swim. Like go to a baby swim class, you know, you don't need one that's set aside for people with disability So when she was prescribed physical therapy, we signed her up for the little gym, so she took gymnastics classes That's just been my attitude, since she was born, was that, let's just make this kind of as normal life as possible. And I could make some noise about how the disability world does sort of suck you in and you feel like that's where you belong. And you know you belong in the world." |
| Captain | Captain: "I was the manager for basketball and volleyball during my freshman year in high school. And then, when I was a junior and senior, during those years, I managed softball." |
| Captain | Captain: "I can't remember any specific people, you know. But I do know they said that I needed help a lot. And I don't really need help, you know, like I can do things by myself." |
| Jane | Chris: "Whatever we do, she's included." |
| Jane | Chris: "We are businesspeople, business minded. And so, we started telling [Jane] back in junior high, you know what you're going to open up a coffee cart at [your] high school. A program, because I have seen a teacher up north do it successfully, and it was impressive how it included inclusion. It included mixing the students up, and the teachers and staff and administration with that special population. So, I tried to duplicate it with great difficulty because we're on the outside looking in; I wasn't a teacher yet" |
| Jane | Evie: "I mean pretty much everything that the seniors were going to do that year as part of the senior class, we made sure [Jane] was part of it." |

4.6.2.1.3 Higher Education Goals

The goal of higher education was present in each case and is part of the goal of selfactualization. However, it deserves particular attention given the purpose of this study. Parent/guardian participants communicated having this goal directly and indirectly. In Minnie's case, Apple referred back to her experience leaving for college and the resulting feeling of desiring her sister to also have that opportunity so that when they were older and her sister requested to go to college, she was determined to find a way to bring that to fruition. Captain's mother began financially planning for higher education when Captain was young. Actions related to the goal of higher education also included parents/guardians engaging in conversations about college and supporting the college-going pathway in tangible ways such as transportation assistance and helping with the enrollment process and tuition. Parents and students also visited the community college campuses together (i.e., Jane, Frank, Martin), and Captain went on a college road trip with her mother. This road trip was described as an important event resulting in Captain choosing a university HEPSSID. Minnie's experience on the community college campus also was a key experience that led to her expressing the desire to go to college. Each student verbally expressed the desire for PSE to their parents/guardians. The combination of the student and parent/guardian's mutual desire for PSE appears to result in actions taken towards that goal, despite obstacles encountered.

Table 6

Higher Education Goals

| Case | Quote |
|-------|--|
| Frank | Kim: "Because why shouldn't he go to college?" |
| Frank | Researcher: "Why did you want to go to community college?" |

| Case | Quote |
|---------|---|
| | Frank: "Because I wanted to learn new things." |
| Minnie | Apple: "But we work with [names state service] and they managed to get her a job. And she worked that job for a while. Eventually, she lost that job and so she asked me about going back to school." |
| Martin | Mary: "I always thought about college for him." |
| Captain | Researcher: "Why did you want to go to college?" Captain: "Well, the reason was because I want to have fun and get more education." |
| Jane | Evie: "She kind of always knew she was going to go to college." |
| Jane | Evie: "Well, the same thing that was on the path for the rest of our kids. And we just wanted her to experience the same thing that our other children experienced. I didn't think that it would be any different for her, so the expectation was always there. It wasn't that she was not going to go to college because she has a disability; it was she was going to go to college because we wanted her to experience that to the best of her ability." |

4.6.2.1.4 Value of Education

The parents in this study (excluding Minnie's case as that is unknown) showed a strong value of education. The parents were each involved with their student's school, advocating in different ways but all related to individual student needs while rejecting a warehouse model of education. Parent participants were active in IEP meetings, attending them religiously.

Captain's mother frequently volunteered in the schools and provided academic support such as homework assistance and creating organizational systems to help Captain during high school.

Frank's mother worked at Frank's school as a substitute teacher. Jane's father volunteered as a guest speaker and eventually took employment as a teacher, meeting with staff frequently before that employment. Jane's parents also would attend Back-to-School Night and Book Fair.

These acts of school involvement are evidence of a shared value of education.

Discrimination was present in the cases of Frank and Martin. A community college staff member prohibited Frank from registering, citing the reason Frank did not have a regular high school diploma. Overcoming this barrier took perseverance as he was unable to register until

the college's employee spoke with Frank's mother on the phone, Frank and his mother met the employee in person, and the employee obtained approval from the course's professor that Frank may take their course. In the cases of Frank and Martin, the parent request for inclusive educational placement was originally denied. Despite this refusal, the parents continued to advocate for such placement, and each of these students gained access to at least some general education placement. Perseverance in the face of discrimination for each of these goals shows grit and a shared value of education. These behaviors "that challenge the status quo" and seek "to transform such oppressive structures" may also be an indication of resistant capital as parents and students engaged in "behavior that challenge[d] inequality" (Yosso, 2005, pp. 80-81).

Table 7

Value of Education

| Case | Quote |
|---------|---|
| Frank | Kim: "And you know I told the assistant principal, I said, I don't want him in classes where kids are just going to be messing around. He's got to have good role models because he'll follow whoever's the funniest. He's got to have good role models. She said, "Absolutely. We'll put him in advanced classes." |
| Frank | Researcher: "Why did you want to go to community college?" Frank: "Because I wanted to learn new things." |
| Minnie | Apple: "I went to college and got my bachelor's and she saw me do this. And she was happy for me but sad because she couldn't do that herself." |
| Minnie | Researcher: "And what do you hope to do once you finish [the HEPSSID]?" Minnie: "Teach others to go to school." |
| Martin | Researcher: "What do you like about being there [college]?" Martin: "I would like to learn English." |
| Captain | Betty: "Like our family believes in higher education. All my siblings went to college. So, it just, it's just part of who we are. And so, yes, we had a prenatal diagnosis but didn't change that basic fundamental fact of who we are that that would be, you know, that's something that we should shoot for." |
| Captain | Captain: [value of education for more than employment reasons] "I love college. You know, I get to meet all kinds of different people and it's been fun." |

| Case | Quote |
|------|---|
| Jane | Chris: "Let me put it to you this way. I was very, in a professional way, challenging the establishment, education, school, school district, where I would ask the teachers and principals; I would sit in the principal's office for a couple times a year." |
| Jane | Researcher: "So, my first question for you is why did you want to go to college?" Jane: "To be smart." |

4.6.2.2 Pathway Knowledge

Pathway knowledge was the second most prevalent theme that emerged from the cross-case analysis and refers to knowing how to navigate educational spaces and utilizing this knowledge to build pathways to the community college. This theme was primarily related to parents/guardians, appearing in codes related to being college-educated, working in education, having awareness of HEPSSIDs, and forging pathways to the community college using navigational capital. Codes related to this theme also appeared in student data. However, this was limited mostly to when Captain learned about and applied for the community college support program, and when Minnie was on the community college campus as part of what was referred to as an "educational project." This experience provided Minnie with awareness of and experience with the community college.

Pathway knowledge gained by parent/guardian participants may be related to educational attainment with these participants. All parents/guardians had some college education with four of the six completing at least a bachelor's degree. Three completed graduate degrees, with two earning doctoral degrees. The two parents who had some college education earned industry-specific credentials. These parents/guardians are not a fair representation of national educational attainment data and may be related to the value of education described earlier. Experience gained from being students in higher education likely

also provided navigational capital as parents/guardians gained "skills of maneuvering through [these] social institutions" (Yosso, 2005, p. 80).

Along with information gained about navigating educational spaces through experiences themselves as college students, Jane's parents (and two siblings) and Minnie's sister were alums of the community colleges where Jane and Minnie later enrolled, respectively. This familiarity with the community college may have led to these parents/guardians not only looking to these colleges as avenues for PSE but also having awareness of their specific policies and procedures.

With the acquisition of knowledge related to higher education, the comfort and confidence exhibited by parents/guardians in navigating educational institutions as a whole may be related to parents/guardians having experience working in education or a similar field.

Jane's father worked as a public school teacher, and Minnie's sister worked in the fuels industry in a position responsible for education and training. Frank's mother worked as a public school substitute teacher previously and at the time of the study was working in higher education in a position related to HEPSSIDs. Captain's mother also works in higher education as a professor.

Martin's case was the only case in this study that did not have a parent/guardian with experience working in education or a similar field, but even in this case Martin's mother stated she sought out training and resources to learn information that would help her advocate for her son in educational spaces.

The two parents who worked in higher education were the only parents/guardians aware of HEPSSIDs, but this knowledge was not acquired through the public schools. The lack of knowledge of these programs may be a barrier (this study's secondary research question) to

PSE for students with ID if this information is not being communicated to parents by LEAs, and if LEAs instead are encouraging a transition to vocational programs. This vocational program transition focus by LEAs was seen in the three cases where the parents/guardians were unaware of HEPSSIDs). Interestingly, this barrier of unawareness of HEPSSIDs in those cases was overcome by parents/guardians pursuing PSE at the community college where a HEPSSID was located. It was then that community college employees provided social capital in the form of information to the parents/guardians and students about HEPSSIDs (Yosso, 2005).

Pathway knowledge and navigational capital present in these cases allowed for the forging of pathways to the community college (Yosso, 2005). The LEAs, except in Captain's case, were not directing students post high school to higher education. Even in Captain's case, sufficient assistance with transition was not provided as seen with Captain's mother seeking outside training on transition and using social capital to learn about and access a college support program that Captain later utilized (Yosso, 2005).

In Martin and Minnie's case, the parents/guardians searched for educational options online and met with college staff in pursuit of what they perceived as access points, before being redirected by the community college to the HEPSSIDs. Jane's parents utilized the LEA's pathway to vocational rehabilitation, but independently and simultaneously enrolled Jane at the local community college with the intention of the family providing any needed support. Captain and Frank's parents looked at university HEPSSIDs before pivoting attention to the community college and providing support for these students to be successful there.

Parents/guardians providing student support was in each case, albeit in various ways.

Parents/guardians helped with enrollment and transportation, filled out or assisted with the

colleges' applications, and/or visited campuses with the students. Frank and Captain's parents sought out community services to support their students in areas of transportation and academic assistance. Tuition was saved for by Captain's parents via a college fund, and Minnie's sister helped pay tuition directly and managed resources from others for this same purpose. Minnie's sister and Jane's parents were willing to provide necessary transportation to and from the community college. Jane's parents were willing to pay for a support person to go to class with Jane, and Minnie's guardian expressed similar willingness in the form of going to class with Minnie if needed. Through each of these cases, it is clear that the accumulation and application of pathway knowledge and navigational capital were important to forging pathways to the community college for students with ID (Yosso, 2005).

Table 8

Pathway Knowledge

| Case | Quote |
|--------|---|
| Frank | Kim: "I didn't start thinking about it because there was nothing in our area happening around college. And I knew he would need support so we had to get the support person or people that we had working with him lined up before we could do anything like that. He doesn't need his mother going to college with him, or his father or you know so typically we tried to get college-aged students that would go with him to provide support as needed The program in [our state] was going to be pretty expensive and we couldn't afford it. So, there was no option close by us. So that was my answer to him going to college was starting some classes at the community college." |
| Minnie | Apple: "And so she was like, 'I wanna, I want to take classes. I want to go to [names the community college].' And so, I started looking at [the community college] and started going through their website and I at first looked at like the adult education classes." |
| Martin | Mary: "And I think I found it just looking for different, in different community collegessee if they had a program I did see that they had a program for teaching the kids like helping them how to read, you know, even if they finished high school. They said they found that some kids cannot read or cannot do basic math. And so, I heard about that program, and I went to the college to ask about the program. And he took a test but then were looking for a mentor for him and then the lady, call me because I did mention that he had a disability, and she said, 'You know what, we're beginning this program and we began this program about a year agoIf you're interested, you can |

| Case | Quote |
|---------|--|
| | come and see it and see if that interests you.' And so that's how I got to know a little bit more about the program." |
| Captain | Betty: "[W]e had set aside, you know, 529s early on, just to drib a little bit into overtime when we had any extra and we of course set one up for Captain" |
| Captain | Betty: "So I would guess that the whole community college aspect probably came up during her senior year, cause I said junior year we had done the whole college tour trip like you know she and I took a road trip." |
| Captain | Captain: [speaking about the application and essay she submitted for the college support program] "Like I told [my mother], 'I've already turned in the application. She's like, 'What?' I knew, so surprised right now And I wrote about how like when I was little " |
| Jane | Chris: [speaking about the LEA transition school] "They were surprised that she was already enrolled by the times she was enrolled in that post-secondary school." |
| Jane | Evie: "It was the same process that. Any other student goes through. But I mean we have to register her you know the whole FAFSA, the financial aid and all that stuff it was the same process" |

4.6.2.3 Community Support

Similar to parents/guardians forging pathways to the community college via pathway knowledge acquisition and application of this knowledge was the third cross-case analysis theme of community support. In section 4.6.2.2 above, it was shown that parents/guardians supported the students accessing the community college using navigational capital (Yosso, 2005). What also was present in this study was social capital in the form of "networks of people and community resources" (Yosso, 2005, p. 79).

Frank was influenced by his friend with trisomy 21 who was pursuing higher education at a university HEPSSID. This social contact provided encouragement and likely self-efficacy for him to do likewise. He also had school administrators in the latter part of his educational career that supported his academic preparation by placing him in advanced courses and general education classes. Captain's social network included a paraprofessional at her high school who not only helped her academically but also reinforced the expectation she would go to college

after it was confirmed she passed the last of her state's high school exit exams. She had peers attending the community college as well, although that social network did not appear to directly influence her pathway to the community college.

Social capital in the form of community resources included Captain's scholarship from Ruby's Rainbow and two college support programs (one specific to the community college and one outside of the community college). She also utilized the college's disability support services. Frank used support services through a Medicaid waiver program that assisted with transportation, navigating the community college campus, and having someone in class (services that faded as he gained independence in these tasks). Jane received similar services from the LEA's transition program staff who walked with her to the community college, helping her navigate the campus. Lastly, Minnie stated she received support from the group home where she was residing at the time of enrollment, although what type of support she received is unknown outside of a group home employee being a contact for the HEPSSID.

Community support and social capital also applied to parents/guardians. Martin's mother spoke with the parents of students during registration about the college's HEPSSID, and these positive reviews encouraged her to continue enrolling Martin into that program. The professional who conducted Captain's full psychoeducational evaluation recommended she start at the community college instead of a university HEPSSID, a recommendation that made a strong impact on Captain's mother and pivoted their focus to that pursuit. Another professional, Frank's professor, was instrumental in Frank accessing the community college as this professor stated their willingness to have Frank in class. Without this professor's approval, the community college employee was barring enrollment to the college. This situation likely

also involved navigational and resistant capital as Frank and his mother sought to overcome this obstacle and discrimination (Yosso, 2005).

Lack of community support or resources was present as well, as a barrier that was overcome. This was seen in the cases of Minnie, Captain, Frank, and Martin. Minnie's sister expressed a lack of community resources to support Minnie in attending the community college. For example, tuition costs were covered by family members for the majority of the time Minnie was in the HEPSSID, although funds were available through a government program to cover these costs. This information was not communicated to Minnie or her sister by community agencies, the group home, or the HEPSSID's staff. Captain was without some transition supports because she graduated high school with a regular diploma, thereby exiting the LEA and related support services. To overcome this lack of support, Captain's mother sought out other available support services. Frank was denied vocational rehabilitation state services for an unknown reason but accessed support through a Medicaid waiver program instead. Martin's only form of community support in accessing the HEPSSID at the community college appeared to be in the form of public transportation, which other student participants utilized as well (i.e., Frank, Captain, and Minnie). Overcoming these potential barriers may be related to participants having value-driven grit, familial support, financial resources, other community support services, and navigational and social capital (Yosso, 2005).

Table 9

Community Support

| Case | Quote |
|-------|--|
| Frank | Kim: "So, he gets funds that support him through Medicaid to be engaged in the |
| | community and to be independent. This person was training him to ride the bus to the |

| Case | Quote |
|---------|--|
| | college, and then she would help him orient his way through the campus, she would sit with him in the course and eventually she faded because he didn't need her there all the time" |
| Minnie | Researcher: "What helped you the most to be able to go to college?" Minnie: "That's a tough one. My company and my sister helped me gotten to college." |
| Martin | Mary: "Outside of the college, like the day that I was registering him there were other parents, so I said, 'You know, so I'm new here. How long have you been here? What do you like about the program? Is there anything that you don't like about the program?' And all I heard was, you know, good things." |
| Captain | Betty: "So she was accepted into this [college support program]. So now she has this sort of entree into the community college system and extra advisorsand then we found out that the [other support] program which are with [other colleges] but had just recently come to the [the local] campus, which is literally a stone's throw from our house And so, we interviewed and got hooked up with that and it's peer mentor support and things like that" |
| Captain | Captain: "[My high school paraprofessional] likes to talk about college with me. And after I passed that test [the last of the high school exit exams], he's like, 'You're going to get that diploma and you're gonna go in college. I'm proud of you." |
| Jane | Evie: [speaking about support services from the LEA transition site] "And so miraculously they got an aide. And so they were able to assign her to somebody at I think the first semester by herself; there was no other kids going to the college and then I guess the other kids started figuring 'Why is [Jane] going to college? I think I want to go.' So, then they started, there's more students started going so now, I think it was four or five, and they have an aide that sits with her and them in their college class. And then, once that class is over they walk them back to this school." |

4.6.2.4 Accessibility

The fourth theme that emerged from cross-case analysis was accessibility, related to the institutional characteristics of the community college. In Perna's (2006) conceptual model of student college choice the third layer about context shows location and other institutional characteristics impact college choice. The institutional characteristics that influenced study participants in choosing the community college included open-access admissions policies, course options, location, and affordability (Blagg & Chingos, 2016; Cohen et al., 2014).

Cohen et al. (2014) explained community colleges "attract those . . . who had

inadequate preparation in the lower schools" (p. 35). Part of preparation is curricular. Captain and Martin were the only participants to take Algebra, with Captain being the only participant to take foreign language courses (i.e., Spanish and sign language). Frank was the only student to take advanced courses.

Captain was the only student in this study who took and passed state exit assessments and received a regular high school diploma. Martin and Frank exited high school with alternative diplomas, and Jane exited with a completion certificate. Minnie exited high school with a diploma before attending the LEA's transitional program for vocational rehabilitation.

This suggests she received an alternative diploma; else she would have been ineligible for continued LEA services. Captain also was the only student to take a college entrance exam, one her mother vaguely recalled was done while at the high school with the general student body.

Captain did not take the exam to gain admission to a university. While some universities (a small number of online institutions) have what is termed *open admissions*, these institutions often still require a regular high school diploma or General Educational Development (GED) certificate—similar to other universities. In contrast, community colleges have open-access admissions policies that provided postsecondary access to the students in this study.

In addition to open-access admissions policies, community colleges provide options from general curriculum courses to remedial courses and related programs. This meant the community college provided varied curricular access points to fit the range of interests and academic preparation of students in this study. Captain and Frank enrolled directly with the community college taking general courses with an academic and co-curricular focus, respectively. These students were also the only two student participants to have dominant

general education placements—starting with private preschool. Enrolling in general curriculum courses may be related to the academic preparation shown to be correlated with inclusive educational placement (Buckley et al., 2006), or the development of self-efficacy related to confidence in one's ability to be successful in classes that resemble the general student body. Minnie's sister turned to the community college because of remedial course options, and Martin's mother did similarly when investigating a program targeting basic academic skills. These remedial courses and related programs meant the community colleges were academically accessible to students of differing levels of academic preparation and current abilities, as well as varied interests.

Community colleges, in seeking to serve their communities, are also physically accessible to members of that community in terms of location and/or transportation (Cohen et al., 2014). Each student participant lived with their parent/guardian and the majority of them utilized and even relied on public transportation services to take them to and from the colleges. This may partly be related to the right to hold a driver's license being taken away when an adult with ID is judged by a court to have the state or another individual assume legal guardianship. To utilize public transportation, the location of the colleges needed to be within range of those services. While some parents/guardians stated they were willing to assist with transportation, location/transportation accessibility was an important aspect in choosing the community college or a particular campus in each case.

College choice is also influenced by family income (Perna, 2006). This is important to note, as each household income reported in this study was above the national poverty line, with two of the five cases reporting an annual household income above \$100k (U.S.

Department of Health and Human Services, 2021). Parent/guardian participants all regarded the community college as being financially accessible and affordable.

Lastly, the theme of accessibility encompassed aspects of the enrollment process itself—being easy or difficult to navigate. As a whole, participants noted the community colleges' applications were fairly simple to complete. However, an obstacle related to this theme was the difficulty expressed by student participants with the "interviews." It appears each student had at least one meeting with college staff members from the offices of admissions or disability services, or the HEPSSIDs. Captain, Frank, and Minnie each described these meetings/interviews as difficult. Without grit, self-determination, and self-efficacy this could have been a possible barrier for students.

Table 10

Accessibility

| Case | Quote |
|---------|---|
| Frank | Kim: "Well, in regards to location, so the school in [our state] he would have had to live there and we couldn't afford it. The school nearby us he could live at home and take classes. And so that was why location was important because he could live at home because right now we couldn't afford him to go to school, to move away and go to school." |
| Minnie | Apple: "But so if we hadn't had that transportation resource, we couldn't have done it, or at least not, not easily" |
| Martin | Mary: "I had, I had look at all the programs. One was private. But it was very expensive. It was, it was very expensive and the other one was very far That was not something that I could do. And this college, it's about 20 minutes away from my house, maybe less." |
| Captain | Researcher: "Okay, so this particular community college, we're going to talk about what factors contributed to picking that one. I know. I already heard you say that they had that [support] program come in and it was you said around the corner. So" Betty: "Proximity is a big one." Researcher: "Okay so proximity was a big. Cost doesn't sound like it was" Betty: "I mean it's more reasonable than anything else we could have done, frankly, so yeah." |

| Case | Quote |
|------|--|
| Jane | Evie: "So she's transition into that school, so she'll be there until she's 23 but at the same time we enrolled her at the community college, because the community college is across the street from that transitional school" Chris: "Perfect" Evie: "So it worked out well. We were gonna have her go to college anyways" |

4.6.3 Cross-Case Patterns

While pondering on the data, it occurred to me that there might be patterns unnoticeable when using the cross-case analysis method of grouping codes to discover themes. To assess the existence of patterns, the grouped codes from each case were typed into the first column of a table by row, starting with the second row. Duplicate codes were combined. Each case name was typed into the top row in the second through sixth columns. When a code was present in a case, the blank field in the table corresponding to that student participant and code was marked with a check-mark. A series of check-marks were noticed among three cases, with another series among the remaining two cases. These differences were between cases involving students who traditionally enrolled (i.e., Frank and Captain) compared to students enrolled in a HEPSSID (i.e., Minnie, Martin, and Jane).

Minnie, Martin, and Jane were each in self-contained dominant educational settings for elementary and secondary school. They were also directed by the LEAs to the LEAs' vocational transition programs. Each of these students followed that pathway post-exiting high school. In comparison, Frank and Captain had dominant general education placements and did not enroll in a LEA's vocational transition program post high school. This finding may be indicative of the presence of ableism, a school to special education vocational transition program pipeline for students in special education dominant educational placements, and/or low expectations

within LEAs for students with ID. Low expectations and ableism may also be present within the community college evidenced by Minnie, Martin, and Jane being redirected from other courses/programs to each college's program designed for students with ID instead of the colleges seeking ways to support the initially sought pathway.

Another difference between these two groups of students was noticed in the parents/guardians. Frank and Captain's parents were aware of HEPSSIDs, employed at a university, and had doctoral degrees. Frank and Captain were the only two students in this study to have general education dominant educational placement and awareness of HEPSSIDs prior to engagement with the community college. This knowledge may be indicative of the presence of additional social or navigational capital (Yosso, 2005).

4.7 Summary

In summary, individual case descriptions with supporting quotes for each of the five cases provided a description of the students' pathways to the community college. Coded data was used to create code lists, which were reduced and grouped. The resulting themes related to each case were described with supporting quotes. Cross-case analysis using themes from the individual cases produced broad themes, and greater detail was obtained by grouping reduced code lists from each case and using the lens of the cultural wealth model (Yosso, 2005). This approach to cross-case analysis produced four themes—value-driven grit, pathway knowledge, accessibility, and community support. The final step in the cross-case analysis involved putting all grouped codes in a table and reviewing the data for patterns. Differences were found between students who had dominant general education placements, parents who worked in

higher education, and parents who earned a doctoral degree, compared to the other three student cases without these factors present.

CHAPTER 5

SUMMARY, DISCUSSION, RECOMMENDATIONS

Students with ID have one of the lowest college-going rates when compared to other disability subgroups (Bouck, 2014; Grigal, Hart, & Migliore, 2011; NCES, 2017). This underrepresentation is indicative of a broken pipeline. To better understand how students with ID successfully transition to higher education, this multi-case study identified factors that influenced and supported students with ID in preparing for, pursuing, accessing, and enrolling in PSE via the community college.

The institutional type of community college was targeted given institutional characteristics of accessibility, as well as preference for this institution by students with ID (Bouck, 2014). The central research question guiding this study was, "How have students with ID successfully pursued pathways to postsecondary education via the community college?" This study also sought to understand what obstacles have been overcome in pursuit of transition to PSE via the community college for students with ID.

Five adults with ID and their parents/legal guardians were interviewed in this study.

Results from individual case studies were provided in the form of description and case themes using data grounded mostly from student and parent/guardian interviews, but also documents in the case of Captain and some reference to public information online (i.e., information on colleges and schools, and/or support services). Each case was unique with students accessing the community college at various ages and in different parts of the United States. Students' pathways to the community college were just as varied; as was the coursework and credentials sought—extracurricular courses, certificates (issued by HEPSSIDs), or an associate degree.

Cross-case analysis revealed commonalities across the individual cases in the areas of four main themes—value-driven grit, pathway knowledge, community support, and accessibility. These themes had aspects of aspirational, navigational, social, and resistant capital (Yosso, 2005). These themes relate to the literature in areas of expectations, collegiate aspirations, self-determination, the purpose of higher education, socioeconomic status, accessibility, and support.

5.1 Discussion

In conducting this study, the focus was on answering "how" when seeking to understand the students' collegiate pathways. Through individual case descriptions and themes, understanding what helped Minnie, Frank, Jane, Martin, and Captain each individually enroll in PSE at the community college was clear. The difficulty came with cross-case analysis.

Simply comparing themes from individual cases was insufficient. Certain codes related well to one another in one case to produce a theme, but simply comparing themes did not adequately show/explain how grouped codes related to each other across cases. To answer how students with ID successfully pursued PSE at community colleges, grouped codes from each case were analyzed for similarity and frequency. Focusing on the primary research question as well as obstacles overcome, this process produced 25 key factors.

Seeking to understand how these 25 components on the collegiate pathway related to broader themes involved grouping them through the lens of Yosso's (2005) community cultural wealth model which made relationships clearer. The themes of accessibility, community support, and pathway knowledge surfaced. The biggest hurdle, however, remained. What was going on such that all five of these student participants pursued PSE at the community college

despite different levels of academic preparation and achievement, family systems, locations, resources, and support services? How was data about expectations, aspirations, being goal-driven and purposeful, self-efficacy, self-determination, resilience, other-esteem, networking, and optimism related?

5.1.1 Value-Driven Grit or Expectations

It was difficult not to be influenced by the literature on expectations during cross-case analysis. It would have been quite easy to conclude students with ID were accessing PSE at the community college because of "high expectations" discussed in the literature on transition and PSE for students with ID (Garrison-Wade & Lehmann, 2009; Grigal & Hart, 2012; Kohler, Gothberg, Fowler, & Coyle, 2016; Martinez et al., 2012; McGrew & Evans, 2004; Yarbrough, Getzel, Kester, 2014). I am not disputing the importance of expectations; it just failed to answer the question, "What was going on?" How were students with ID accessing higher education when in four of the five cases the LEAs were not promoting that pathway, and the transitional support was insufficient in the one case that did have LEA support (even if mostly in the area of academic preparation)? To answer with "expectations" seemed myopic.

Parents/guardians desired and sought out PSE opportunities for the student participants despite four of the five cases involving direction to vocational rehabilitation programs post high school by LEAs. These expectations appeared to be related to the lens utilized to view disability or "disability lens." There are multiple views of disability or disability lenses including legal, medical, social, mere-difference, and spiritual (Andric & Wundisch, 2017; Evans et al., 2017; Heyer, 2007). Often these lenses are used to understand systems, practices, and research, but families also possess a view of disability. While it is outside the scope of this study to assess

effectively what disability lenses were utilized by participants in each case; it was observable they were of an optimistic, positive, and/or strengths-based nature similar to findings by Beighton and Wills (2017) in their qualitative study on parenting a child with ID. Parents in the cases of Captain, Jane, Frank, and Martin gave examples or directly referenced individual views of disability that involved the aspect of faith (the hope of something unseen) and/or the rejection of low expectations. No parent/guardian expressed self-pity. The parents/guardians seemed to be encouraging personal narrative building centered on the student participant without imposing limitations based on a social deficit disability narrative or ableism.

I turned to deep moments of introspection, prayer, and study. Nothing I read, discussed or thought of accurately described the data I was looking at. The positive perception of disability in parent/guardian data for *all* parents/guardians was important, but how? The majority of parents holding positive perceptions of disability and/or having a child with ID is disputed (Goff et al., 2013; Skotko, Levine, Goldstein, 2011). What is less disputed is a negative or deficit view of individuals with ID existing historically (Trent, 1994) and continuing to exist socially today (Natoli, Ackerman, McDermott, & Edwards, 2012), including in education (McGrew & Evans, 2004).

Even an evaluation of the literature on expectations discusses the concept as a dichotomous "low" and "high." When applying this to students with ID, referring to "high" expectations is perpetuating a sociocultural narrative of what is normal to expect. Anything above this understood norm is considered a "high" expectation thereby suggesting the expectation itself is abnormal, unrealistic, or atypical. In a study of 17 parents of adult children with ID, 50% reported they expected their child to go to college with 75% of those parents

indicating this expectation was not an IEP goal (Yarbrough et al., 2014). Based on this example, the parents' expectations of college were average but the similar expectation from the LEA was low. This is why understanding history (reviewed partially in Chapter 2) is important, as negative and inaccurate perceptions persist and emerge in subtle ways such as referring in the literature or real life to the aspiration of an individual with ID enrolling in PSE at a community college as a "high" expectation.

The second issue with expectations was what it excluded. By definition it is an "act of expecting," "to look forward to; regard as likely to happen," or "to look for with reason or justification" (Random House, 1980, p. 465). I expect to finish this dissertation, but without the practical and emotional support of my family, friends, and dissertation committee; participants; perseverance; resources; many hours of writing and study; and self-efficacy; the likelihood it will occur is low. In summary, expectations were one part of a bigger picture when looking at factors contributing to the collegiate pathway for students with ID.

Broadening my perspective further, expectations appeared to be related to goals with the goal of higher education being a part of the superordinate goal of self-actualization. This was evidenced when Frank's mother remarked "there's no reason to put a ceiling" on what individuals with ID can accomplish, including going to college. The goals were long-term in nature; honored familial values of education, autonomy, and inclusivity; and were influenced by a strengths-based view of disability. Reaching these goals required removing, ignoring, and/or resisting "restrictive structures" and low expectations (Perna, 2006, p. 118). It also required navigational, aspirational, social, and resistant capital (Yosso, 2005); and grit (Duckworth & Gross, 2014).

Taking a 30k foot view to account for disability lens was necessary to analyze the data. To not do so would ignore key factors, like not discussing race or SES when describing issues of access in higher education. Expectations being related to something greater can be seen quite easily in Chris' way of waking Jane up in the mornings—"Rise up woman of God." Regardless of your personal beliefs in deity, that is a strength-promoting statement very different from a deficit view of disability. Instead of "wake up" it was "rise up," denoting a sense of empowerment. "Woman" is an adult, not a child or someone child-like. Being "of God" relates her to deity. Similar statements related to positive and strengths-based views of disability were present across the cases (see Table 4).

So, what was going on? The data was showing value-driven grit—when values drive decisions including creation and pursuit of long-term goals that require passion and perseverance to achieve. With that perspective, it was clear how the two primary goals of self-actualization and higher education were influenced by a strengths-based view of disability with the result being forged higher education pathways for students with ID. Reaching these goals encompassed actions seen in the case studies such as rejecting low expectations, fostering self-determination, engaging in inclusive experiences, and cultivating aspirations for higher education.

5.1.2 Desire for Higher Education and Self-Determination

Aspects of value-driven grit had similarities to findings in a study by Yarbrough et al.

(2014) in which parents expressed strengths-based views of disability, aspirations for their children with ID, and the value of higher education. One difference between that study and the present study was parents learned about the HEPSSID through the community, other parents,

or teachers and attributed the goal for college to receiving information on and/or having a teacher recommend the HEPSSID. What was similar is that parents also attributed the goal for college to their child having this desire. Expressing such desires and acting on them relates to the literature on self-determination.

In the present study, students' expression of the desire to go to college and the parents/guardians' response in actions to assist in bringing that to fruition was evidence of self-determination and fostering self-determination, respectively. Studies have shown families foster self-determination in individuals with disabilities generally (Wehmeyer, 2014), and individuals with ID specifically (Ankeny & Lehmann, 2011; Taylor, Cobigo, & Ouellette-Kuntz, 2019). Franks' mother displayed this when describing how she encouraged Frank to make a list of things he wanted to discuss at an upcoming IEP meeting and the result was he used that list to speak to his committee about joining the high school's band.

Ankeny and Lehmann (2011) refer to the IEP as "an effective tool to teach self-determination" (p. 285), but their study conducted with four participants (three with ID) who previously attended a LEA transition program on a community college campus showed this was not being utilized to foster self-determination by LEAs. One student from the study shared a time when she left an IEP meeting "feeling that no one believed she had the ability to become a teacher" (Ankeny & Lehmann, 2011, p. 285). The study also showed only one of the four participants contributed to IEP meetings in a significant manner. A similar finding appeared in this present study when the cases of Captain and Frank were the only two showing self-determination in IEP meetings—Frank with the goal of joining the band and Captain with the goal of college. While all student participants attended IEP meetings, such attendance seems

related more to legal requirements for students to be invited to those meetings instead of a tool to foster self-determination.

In the Ankeny and Lehmann (2011) study it also was reported that "high school personnel identified themselves as the key contributors to the students' welfare," but the four participants in the study "identified family members as the ones who most prominently modeled goal-directed behavior and who recognized and supported the development of their strengths and interests" (p. 286). Similar development of goals and interests was seen in the present study as parents supported college aspirations; sought out or provided work experiences; and supported engagement in various co-curricular, extracurricular, and/or community activities. Although extracurricular involvement has not been shown to be correlated with college enrollment, it is an indication of efforts to develop talents and interest in inclusive experiences (Gibbs, Erickson, Dufur, & Miles, 2015).

5.1.3 College-Going Culture and the Higher Education Experience

Another interesting finding in the present study was how student participants expressed the desire for college, in some cases when a sibling went to college. These expressed desires and parental references to having higher education goals for all members of the family points to a value of higher education within the family unit—a familial college-going culture. This culture likely influenced the siblings to go to college, which in turn provided self-efficacy from vicarious experiences—"If my sibling can go to college, then I can go, too." Another explanation is years spent in inclusive education have been found to be related to students with ID having expectations for college (Martinez et al., 2012). Frank, Captain, and Martin all had inclusive

educational placements whether for a few classes (Martin) or a majority of classes (Frank and Captain).

College-going behavior may also be related to the fact that all of the parent/guardian participants had at least some college—a notable aspect given national educational attainment data (U.S. Census Bureau, n.d.). For the general student body, college enrollment has been found to be positively correlated with parental educational attainment levels (Cataldi, Bennett, & Chen, 2018). Looking specifically at parents of individuals with developmental or intellectual disabilities, the study by Yarbrough et al. (2014) found "parental expectations grew less from the federally mandated special education IEP transition process and more from their own experiences having attended college and wanting the same experience for their child" (p. 8). The quote from Evie, "Just our expectation, yeah, our expectations wanting her to experience everything that anyone else experienced after high school—jobs, school, college" suggests similarly—a value of inclusivity and education, and the view of college as an experience.

Viewing the value of higher education as an experience may explain why the focus for PSE was not necessarily related to specific occupational goals. The lack of employment focus for PSE present in the current study runs counter to findings from a study by Griffin et al. (2010). Griffin et al. (2010) surveyed families of transition-age students with ID on their perspectives of PSE. Families indicated student safety and "focus on employment after completion of program" were the two most important concerns, while "typical college experience" and the distance of campus from home were the two least important concerns (Griffin et al., 2010, p. 343). Safety concerns were also mentioned by participants in the present study (i.e., Minnie's sister and Jane's parents), but employment outcomes were not the primary focus mentioned by

participants. Instead, desire for the college experience, including learning, and transportation/location were mentioned as important factors present across the cases influencing pathways to the community college.

Aspirations for the student participants were described with a sense of equal opportunity and inclusivity. This general desire was shared by Mary who expressed wanting her son, Martin, to experience "life," which resulted in her taking him out into the community despite "tantrums" which she "dealt with." Mary said, "I was willing to do that and more but for him to experience that there's a world outside." Relatedly, all of the student participants expressed motivations for attending college that were not related to employment outcomes—learning, being around diverse groups of people, teaching others about college, and having social experiences. Captain's mother was the only participant to remark occupational skill development, or "learning how to work," was something she desired when looking at HEPSSIDs.

5.1.4 Forging Pathways

Parents/guardians had collegiate aspirations for themselves (evidenced by their engagement in higher education) and for the student participants. Navigational capital gained from being college students and the work experience some of the parents/guardians had in the field of education helped forge collegiate pathways. The reason these pathways had to be forged was that such pathways were not promoted (i.e., Jane, Martin, Minnie, and Frank) or adequately supported (i.e., Captain) by LEAs. Grigal and Hart (2012) warn that "college expectations are present in subtle-or not so subtle-messages that permeate the academic and social experiences of college-bound youth throughout their secondary experiences" (p. 221). In part, this appears in the form of low expectations, and pipelines to vocational rehabilitation

based on group-based stereotypes.

A study by Martinez et al. (2012) found 38% of parents of students with ID viewed the school as not having "high expectations," with another 15% reporting they were unsure, leaving only 47% of parents who thought the schools had "high expectations" for their students with ID. McGrew and Evans (2004) addressed this issue of "group-based stereotyped low academic expectations" for students with cognitive disabilities in LEAs over fifteen years ago (p. 4). In a review of literature, McGrew and Evans (2004) described the existence of two intelligence philosophies—Burt or Binet/Gump. The Binet/Gump refers to Alfred Binet, to who intelligence tests are traced back; and to Forest Gump, the main character in the movie *Forest Gump* who had a cognitive disability and received national recognition for numerous accomplishments. A Binet/Gump philosophy is optimistic and views intelligence testing as a way to identify students for the purpose of providing support to help these students grow further (McGrew & Evans, 2004). Intelligence test scores are not regarded as "intelligence quantified" and do not reflect a level of "innate or 'fixed' ability" (McGrew & Evans, 2004, p. 3).

Individuals and systems with a Burt philosophy hold the "inaccurate belief . . . that measured intelligence is a genetically determined, largely fixed, global, and enduring trait that explains most of a student's success (or failure) in school learning" (McGrew & Evans, 2004, p. 5). The reality is that "IQ test scores, under optimal test conditions, account for 40% to 50% of current expected achievement," which leaves "50-60% of student achievement . . . related to variables 'beyond intelligence'" (McGrew & Evans, 2004, p. 6). A majority of educators have been found to have adopted the Burt philosophy (McGrew & Evans, 2004). The way the Burt philosophy appears is in policies and practices of segregated schooling—excluding students

with ID from general education classes. It also surfaces in expectancy and Pygmalion effects which have a positive correlation with academic achievement. Low academic achievement of students with ID, in part, stems from the false Burt philosophy and related practices of exclusion and stereotyping effects that ultimately direct "group members" (i.e., students with ID) towards pathways expected for that group (i.e., LEA vocational rehabilitation transition programs, sheltered employment, unemployment) (McGrew & Evans, 2004, p. 26).

Utilizing the current and dominant pipeline versus engaging in individual transition planning may also be related to findings from other studies describing transition planning as inadequate (Griffin et al., 2010; Martinez et al., 2012). The transition planning in the present study that did occur was predominantly (4 of 5 cases) geared toward vocational rehabilitation despite three of the five cases stating to LEAs that college was a desired transitional outcome. Grigal and Hart (2012) stated that parents "often determine what is possible based upon guidance from the professionals in their lives" (p. 222). Such professionals may be teachers and counselors with the general student body (Perna, 2006), as well as IEP committee members and transition staff for students with ID. These professionals are thought to directly impact parents regarding post-school possibilities, including college (Grigal & Hart, 2012). Grigal and Hart (2012) warn, then, that families may not be receiving information about current collegiate options when these staff members are uninformed. While reasonable to assume the LEAs were uninformed of PSE pathways for students with ID given the lack of information provided to participants in this study, it may also simply be an indication of the need to still address the inadequate transition planning reported in previous studies and warehouse-style transition planning to vocational rehabilitation programs (Griffin et al., 2010; Martinez et al., 2012).

5.1.5 Accessibility

Despite the lack of support from LEAs, participants in the present study worked together to pursue accessible options for college. The knowledge on how to do this seems to be related to the fact that each parent/guardian had particular characteristics. Each parent/guardian was married, working in professional occupations, went to college (earning industry certifications; or bachelor's, master's, and/or doctoral degrees), and had annual household incomes ranging from \$50k to \$200+k. Families' SES has been regarded as a significant factor influencing college choice and access (Perna, 2006; Yosso, 2005). In the general student body, the higher the SES (defined as a composite of parental education and occupation, and family income), the greater likelihood of PSE enrollment (McFarland et al., 2019).

Families' SES may have provided the capital to forge collegiate pathways in two important ways—finding accessible PSE options (i.e., looking online, visiting campuses) and securing necessary supports (i.e., transportation, collegiate support services). Martinez et al. (2012) noted when there was a lack of support from LEAs in transitioning to PSE, "family members were the primary conduits to new information pertinent to the quality of life of their family member" with ID (p. 285). And these families had the capital to be conduits of change evidenced by parents/guardians knowing to turn to the community college as a point of access to PSE despite the college not having a HEPSSID or the parents/guardians not yet being aware of the colleges' HEPSSIDs. The reason this is also important is that no matter the academic preparation of and credential received upon exiting high school by the student participants in this study, each family regarded the community college as academically accessible.

Rigorous academic preparation is considered a strong predictor of college enrollment

and choice (Perna, 2005; Perna, 2006). Each student participant in this study had varying levels of academic preparation including courses taken and credentials received upon exiting high school, yet all accessed the community college. This appeared to be related to the open admissions policies present in this institutional type, as four student participants exited high school without a standard diploma. Each parent/guardian turned to the community college as an academically accessible institution, even if later redirected to the college's HEPPSID. Also, the rigor of academic preparation may not have been a prevalent theme due to the nature of HEPSSIDs. These programs are designed to support students with ID in PSE and admissions requirements likely resemble the range of diplomas and certificates students with ID receive from LEAs. Using Think College's (n.d.-a) website to review acceptance rates for the three HEPSSIDs student participants attended in this study, it was found that two had 100% acceptance rates and one had an 80% acceptance rate for the most recent fall term. In summary, the role of rigorous academic preparation as a strong predictor of college enrollment for students generally appears to be less of a factor for students with ID enrolling at community colleges and/or HEPSSIDs.

This was a surprising finding as I expected academic preparation, including the amount of time in general education courses, to influence enrollment. Instead, the value of higher education as a means to continue learning and provide collegiate experiences along with community colleges living up to their purposes of serving the needs of their communities and being open-access institutions were primary factors in accessing higher education for students with ID in this study. This is also likely why not taking college entrance exams and high school exit exams (i.e., state achievement tests) did not negatively impact college access in these case

studies. The only case these collegiate preparatory steps were taken was in the case of Captain which seems to have influenced the purpose of her enrollment (i.e., prepare for the university) and credentials sought (i.e., an associate degree).

Captain was the only participant to pursue an associate degree, being one semester away from completion at the time of the interview. She was also the only student participant to earn a regular high school diploma, take a college entrance exam, have college as a transition goal on her IEP, and not only take but also pass the state high school exit exams. All of these aspects are related to academic preparation. Based on Captain's experience, perhaps academic preparation is important for students with ID when seeking to earn an associate degree.

5.1.6 Support

Accessing the community college was done in conjunction with families seeking, providing, and/or securing necessary supports. As a result, each student participant had some level of academic and/or functional support (i.e., transportation, on-campus navigation, in-class support, accommodations). In the absence of support services, parents/guardians expressed the willingness to provide it themselves.

In hindsight, it is logical that students who qualify for special education services in primary and secondary public schools and who receive those services because of academic support needs related to their disability will need similar support services to be successful in higher education. Furthermore, receiving a diagnosis of ID requires documented impairments in areas of adaptive functioning (APA, 2013). A common adaptive functioning assessment focuses on nine skills categories—communication, community use, functional academics, home living, health and safety, leisure, self-care, self-direction, and social (von Buttlar, Zabel, Pritchard, &

Cannon, 2021). Many of the services sought and provided to the students with ID in this present study addressed some of these adaptive functioning areas with particular attention to safety and transportation. Without support in these areas, parent/guardian participants expressed it would have been unlikely the students with ID could have successfully engaged in PSE at the community college. This has important implications for supporting collegiate pathways for students with ID. How do families without the financial means and/or navigational capital provide or secure support services for students with ID accessing the community college? Are students with ID who live in areas where necessary support services are difficult to secure and/or not available less likely to enroll in PSE? Are students with ID more likely to enroll in PSE when HEPSSIDs are geographically nearby because these programs include support services?

5.1.7 Peers

Sometimes paying attention to what is not present in data is just as important as what is found. In the literature, peers have been shown to influence college-going pathways in the general student body (Center for Higher Education Policy Analysis, 2006). However, this was not a strong factor in this study. In part, this may be due to the reference of many of the student participants' peers having disabilities and following the dominant LEA vocational rehabilitation transition pathway. Snowball sampling was ineffective as parents/guardians were unable to think of individuals with ID in their social networks engaging in PSE at the community college.

This does not mean that peers cannot be an influence if college-going behavior increases within this population. The parent/guardian participants in the cases of Jane and Minnie stated how individuals with ID and/or their families expressed the desire to pursue PSE

at the community college HEPSSID *after* Jane and Minnie pursued this course. These peers were from the group home (in Minnie's case) and the LEA transitional center (in Jane's case). This suggests that peers may influence college-going behavior when a peer with disabilities has pursued this course. This influence was already seen in the case of Frank when his friend with trisomy 21 left to attend a university HEPSSID and Frank expressed the desire to do similar.

5.1.8 Divergence

The last area in need of discussion stems from the differences found between students who accessed the community college traditionally compared to students who enrolled in HEPSSIDs. As discussed in this study, all the student participants originally sought to enroll traditionally at the community college. However, only two students did so—Captain and Frank. Both of these students did not have a HEPSSID at their community colleges, had mothers with doctoral degrees who worked in higher education, took general education classes in elementary and secondary schools, and did not engage in LEA vocational rehabilitation transition programs post high school. These students were also the only ones to show selfdetermination in IEP meetings. It is unclear if the culmination of these factors or a few of them resulted in the different way the community college was accessed, but it was a difference worth noting and possibly exploring in future research. How does academic preparation, including inclusive educational placement, impact college choice for individuals with ID (i.e., choosing a HEPSSID or enrolling traditionally)? How does the presence of a nearby HEPSSID impact college enrollment patterns in individuals with ID? Is there a correlation between parental higher education attainment and traditional college enrollment patterns in students with ID?

5.2 Limitations and Delimitations

As with all studies, this present study had limitations. First, participants were not selected but were recruited mostly via emails sent by program directors listed in the Think College "Find a College" database and various disability organizations. As such, participants had to have access to the internet and a computer/tablet/smartphone or similar, and an email account. This recruitment method was used due to the COVID-19 pandemic and resulting social distancing guidelines that prevented in-person recruitment and interviewing. With this restraint forcing recruitment to be done virtually, participants without access to the internet and email were excluded. This also meant participants who did have access to the internet and email self-selected. Needing internet and email access and relying on self-selection resulted in only individuals with resources, time, and/or willingness to share personal experiences participating in this study.

The other limitation of this type of recruitment is it relied on program directors who were listed on the Think College database, and staff members at disability organizations and disability services offices to forward the recruitment email to potential participants. One program director and one disability organization responded they were uncomfortable with sharing research recruitment flyers with potential participants. Many directors never responded to recruitment efforts. These actions resulted in possible participants utilizing these programs, services, or organizations not receiving information about participation thereby limiting who was able to participate in this study.

Secondly, parent/guardian participants in this study all had at least some college, with the majority having graduate degrees. Relatedly, annual household incomes for

parent/guardian participants were all above the national poverty level with two reporting incomes above \$100k. Socioeconomic factors such as family income impact postsecondary enrollment patterns (Doren, Gau, & Lindstrom, 2012; Perna, 2006). This could be an indication that families with higher incomes are more likely to have a student with ID enrolled in PSE and/or these participants had the resources to be able to hear about and participate in the study. Whatever the reason, the participants are not a good representation of national income and educational attainment statistics. Participants also were either Hispanic, Mexican, Mexican-American, or White. Although generalization was not the purpose of this qualitative study, results of this study are without the voices of people with less than a college education, living in poverty, and/or who identify with other ethnic/racial groups (i.e., Native American, Black, Asian American, Pacific Islander, multiracial, etc.).

A delimitation inherent in study design is the exclusion of LEAs from individual case studies. While information was obtained about educational experiences including IEP meetings and goals, teachers and other school staff were not interviewed. In part, this was done to focus on the student and their lived experience. It also would have been unfeasible in some cases like Minnie who exited high school over twenty years ago. The collection of data from IEPs was, in part, to provide information about academic preparation on the part of the LEAs but this document was only received for one student participant. Without interviews from teachers or other school staff and IEPs for each student participant, the study may not accurately show all supports and related services influencing the college-going pathway provided by LEAs to student participants.

5.3 Recommendations for Future Research

Results from this present study in relation to the literature reviewed point to areas of need in future research. First, parents/guardians all had at least some college and annual household incomes above the poverty level, with some exceeding income median levels for their state (U.S. Census Bureau, 2020). The study also had participants from certain racial/ethnic groups but did not have participants from other racial/ethnic groups (i.e., Native American, Black, Asian American, Pacific Islander, multiracial). It was not the intention to leave out the experiences and voices of individuals who identify with these races/ethnicities, have annual household incomes below \$50k (the lowest income reported in this study), or have educational attainment less than some college. To better understand the pathways to the community college for these individuals, further inquiry is needed to look at factors that influence the collegiate pathways for students with ID who identify with one or more of these categorical descriptions. When parents/guardians are without navigational capital obtained from personal experiences with higher education institutions as students, how was navigational capital obtained or what was used to navigate the collegiate pathway? How did students who identify with multi-minority status from other racial/ethnic groups forge collegiate pathways? What is the influence of SES on students with ID accessing the community college? For families with low SES, what capital or other resources do they use to forge pathways to the community college for a family member with ID?

Further inquiry of the role parents/guardians' view of disability plays in forming life goals including the goal of higher education for students with ID is warranted. The literature on expectations looked at the presence of what was regarded as expectations or aspirations,

instead of the source of those expectations/aspirations. How parents form a strengths-based view of disability and the role this plays in building a family culture independent of lower educational expectations is worthy of inquiry. When parents/guardians receive messages of low expectations from society, educational institutions, and/or professionals, how do parents/guardians develop and/or retain a "cup half full" perspective of disability (McGrew & Evans, 2004)? What are the personal characteristics of these parents/guardians; do they have grit and perseverance, or values of inclusivity? It appears understanding collegiate pathways of students with disabilities requires the inclusion of understanding what disability means to individuals within the family system. This also suggests the need for a framework unique to students with ID given the deep history of discrimination, marginalization, and ableism affecting this population making this population uniquely different from those used for understanding college choice in other student populations.

5.4 Implications for the Field of Higher Education

As alluded to above, insufficient is the availability of frameworks for this student population in understanding college choice (a term used here to include aspects of the precollege pathway). Theories address the experiences of college students with disabilities (i.e., Disability-Diversity (Dis)Connect Model and Interactionist Model of Disability) but not their pathways (Aquino, 2016; Evans et al., 2017). College choice models such as Bourdieu's cultural capital, and Hossler and Gallagher's (1987) three stage model traditionally were designed for dominant student populations, and not those with ID eligible for alternative diplomas and subjected to the low expectations for this population (Evans et al., 2017). The theory used in this study, community cultural wealth, considers capital specific to marginalized students but

was developed specifically to racial/ethnic characteristics and not disability (Yosso, 2005). While navigational, social, resistant, and aspirational capital applied to this study, parts such as linguistic capital and familial capital (as described by Yosso and not as applied by other researchers) did not—which is to be understood since the focus of community cultural wealth was not on disability. Disability Critical Race Studies (DisCrit) does focus on disability and is used in educational research, pulling from aspects of Disability Studies and Critical Race Theory, but examines the social construction of disability and the intersection of this with race instead of solely on college choice for students with disabilities (Annamma et al., 2016; Annamma, Ferri, & Connor, 2018). A transition framework proposed by Garrison-Wade and Lehmann (2009) is specific to students with disabilities and community colleges. However, the focus of that framework was on what was described as "high functioning" students with learning disabilities and was geared toward aspects related to PSE success versus college choice and the collegegoing pathway. This points to a need for more research to develop an appropriate college choice model for students with ID. It also alludes to the need for higher education researchers to critically look at biases related to what is regarded as diversity and access. Is disability regarded as a form of student diversity?

Related to the call for introspection discussed above, I am asking higher education researchers to consider how the practice of excluding individuals with ID from research is adding to a deficit perception of this population. This present study showed how a deficit perception continues in education resulting in exclusion (i.e., LEAs initially denying requests for Frank and Martin to have general education placement) or discrimination (i.e., Frank being denied admissions). Welsby and Horsfall (2011) noted how "people who have an intellectual

disability have not been seen as competent, reliable, or trustworthy research participants" evidenced by the lack of including the voice of these individuals in research studies (p. 797). By regarding this population as what Taylor (2018) refers to as *knowledge citizens*, the higher education community can change deficit perceptions by giving this population a voice in research that is about them and that impacts their lives. This present study shows the value of including participants with ID in research which allowed for understanding their motivations, desires, experiences, and perceptions. If Welsby and Horsfall (2011) are correct in declaring "exclusionary practices are the results of socio-cultural processes that produce and re-produce exclusion for some groups in our society," then evaluation of higher education culture or processes that result in excluding individuals with ID from research is warranted (p. 796).

5.5 Recommendations for Community Colleges and Local Education Agencies

I propose three recommendations for community colleges and LEAs based on the literature and findings from this study showing familial lack of awareness of HEPSSIDs, poor transition support to the community college, and low expectations from educational institutions. First, both community colleges and LEAs need to strategically increase awareness of PSE programs by sharing this information with students with ID and their families. Second, community colleges and LEAs, who many times already have collaborative partnerships in other areas such as dual-credit courses, need to increase interagency collaboration in areas specific to students with ID. Lastly, both entities need to conduct systems evaluations to identify and change practices and policies that perpetuate ableism and low expectations for this population.

In a study by Yarbrough et al. (2014) published by the Center on Transition Innovations, parents suggested four main areas of improving transition to PSE for students with intellectual

and developmental disabilities. One suggestion for colleges was to share information about HEPSSIDs with LEAs. Lack of information about HEPSSIDs was seen in the cases of Martin, Jane, and Minnie. This lack of awareness can be addressed by community colleges sharing information about HEPSSIDs, course offerings, and degree programs with LEA staff members who are at IEP transition meetings and also the broader community (perhaps through area disability services offices). As feasible, I suggest community colleges also have vendor tables and college representatives at transition conferences held by LEAs or hold independent information sessions for parents/guardians of individuals with ID living within their communities. The purpose of such actions is to ensure this information is provided to parents/guardians, especially given the majority of adults with ID live with family members (Larson et al., 2008). Providing this "information to students and their families about postsecondary enrollment options" is important to college choice (Perna, 2006, p. 118).

Teachers and other members of LEA transition and IEP teams should receive training by LEAs on PSE opportunities (including HEPSSIDs), which was the second recommendation by parents in the study by Yarbrough et al. (2014). Related to this is for LEAs to improve transition services. Parent/guardian participants described LEA transition services as insufficient, and in a majority of the cases student participants were directed to vocational rehabilitation dominant pathways post twelfth grade. Although I did not interview LEA staff, parent participants did not receive information about local HEPSSIDs from the LEAs and the only student participant to have a college transition goal was not supported by the transition specialist in that goal. With the majority of student participants being directed to the LEAs' vocational rehabilitation transition program, this may be an indication of a warehouse model approach to transition.

Change in information dissemination and transition outcomes will require interagency collaboration.

Increased communication between the two systems, LEAs and community colleges, may positively impact students with disabilities collectively in transitioning to the community college (Garrison-Wade & Lehmann, 2009). Specific to students with ID, Grigal and Hart (2012) wrote that "inclusion of youth with an intellectual disability in higher education requires collaboration between systems, programs, and professionals in higher education, K-12 education, and state and local disability and rehabilitation arenas" (p. 221). If this type of collaboration was present, Minnie and her sister would have known about tuition assistance for students with ID; Martin, Jane, and Minnie and their parents/guardians would have been aware of the HEPSSIDs within their communities; and Captain and Frank and their mothers would have been provided with information on college support services and other community resources instead of locating these services themselves using navigational and social capital.

Interagency collaboration is not a new idea in transition planning. A well-known model for evaluating transition programming is the Taxonomy for Transition Programming 2.0 (Kohler et al., 2016). The five areas of this model are student-focused planning, student development, program structures, family engagement (partly addressed in the recommendation to share information as described above), and interagency collaboration. Interagency collaboration requires a "coordinating body that includes students, parents, educators, service providers, community agencies, postsecondary institutions, employers, and other relevant stakeholders" with one of these being the "lead agency" but all having a "designated transition contact person" (Kohler et al., 2016, p. 7). It is recommended that state and local disability and

rehabilitation agencies, LEAs, and community colleges seek to meet the aspects of the collaborative framework proposed for achieving interagency collaboration in Taxonomy for Transition Programming 2.0, starting with creating an interagency coordinating body and providing cross-agency professional development (Kohler et al., 2016).

Sharing information and interagency collaboration, however, may prove to be insufficient if low expectations for students with ID continue to be present in LEAs. Garrison-Wade and Lehmann (2009) in a study of students with disabilities found transitioning to the community college was hindered by "low expectations, [and] poor high school preparation and transition planning" (p. 415). They proposed the need for interagency collaboration (mentioned above) as well as focus on student preparation during secondary education since low expectations hinder college being encouraged and expected, academic preparation, and students building positive self-perceptions.

To address this issue, LEAs need to first acknowledge and "own" the existence of low expectations, Burt IQ philosophies, and ableism inherent in their systems including the practice of "institutionalized segregated instruction" (McGrew & Evans, 2004, p. 25). Then, LEAs should seek to uproot these and other practices or campus cultures that reinforce low expectations for students with ID (McGrew & Evans, 2004). The Taxonomy for Transition Planning 2.0 suggests "setting high expectations" and engaging families in ways such as providing families and students with assistance in applying for college (Kohler et al., 2016, p. 8). If families and students are being aided with college applications, then perhaps college is a transition goal or at least part of the conversation. Another way to shift away from low expectations is to heed the suggestion by Yarbrough et al. (2104) that "discussions at IEP meetings of the expectation

of college . . . begin as early as when the child is in elementary school" (p. 8). When a student who has expressed interest in PSE begins having transition IEP meetings, LEAs "with the consent of the parents or a child who has reached the age of majority" should consider inviting an appropriate college staff member as one of the agency representatives "responsible for providing . . . transition services" (IDEA, 2004, Sec. 300.321). Having college representatives present at transition IEP meetings may be beneficial in supporting students with ID in preparing for and transitioning to PSE.

5.6 Recommendations for Students and Families

Results from this study showed collaborative relationships between individuals with ID and their parents/guardians. Individuals with ID engaged in self-determination and parents/guardians fostered self-actualization by honoring aspirations and offering support. It is recommended that individuals with ID engage in self-determination including expressing the desire for higher education. Families also are encouraged to provide and/or secure supports and services necessary for family members with ID to access and succeed in higher education, foster self-actualization in individuals with ID, and be involved/engaged with schools/LEAs including advocating for social and educational development and inclusion.

Every student participant in this study expressed the desire for college to their parents/guardians. Parents/guardians supported these goals, including seeking out PSE options. Working collaboratively, families filled out collegiate applications and secured transportation or other support services. Student participants engaged in interviews at the colleges, accompanied by their parents/guardians. Based on study findings, it is recommended for students with ID to share their aspirations for PSE to their families and for family members to assist by offering

support in areas of planning such as obtaining information about PSE options, completing admissions-related tasks, visiting campuses, choosing courses, and securing educational and/or transportation support services.

Another area parents/guardians can assist individuals with ID is in social and educational development. Parents in this study attended IEP meetings religiously, communicated with teachers and administrators about their students, volunteered at the students' schools, and supported students academically. Parents advocated for their children by seeking general education placement and/or inclusion in school activities (i.e., band, sports teams, Bible Club, cheerleading) despite the reluctance of some schools to provide these experiences. Based on these findings which appeared in the majority of the cases in this present study, it is recommended that parents/guardians engage similarly by seeking for their children to have educational and/or socially inclusive experiences in school and/or community, attending IEP meetings regularly, and supporting their children's education through engagement with schools and school staff.

The last recommendation is for parents/guardians to foster self-actualization in individuals with ID. Based on study findings, this largely appears to be related to parents/guardians' view of the individual with ID, and disability. Yarbrough et al. (2014) conducted a study involving twelve parents whose children with ID were accepted into a HEPSSID. These parents differed from the parents/guardians in this present study as they heard about the local HEPSSID from other parents or teachers; but were similar in that they had "an innate, positive perspective on their child," had "high aspirations," encouraged self-efficacy, and communicated to their children expectations of PSE (Yarbrough et al., 2014, p. 6). Engaging

in these actions and having a strengths-based view of disability may help counter what Vaccaro, Kimball, Newman, Moore, and Troiano (2018) found in their study of college students with disabilities who reported "deficit-laden societal messages," and "stigma-laden messages that they could not achieve particular life goals" such as going to college (p. 46).

5.7 Conclusion

In summary, "every system is perfectly designed to get the results it gets" (origin disputed) (The W. Edwards Deming Institute, n.d.). The family systems in this study had the same result—100% of students with ID accessed PSE at the community college. While considered fundamental, families are also basic units of society; and outcomes of PSE in one family unit may not result in similar outcomes in another family unit, especially if that unit is without value-driven grit, pathway knowledge, community support, and an accessible college (Ballard, 2005; The Church of Jesus Christ of Latter-day Saints, 1995/2008). What can larger systems learn from these smaller family systems?

Broader change requires evaluating policies and practices in educational and sociocultural systems; especially those based on false understandings of ID, intelligence, and the relationship between IQ scores and achievement (McGrew & Evans, 2004). The implications of this and findings from this study suggest LEAs and community colleges may need to evaluate their systems to create different results than what is presently occurring—students with ID being the least likely student disability population to access higher education. Local education agencies can increase their expectations, adopt a Binet/Gump IQ philosophy, provide support, foster self-determination, and improve transition services by collaborating with other stakeholders (i.e., community colleges, families, and disability services agencies). Community

colleges are providing access to higher education but could also engage in more collaborative efforts with LEAs, students with ID, and their parents/guardians to support this underrepresented college student population.

Based on findings from this study, families appear to be the primary systems forging pathways to the community college for students with ID. Local education agencies and community colleges can assist these families by reevaluating their practices to align with goals of students with ID accessing and engaging in higher education. Through systems change educational institutions and families can collaboratively build pathways to inclusive community college experiences without creating "separate courses and courses of study [that] reinforce the widespread presumption that students with ID cannot succeed in typical classes" (Grigal et al., 2016, p. 19). After all, "segregated or separate options reflect the limitations of those planning and implementing PSE services more than the limitations of the students who access those services" (Grigal & Hart, 2012, p. 221).

APPENDIX A

HIGHER EDUCATION PROGRAMS DESIGNED TO SERVE STUDENTS WITH ID WHO HAVE EXITED HIGH SCHOOL

| HEPSSID Name | Institution | Institutional Type | Location (State) | Housing | TPSID | СТР |
|---|---|-----------------------|--------------------------|-----------|----------|----------|
| BullDog LIFE | Alabama A&M | 4-year | Alabama | No | Yes | No |
| CrossingPoints Summer Bridge Program | University University of Alabama | 4-year | Alabama | Yes | Yes | No |
| Eagles | Auburn University | 4-year | Alabama | Yes | No | Yes |
| On 2 JSU | Jacksonville State University | 4-year | Alabama | Yes | Yes | No |
| Passage USA | University of South Alabama | 4-year | Alabama | No | Yes | No |
| TAPESTRY | University of Alaska | 4-year | Alaska | Yes | No | No |
| 3D Program | University of Arkansas- Pulaski Technical College | 4-year | Arizona | No | No | Yes |
| Academic and Career Achievement Program | South Arkansas Community College | Community college | Arizona | No | No | Yes |
| EMPOWER | University of Arkansas | 4-year | Arizona | Yes | No | Yes |
| HOWL | Arkansas State University | 4-year | Arkansas | Yes | No | Yes |
| Launch | University or Arkansas | 4-year | Arizona | No | No | No |
| College 2 Career | San Diego Community College District | Community college | California | No | No | Yes |
| College of Adaptive Arts | College of Adaptive Arts | | California | No | No | No |
| College to Career | North Orange County Community College District | Community college | California | No | No | No |
| College to Career | Sacramento City College | | California | No | No | No |
| College to Career | Santa Rosa Junior College | Community college | California | No | No | Yes |
| College to Career | Fresno City College | | California | No | No | No |
| College to Career College to Career | Shasta College West Los Angeles College | | California California | Yes No | No No | No No |
| College to Career Program | College of Alameda | | California | No | No | No |
| CSUN Explorers | California State University Northridge | | California | No | No | No |

| Foothill College | Foothill College | | California | No | No | No |
|---------------------------------|--------------------------------|-------------------|-------------|-----------|----------|-----------|
| Transition to Work | Ventura Callega | | California | No | No | No |
| I-CAN JOB | Ventura College UCLA Extension | | California | No Yes | No No | No Yes |
| Pathway to UCLA Extension | | | | | | |
| Tierra del Sol | CSUN, LA Valley | | California | No | No | No |
| Foundation NEXUS | College, LA | | | | | |
| Program | Pierce College, LA Mission | | | | | |
| | College, College | | | | | |
| | of the Canyons, | | | | | |
| | Glendale | | | | | |
| | College, West | | | | | |
| | Valley | | | | | |
| | Occupational | | | | | |
| | Center | | | | | |
| Transition to | Taft College | | California | Yes | No | No |
| Independent Living | | | | | | |
| (TIL) | | | | | | |
| Wayfinders | California State | 4-year | California | Yes | Yes | Yes |
| | University- | | | | | |
| CHOICEC/ | Fresno | 4 | Calamada | V | | NI - |
| CHOICES/ | Colorado State | 4-year | Colorado | Yes | Yes | No |
| Opportunities for Postsecondary | University | | | | | |
| Success | | | | | | |
| Elevate at ACC | Arapahoe | Community | Colorado | No | No | Yes |
| | Community | college | 00.0.00 | | | . 55 |
| | College | | | | | |
| Office of Inclusive | University of | 4-year | Colorado | Yes | No | No |
| Services | Colorado- | | | | | |
| | Colorado | | | | | |
| | Springs | | | | | |
| UNC Goal | University of | 4-year | Colorado | Yes | No | Yes |
| | Northern | | | | | |
| Callaga Stana | Colorado | Comemon in its | Commontions | No | No | Nie |
| College Steps | Norwalk Community | Community college | Connecticut | No | No | No |
| | College | College | | | | |
| Step Forward | Gateway | Community | Connecticut | No | No | No |
| Step i oi wara | Community | college | Connecticut | 110 | | 110 |
| | College- New | | | | | |
| | Haven | | | | | |
| Career and Life | University of | 4-year | Delaware | Yes | No | Yes |
| Studies Certificate | Delaware | | | | | |
| Eagle Connections | Tallahassee | Community | Florida | No | No | Yes |
| | Community | college | | | | |
| | College | | <u> </u> | 1 | | |
| FAU Academy for | Florida Atlantic | 4-year | Florida | No | No | Yes |
| Community Inclusion | University | | | | | |

| FIU Embrace Life | Florida | 4-year | Florida | No | Yes | No |
|-----------------------------|--------------------------------|---|---------|------|-----|-----|
| TTO ETHIDIACE LITE | International | - year | Tiorida | 140 | 163 | 140 |
| | University | | | | | |
| FIU Embrace PLUS | Florida | 4-year | Florida | Yes | Yes | No |
| | International | , | | 100 | | |
| | University | | | | | |
| Inclusive Education | University of | 4-year | Florida | Yes | Yes | Yes |
| Services | Central Florida | , | | | | |
| Marino Campus | Marino Campus | 4-year | Florida | No | No | No |
| | and Florida | | | | | |
| | International | | | | | |
| | University | | | | | |
| PALS | Pensacola State | 4-year | Florida | No | No | No |
| | College | | | | | |
| Programs for Adults | Brewster | | Florida | No | No | No |
| with Intellectual | Technical | | | | | |
| Disabilities | College | | | | | |
| Project ACCESS | College of the | 4-year | Florida | No | No | Yes |
| | Florida Keys | | | | | |
| Project | Florida | | Florida | No | No | Yes |
| Independence | Panhandle | | | | | |
| | Technical | | | | | |
| | College | | | | | |
| Project SAINT: | Santa Fe | | Florida | No | No | No |
| Student Access and | College | | | | | |
| Inclusion Together | | | | | | |
| Project STAGE | Indian River | | Florida | No | Yes | Yes |
| orius I | State College | | | ., | | |
| SEU Link | Southeastern | | Florida | Yes | No | Yes |
| The Arc Jacksonville | University | 4 | Florida | Yes | No | No |
| | University of North Florida | 4-year | FIORIGA | res | INO | INO |
| on Campus Transition at UNF | North Florida | | | | | |
| The Learning | University of | 4-year | Florida | Yes | No | No |
| Academy at USF | South Florida | 4-year | Tiorida | Tes | INO | NO |
| VERTICAL/Achieve | Florida State | 4-year | Florida | No | Yes | No |
| VERTICAL/Actileve | College at | 4-year | Tiorida | 110 | 163 | 140 |
| | Jacksonville | | | | | |
| Academy for | Kennesaw State | 4-year | Georgia | Yes | No | No |
| Inclusive Learning | University | , year | Georgia | 1.63 | 110 | 1.0 |
| and Social Growth | | | | | | |
| CHOICE Program for | East Georgia | 4-year | Georgia | Yes | Yes | Yes |
| Inclusive Learning | State College | | Ĭ | | | |
| Destination Dawgs: | University of | 4-year | Georgia | No | Yes | Yes |
| Inclusive Post- | Georgia | | | | | |
| Secondary Education | _ | | | | | |
| at UGA | | | | | | |
| Eagle Academy | Georgia | 4-year | Georgia | Yes | Yes | Yes |
| | Southern | | | | | |
| | University | | | | | |

| Event at Coorgie | Coorgio | 1or | Coorgio | Vos | No | Voc |
|----------------------------|---------------------------|--------------|-------------|------|----------------|----------|
| Excel at Georgia | Georgia | 4-year | Georgia | Yes | No | Yes |
| Tech | Institute of | | | | | |
| IDEAL | Technology | 4 4000 | Coorgia | No | Voc | Voc |
| IDEAL | Georgia State University | 4-year | Georgia | No | Yes | Yes |
| LEAP: Leveraging | • | | Coorgia | No | Yes | Yes |
| Education for | Albany Technical | | Georgia | NO | 162 | 165 |
| Advancement | College | | | | | |
| | College | | | | | |
| Program Project WOLVES | University of | 4 year | Georgia | No | Yes | Yes |
| Project WOLVES | West Georgia | 4-year | Georgia | NO | 162 | 165 |
| The GOALS Program | Columbus State | 4-year | Georgia | Yes | Yes | No |
| at CSU | University | 4-year | Georgia | 163 | 163 | INO |
| Postsecondary | UH Community | Community | Hawaii | No | Yes | No |
| Support Project | College System | college | Паман | NO | 162 | INO |
| Support Project | Campuses on | College | | | | |
| | O'ahu Island | | | | | |
| SPARC Program | Lewis-Clark | 4-year | Idaho | No | No | No |
| SPARC Program | | 4-year | luano | NO | INO | INO |
| Caraar Chille Institute | State College | | Illinois | No | No | No |
| Career Skills Institute | Harper College | Community | | | | _ |
| College for Life | John Wood | Community | Illinois | No | No | No |
| | Community | college | | | | |
| Callana familifa | College | Community | 100 | N1 - | NI- | NI- |
| College for Life | Lewis and Clark | Community | Illinois | No | No | No |
| Programs | Community | college | | | | |
| Charles wet Learning | College | | Illinaia | Vaa | N ₂ | Vac |
| Elmhurst Learning | Elmhurst | | Illinois | Yes | No | Yes |
| and Success | College | | | | | |
| Academy | I I a a milia mad | Company mits | Illinaia | NI- | Na | Vac |
| Heartland Academy | Heartland Community | Community | Illinois | No | No | Yes |
| for Learning Opportunities | | college | | | | |
| PACE at National | College National Louis | 4-year | Illinois | Yes | No | Yes |
| | | 4-year | IIIIIIIIII | 162 | INO | 165 |
| Louis University | University | 4 4000 | Illingis | No | No | No |
| Personal Success | College of Lake | 4-year | Illinois | No | No | No |
| Program Drainet COACH | County | 4 4000 | Illingis | No | No | No |
| Project COACH | College of | 4-year | Illinois | No | No | No |
| DAICE | DuPage Rock Valley | 4 | Illinaia | NI- | N ₂ | No |
| RAISE | • | 4-year | Illinois | No | No | No |
| DISE (Dood to | College | 4 4025 | Illingia | Voc | NIa | Voc |
| RISE (Road to | Judson | 4-year | Illinois | Yes | No | Yes |
| Independent Living, | University | | | | | |
| Spiritual Formation | | | | | | |
| and Employment) | Louis and Claul | Commercial | Illie e i e | V | NI a | Va- |
| Supported College | Lewis and Clark | Community | Illinois | Yes | No | Yes |
| Transition | Community | college | | | | |
| 4 D. E. (4 . L | College | | 1 1 | | | - |
| ABLE (Achieving | Huntington | 4-year | Indiana | No | No | No |
| Balance in Life | University | | | | | |
| through Education) | A1 .1 . | | 1. | | | 1 |
| Northwestern NEXT | Northwestern | 4-year | Iowa | Yes | No | No |
| | College | | | | | |

| STRIVE Academy | Des Moines Area Community College | Community college | Iowa | No | No | No |
|---|--|-------------------|---------------|-----|-----|-----|
| UI REACH | University of lowa | 4-year | Iowa | Yes | No | Yes |
| CLEAR Program | Johnson County Community College | Community college | Kansas | No | No | No |
| Transition to Postsecondary Education (KU TPE) | University of Kansas | 4-year | Kansas | Yes | Yes | Yes |
| College to Career Experience | Murray State University | 4-year | Kentucky | No | No | Yes |
| Supported Higher Education Project of Northern Kentucky University | Northern Kentucky University | 4-year | Kentucky | No | No | Yes |
| Bridge to Independence | Nicholls State University | 4-year | Louisiana | Yes | No | Yes |
| Lions Connected | Southern Louisiana University | 4-year | Louisiana | No | No | Yes |
| Program for Successful Employment | Bossier Parish Community College | Community college | Louisiana | No | No | Yes |
| The Program for Successful Employment | Baton Rouge Community College | Community college | Louisiana | No | No | No |
| UL Life Program | University of Louisiana at Lafayette | 4-year | Louisiana | Yes | No | Yes |
| STRIVE U | Purdue University Global | 4-year | Maine | Yes | No | No |
| College Living Experience of Washington | Montgomery College | 4-year | Maryland | Yes | No | No |
| College Steps Massachusetts | American International College | 4-year | Massachusetts | No | No | No |
| Extraordinary Expectations for College Education and Life (EXCEL) | Bridgewater State University | 4-year | Massachusetts | Yes | No | No |
| Project Forward | Cape Cod Community College | Community college | Massachusetts | No | No | Yes |
| Threshold Program at Lesley University | Lesley University | 4-year | Massachusetts | Yes | No | No |

| Transitional Scholars | MassBay | Community | Massachusetts | No | No | No |
|-----------------------|------------------|-----------|---------------------------------------|------|------|------|
| Program | Community | college | | | | |
| | College | | | | | |
| Noorthoek Academy | Grand Rapids | Community | Michigan | No | No | No |
| , | Community | college | | | | |
| | College | | | | | |
| Ready for Life | Hope College | | Michigan | Yes | No | No |
| , | and Calvin | | | | | |
| | College | | | | | |
| Ready for Life | Calvin College | 4-year | Michigan | Yes | No | No |
| Skills, Opportunity, | Northwestern | 4-year | Michigan | No | No | No |
| Achievement, | Michigan | , | | | | |
| Reward S.O.A.R. | College | | | | | |
| Think Cardinal | Saginaw Valley | 4-year | Michigan | Yes | No | No |
| | State University | 1 7 5 5 1 | | | | |
| Beyond Limits | Bethany Global | 4-year | Minnesota | Yes | No | No |
| 20,0 | University | . , | | . 55 | | |
| BUILD | Bethel | 4-year | Minnesota | Yes | No | Yes |
| 20.22 | University | . , | | . 55 | | |
| Occupational Skills | Central Lakes | 4-year | Minnesota | No | No | Yes |
| Program | College | , year | · · · · · · · · · · · · · · · · · · · | 110 | 1.10 | 1.03 |
| Occupational Skills | Ridgewater | 4-year | Minnesota | No | No | Yes |
| Program | College | - year | Willinesota | 110 | 110 | 103 |
| ACCESS | Mississippi | 4-year | Mississippi | Yes | No | Yes |
| ACCESS | State University | - year | iviississippi | 103 | 110 | 103 |
| Bear POWER | Missouri State | 4-year | Missouri | Yes | No | Yes |
| Bear 1 O WEIX | University | - year | IVIISSOUTI | 103 | 110 | 103 |
| Propel | University of | 4-year | Missouri | Yes | Yes | Yes |
| Порст | Missouri- | - year | IVII330aTT | 103 | 163 | 103 |
| | Kansas City | | | | | |
| SUCCEED | University of | 4-year | Missouri | Yes | No | Yes |
| JOCCLED | Missouri- St. | 4-year | IVII330ui i | 163 | 140 | 163 |
| | Louis | | | | | |
| THRIVE Program | University of | 4-year | Missouri | Yes | No | Yes |
| TTIMIVE TTOGRAM | Central | - year | IVII330aTT | 103 | 110 | 103 |
| | Missouri | | | | | |
| MOSSAIC | University of | 4-year | Montana | Yes | No | No |
| WOSSAIC | Montana | - year | Wiontana | 103 | 110 | 140 |
| MSU LIFE Scholars | Montana State | 4-year | Montana | No | No | No |
| WISO EII E SCHOIGIS | University | - year | Wiontana | 140 | 110 | 140 |
| Trailblazer Program | University of | 4-year | Nebraska | No | No | No |
| Tranblazer Frogram | Nebraska | 4-year | Nebraska | INO | 140 | 140 |
| | Omaha | | | | | |
| Path to | University of | 4-year | Nevada | No | No | Yes |
| Independence | Nevada Reno | ycui | INCVAGA | 100 | 140 | 163 |
| UNLV F.O.C.U.S. | University of | 4-year | Nevada | No | No | Yes |
| 014EV 1.0.C.U.J. | Nevada, Las | -year | Nevaua | 110 | 110 | 163 |
| | Vegas | | | | | |
| Project SEARCH | Great Bay | Community | New | No | No | No |
| Seacoast NH | Community | college | Hampshire | 110 | INU | INU |
| Jeacoast NIT | College | College | Hampsine | | | |
| | Conege | | | 1 | | |

| | . | Ι. | T., . | T | T | T |
|--------------------------------|----------------|-----------|-------------|-----|-----|-----|
| Adult Center for | Rowan College | 4-year | New Jersey | No | No | No |
| Transition at RCGC | at Gloucester | | | | | |
| | County | | | | | |
| Career and | The College of | 4-year | New Jersey | Yes | Yes | Yes |
| Community Studies | New Jersey | | | | | |
| DREAM Program | Mercer County | Community | New Jersey | No | No | No |
| | Community | college | | | | |
| | College | | | | | |
| Garden State | Camden County | | New Jersey | No | No | Yes |
| Pathways Program | College | | | | | |
| Garden State | Bergen | Community | New Jersey | No | Yes | No |
| Pathways to | Community | college | | | | |
| Independence: | College | | | | | |
| Transitions to Higher | 00080 | | | | | |
| Education and | | | | | | |
| Employment for | | | | | | |
| Students with ID | | | | | | |
| | Brookdale | Community | New Jersey | No | No | No |
| Keep Achieving at Brookdale | Community | - | ivew jersey | INU | INO | INO |
| вгоокаате | • | college | | | | |
| 010.01.54.5 | College | | | 1 | | + |
| SJC CLEAR | San Juan | 4-year | New Mexico | No | No | No |
| | College | | | | | |
| Special Services | Eastern New | 4-year | New Mexico | Yes | No | No |
| Program | Mexico | | | | | |
| | University- | | | | | |
| | Roswell | | | | | |
| Bridge to Earning, | Roberts | 4-year | New York | Yes | No | Yes |
| Learning and Living | Wesleyan | | | | | |
| | College | | | | | |
| BRIDGES | SUNY Orange- | Community | New York | No | No | Yes |
| | Orange County | college | | | | |
| | Community | _ | | | | |
| | College | | | | | |
| College Steps | Rockland | Community | New York | No | No | No |
| | Community | college | | | | |
| | College | 00080 | | | | |
| CollegeWorks | Mohawk Valley | Community | New York | Yes | No | No |
| College Works | Community | college | INCW TOTK | 163 | 110 | 140 |
| | College | College | | | | |
| ELCC Collogo | Finger Lakes | Community | New York | No | No | No |
| FLCC College | _ | Community | New YORK | INO | INO | INO |
| Experience | Community | college | | | | |
| | College | | | 1 | | +. |
| HWS College | Hobart and | 4-year | New York | No | No | No |
| Experience | William Smith | | | | | |
| | Colleges | | | | | |
| Impact U | Concordia | 4-year | New York | Yes | No | No |
| | College NY | | | | | |
| InclusiveU | Syracuse | 4-year | New York | Yes | Yes | Yes |
| | University | | | | | |
| Keuka DRIVE | Keuka College | 4-year | New York | No | No | Yes |
| LifePrep | Nazareth | 4-year | New York | No | No | No |
| • | College | , | | | | |
| | Concac | <u> </u> | | | | |

| LIVES Program | State University of New York at Geneseo | 4-year | New York | No | No | No |
|---|--|-------------------|----------|-----|-----|-----|
| Melissa Riggio Higher Education Program | Borough of Manhattan Community College of The City University of New York | Community college | New York | No | Yes | No |
| Melissa Riggio Higher Education Program | College of Staten Island of The City University of New York | 4-year | New York | No | Yes | No |
| Melissa Riggio Higher Education Program | Hostos Community College of The City University of New York | Community college | New York | No | Yes | No |
| Melissa Riggio Higher Education Program | Kingsborough Community College of the City University of New York | Community college | New York | No | Yes | No |
| Syracuse Access | University College at Syracuse University | 4-year | New York | No | Yes | No |
| The College Experience | College of Saint Rose | 4-year | New York | Yes | No | No |
| Transition Employment Academic Model (TEAM) | Monroe Community College | Community college | New York | No | No | Yes |
| Vocational Independence Program | New York Institute of Technology | 4-year | New York | Yes | No | Yes |
| Young Adult Life Transitions (YALT) | University at Buffalo | 4-year | New York | No | No | No |
| Young Adult Life Transitions (YALT) | Canisius College | 4-year | New York | No | No | No |
| Young Adult Life Transitions (YALT) | Erie Community College | Community college | New York | No | No | No |
| Young Adult Life Transitions Program (YALT) | Buffalo State College | 4-year | New York | No | No | No |
| Young Adult Life Transitions Program (YALT) | Daeman College | 4-year | New York | No | No | No |

| ABE Tops | Wake Technical Community College | Community college | North Carolina | No | No | No |
|---|--|-------------------|----------------|-----|-----|-----|
| Adult Basic Skills Compass Education | South Piedmont Community College | Community college | North Carolina | No | No | No |
| BELL Academy | Central Carolina Community College | Community college | North Carolina | No | No | No |
| Beyond Academics at UNC Greensboro | UNC Greensboro | 4-year | North Carolina | Yes | No | Yes |
| Career College at Alamance | Alamance Community College | Community college | North Carolina | No | No | No |
| Career College at Haywood | Haywood Community College | Community college | North Carolina | No | No | No |
| Career College at Randolph Community College | Randolph Community College | Community college | North Carolina | No | No | No |
| ConneXions | Cleveland Community College | Community college | North Carolina | No | No | No |
| Essentials- Cape Fear Community College; Academic and Career Readiness | Cape Fear Community College | Community college | North Carolina | No | No | No |
| I-LEAD | Central Piedmont Community College | Community college | North Carolina | No | No | No |
| Leadership Education in Neurodevelopmental Disabilities | University of North Carolina Chapel Hill | 4-year | North Carolina | No | No | No |
| Scholars with Diverse Abilities Program | Appalachian State University | 4-year | North Carolina | Yes | Yes | Yes |
| Transitional Studies Department Career Academy | Pitt Community College | Community college | North Carolina | No | No | No |
| University Participant (UP) Program | Western Carolina University | 4-year | North Carolina | Yes | No | Yes |
| Work Skills Academy | Mayland Community College | Community college | North Carolina | No | No | No |
| Advancing Students Toward Education | Minot State University | 4-year | North Dakota | Yes | Yes | No |

| and Employment | | | | | | |
|-----------------------|------------------|-----------|--------------|-----|-----|-----|
| Program (ASTEP) | | | | | | |
| Career and | Kent State | 4-year | Ohio | Yes | No | Yes |
| Community Studies | University | , | | | | |
| (CCS) | | | | | | |
| Center for Inclusive | Eastern | Community | Ohio | No | No | Yes |
| Education | Gateway | college | | | | |
| | Community | | | | | |
| | College | | | | | |
| EAGLE Program | Edison State | Community | Ohio | No | Yes | Yes |
| | Community | college | | | | |
| | College | | | | | |
| Human Services | Columbus State | Community | Ohio | No | No | Yes |
| Assistant Certificate | Community | college | | | | |
| Program | College | | | | | |
| Pioneer Pipeline | Marietta | | Ohio | No | Yes | No |
| | College | | | | | |
| The Clark Inclusive | Bowling Green | 4-year | Ohio | No | No | No |
| Scholars Program | State University | | | | | |
| Toledo Transition | University of | 4-year | Ohio | No | No | Yes |
| (T2) | Toledo | | | | | |
| Transition and | University of | 4-year | Ohio | Yes | Yes | Yes |
| Access Program | Cincinnati | | | | | |
| (TAP) | | | | | | |
| Transition Options in | The Ohio State | 4-year | Ohio | Yes | Yes | Yes |
| Postsecondary | University | | | | | |
| Settings (TOPS) | | | | | | |
| Transition Options in | Youngstown | 4-year | Ohio | No | Yes | No |
| Postsecondary | State University | | | | | |
| Settings (TOPS) | | | | | | |
| RiverHawks Scholar | Northeastern | 4-year | Oklahoma | Yes | No | No |
| Program | State University | | | | | |
| Sooner Works | University of | 4-year | Oklahoma | Yes | No | No |
| | Oklahoma | | | | | |
| Career and | Portland State | 4-year | Oregon | Yes | Yes | Yes |
| Community Studies | University | | | | | |
| Culinary Assistant | Portland | Community | Oregon | No | No | No |
| Training Program | Community | college | | | | |
| | College | | | | | |
| Career Studies | Penn State | 4-year | Pennsylvania | No | Yes | Yes |
| | Harrisburg | | | | | |
| Career, Independent | East | 4-year | Pennsylvania | Yes | No | No |
| Living and Learning | Stroudsburg | | | | | |
| Studies (CILLS) | University of | | | | | |
| | Pennsylvania | _ | | | | |
| Integrated | Widener | 4-year | Pennsylvania | No | No | No |
| Professional Studies | University | | | | | |
| Integrated Studies | Millersville | 4-year | Pennsylvania | Yes | Yes | Yes |
| | University | | | | | |
| Integrated Studies | Gwynedd | 4-year | Pennsylvania | Yes | No | Yes |
| | Mercy | | | | | |
| | University | | | | | |

| | I | | T | T | T | 1,, |
|-----------------------|------------------|-------------|----------------|------|------|------|
| Leadership and | Temple | 4-year | Pennsylvania | No | No | Yes |
| Career Studies | University | 4 | Danas danas is | V | V | V |
| Opportunities for | Mercyhurst | 4-year | Pennsylvania | Yes | Yes | Yes |
| Academic Success in | University | | | | | |
| Inclusive Settings | | _ | | | | |
| RAM Initiative (Real | West Chester | 4-year | Pennsylvania | Yes | No | Yes |
| Achievement | University of | | | | | |
| Matters) | Pennsylvania | _ | | | | |
| REAL Certificate | Arcadia | 4-year | Pennsylvania | No | No | Yes |
| | University | | | | | |
| Rock Life | Slippery Rock | 4-year | Pennsylvania | Yes | No | Yes |
| | University of PA | | | | | |
| SEED [Success, | Lehigh Carbon | Community | Pennsylvania | No | Yes | Yes |
| Engagement, | Community | college | | | | |
| Education, | College | | | | | |
| Determination] | | | | | | |
| Certificate of | Rhode Island | 4-year | Rhode Island | No | Yes | Yes |
| Undergraduate | College | | | | | |
| Study in College and | | | | | | |
| Career Attainment | | | | | | |
| CarolinaLIFE | University of | 4-year | South Carolina | Yes | No | Yes |
| | South Carolina | | | | | |
| ClemsonLIFE | Clemson | 4-year | South Carolina | Yes | No | Yes |
| | University | - | | | | |
| Coastal Carolina | Coastal | 4-year | South Carolina | Yes | No | Yes |
| University LIFE | Carolina | , | | | | |
| | University | | | | | |
| REACH Program | College of | 4-year | South Carolina | Yes | No | Yes |
| | Charleston | , , , , , , | | | | |
| Winthrop Think | Winthrop | 4-year | South Carolina | Yes | No | Yes |
| College Program | University | . , | | . 55 | | |
| Augie Access | Augustana | 4-year | South Dakota | Yes | No | Yes |
| / tugic / toocss | University | . , ca. | Journ Bunota | 1.03 | 1.0 | 1.03 |
| ACCESS ETSU | East Tennessee | 4-year | Tennessee | No | No | No |
| 7100255 2150 | State University | - year | Termessee | 110 | | 110 |
| IDEAL- Igniting the | Lipscomb | 4-year | Tennessee | Yes | Yes | Yes |
| Dream of Education | University | - ycai | TCTTTC33CC | 103 | 163 | 163 |
| and Access at | Ciliversity | | | | | |
| Lipscomb | | | | | | |
| Next Steps at | Vanderbilt | 4-year | Tennessee | No | Yes | Yes |
| Vanderbilt University | University | - ycai | TCTTTC33CC | 110 | 163 | 163 |
| The Union EDGE | Union | 4-year | Tennessee | Yes | No | Yes |
| Program | University | +-ycai | 1 5111163366 | 163 | INU | 162 |
| Tigers Learning | The University | 4-year | Tennossoo | No | Yes | Yes |
| | | 4-yeai | Tennessee | INU | 162 | 162 |
| Independence | of Memphis | | | | | |
| Fostering | | | | | | |
| Employment and | | | | | | |
| Education | Hairan-ter C | 4.4057 | Tamera | N | N1 - | V- |
| University of | University of | 4-year | Tennessee | No | No | Yes |
| Tennessee FUTURE | Tennessee | | | | | |
| Program | | | | | | |

| ACC STEPS | Austin Community College | Community College | Texas | No | No | No |
|---|---|----------------------|---------|-----|-----|-----|
| Aggie ACHIEVE | Texas A&M University | 4-year | Texas | Yes | No | No |
| E4Texas: Educate. Empower. Employ. Excel. | University of Texas at Austin | 4-year | Texas | Yes | No | No |
| lifePATH Montgomery | Lone Star College Montgomery | | Texas | No | No | No |
| lifePATH | Lone Star College- Tomball | | Texas | No | No | No |
| Postsecondary Access and Training in Human Services (PATHS) | Texas A&M University | 4-year | Texas | Yes | No | No |
| Project Access | Palo Alto College | 4-year | Texas | No | No | No |
| STRIVE | Alvin Community College | Community college | Texas | No | No | No |
| UT Informal Classes | The University of Texas at Austin | 4-year | Texas | No | No | No |
| VAST Academy | Houston Community College | Community college | Texas | No | No | No |
| Where the Learning Continues (WTLC) | West Texas A&M University | 4-year | Texas | No | No | No |
| Aggies Elevated | Utah State University | 4-year | Utah | Yes | Yes | Yes |
| College Steps Vermont | Northern Vermont University- Johnson, Northern Vermont University- Lyndon, Southern Vermont College, Castleton University | 4-year | Vermont | No | No | No |
| SUCCEED | The University of Vermont, Community College of Vermont | 4-year | Vermont | Yes | No | No |

| Think College | The University | 4-year | Vermont | Yes | No | No |
|---------------------|------------------|-----------|------------|-----|-----|-----|
| Vermont at UVM | of Vermont | | | | | |
| ACE-IT in College | Virginia | 4-year | Virginia | No | No | Yes |
| | Commonwealth | | | | | |
| | University | | | | | |
| College Steps | Northern | Community | Virginia | No | No | No |
| | Virginia | college | | | | |
| | Community | | | | | |
| | College- | | | | | |
| | Loudoun, | | | | | |
| | Annandale and | | | | | |
| | Alexandria | | | | | |
| | Campus | | | | | |
| The Mason LIFE | George Mason | 4-year | Virginia | Yes | No | Yes |
| Program | University | | | | | |
| ACHIEVE | Highline | 4-year | Washington | No | Yes | Yes |
| | College | | | | | |
| INVEST | Skagit Valley | 4-year | Washington | No | No | Yes |
| | College | | | | | |
| PACE Services- | Community | Community | Washington | No | Yes | Yes |
| College to Career | Colleges of | college | | | | |
| | Spokane | | | | | |
| WSU ROAR | Washington | 4-year | Washington | Yes | No | Yes |
| | State University | | | | | |
| Bethesda College of | Concordia | 4-year | Wisconsin | Yes | No | No |
| Applied Learning | University | | | | | |
| | Wisconsin | | | | | |
| Cutting Edge | Edgewood | 4-year | Wisconsin | Yes | No | Yes |
| | College | | | | | |
| Shepherds College | Shepherds | 4-year | Wisconsin | Yes | No | No |
| | College | | | | | |
| UW- Whitewater | University of | 4-year | Wisconsin | Yes | No | Yes |
| LIFE Program | Wisconsin- | | | | | |
| | Whitewater | | | | | |
| Think College | University of | 4-year | Wyoming | No | No | No |
| Wyoming | Wyoming | | | | | |

^{*}Information retrieved on January 22, 2020 (Think College, n.d.-a)

APPENDIX B

STUDENT INTERVIEW PROTOCOL

Interview Protocol and Questions

| roject: Forging Pathways: A Multi-case Study of Individuals with Intellectual Disability Pursuing |
|---|
| ostsecondary Education at the Community College |
| ime of interview: |
| ate of interview: |
| lace: |
| nterviewer: Amanda Jackson |
| articipant: |
| articipant tokenized name: |
| articipant disability diagnosis: |
| articipant race: |
| articipant gender: |
| articipant age: |

[Thank participant for agreeing to participate in the study. Inform participant the purpose of the study is to better understand the experiences and factors that lead to the student enrolling in college. Data will be collected from this interview and from an interview with his/her parent/guardian. The interview is expected to last around one hour, and additional interviews may need to be scheduled (expectation is no more than 3 interviews). Participant's name will not be disclosed in presentation of results, instead a pseudonym will be assigned and used. All data with this pseudonym will be kept in a UNT secure server, and in as encrypted files on a hard drive in my home office. Interview transcripts, notes, and data retrieved from IEP documents will be shared with a peer researcher to aid in data analysis, but this person will only see the data with pseudonyms and not the actual name of participants. The expectation is this research will be published and presented, therefore information regarding the colleges and location of colleges will be changed to a vague description to protect participants from being identified since the average number of students with ID enrolled at each college tends to be so low that disclosing institutional name and location along with basic participant information (disability, age, and gender) may be sufficient to identify student participants. Destruction of data (digital and non-digital) by overwriting all digital files may occur, but not until three years after study completion to comply with federal regulations. Remind interviewee he/she can withdraw from the study at any time without consequence or need for explanation and all information gathered from the participant will be omitted from the study. Confirm receipt of Informed Consent/Assent and ask if participant has any questions in regard to participation in the study].

Turn on recording device and begin interview (if consented to such).

Proceed with semi-instructed interview using the following questions as a guide.

Questions may include but are not limited to:

Grand tour question:

1) Why do/did you want to go to college?



1.1) What helped you the most to go to college?

Open-ended questions:

- 2) About how old were you when you first thought about going to college?
- 3) How did you prepare for going to college?
 - 3.1) Did you take the ACT or SAT?



- 4) When did you remember first hearing about college?
- 5) What did you learn about college from your friends?



- 6) What did you learn about college from your family?
- 7) What did you learn about college from your teachers? School? Other school staff?



- 8) When you were in high school, what classes did you take?
 - 8.1) Which of these classes were in the general education classrooms?
- 9) When you were in high school, what clubs, sports, or activities did you participate in?



10) In high school, how many, if any, annual review/transition meetings did you go to?



- 10.1) How did you participate in these meetings?
- 10.2) Did you help create any of your goals?
- 11) Did you have a job in high school? If so, what?
 - 11.1) Do you work now? If so, what do you do?
 - 11.2) What volunteer work did you do in high school? Now?
- 12) What activities have you been involved with outside of school (Special Olympics, Scouts, church, clubs, etc.)?



- 13) Tell me about people who helped you go to college. How did they help?
- 14) Tell me about people who did not think you could go to college? What did they say/do?
- 15) What was the process like to enroll in college?
 - 15.1) Who, if anybody, helped you enroll in college? Complete the paperwork?



Demographic and closed ended background questions:

- 1) What college do you attend?
 - 1.1) Did you enroll as a traditional student?
 - 1.2) Are you in a Higher Education Program Serving Students with ID?
- 2) How long have you been a student there?
- 3) How old are you?
- 4) What high school did you go to?
 - 4.1) Did you graduate? If so, what did you receive (high school diploma, alternate certificate, etc.)?



- 4.2) What year did you graduate?
- 5) Where do you live (home, campus, group home, etc.)?



Encompassing closing question:

1) What else can you tell me about what you think helped you become a college student?

APPENDIX C

PARENT/GUARDIAN INTERVIEW PROTOCOL

Interview Protocol and Questions

| roject: Forging Pathways: A Multi-case Study of individuals with ii | ntellectual Disability Pursuing |
|---|---------------------------------|
| ostsecondary Education at the Community College | |
| ime of interview: | |
| ate of interview: | |
| lace: | |
| nterviewer: Amanda Jackson | |
| articipant: | |
| articipant tokenized name: | |
| articipant race: | |
| articipant gender: | |
| articipant age: | |

[Thank participant for agreeing to participate in the study. Inform participant the purpose of the study is to better understand the experiences and factors that lead to the student enrolling in college. Data will be collected from this interview and from an interview with his/her parent/guardian. The interview is expected to last around one hour, and additional interviews may need to be scheduled (expectation is no more than 3 interviews). Participant's name will not be disclosed in presentation of results, instead a pseudonym will be assigned and used. All data with this pseudonym will be kept in a UNT secure server, and in as encrypted files on a hard drive in my home office. Interview transcripts, notes, and data retrieved from IEP documents will be shared with a peer researcher to aid in data analysis, but this person will only see the data with pseudonyms and not the actual name of participants. The expectation is this research will be published and presented, therefore information regarding the colleges and location of colleges will be changed to a vague description to protect participants from being identified since the average number of students with ID enrolled at each college tends to be so low that disclosing institutional name and location along with basic participant information (disability, age, and gender) may be sufficient to identify student participants. Destruction of data (digital and non-digital) by overwriting all digital files may occur, but not until three years after study completion to comply with federal regulations. Remind interviewee he/she can withdraw from the study at any time without consequence or need for explanation and all information gathered from the participant will be omitted from the study. Confirm receipt of Informed Consent/Assent and ask if participant has any questions in regard to participation in the study]. Turn on recording device and begin interview (if consented to such). Proceed with semi-instructed interview using the following questions as a guide.

Questions may include but are not limited to:

Grand tour question:

1) Could you describe the path that you believe lead to your son/daughter/ward going to college?

Open-ended questions:

- 2) When did you first think about college for your son/daughter/ward?
 - 2.1) How was this aspiration communicated with your son/daughter/ward?
 - 2.2) How was this communicated with the local education agency?
- 3) How did your son/daughter/ward access college?
 - 3.1) Is he/she attending as a traditional student or through a higher education program

serving students with ID?

- 4) What resources from the community, if any, were used to help your son/daughter/ward go to college?
- 5) What influenced the decision for your son/daughter/ward to go to this particular college?
 - 5.1) In what way, if any, was cost a factor?
 - 5.2) In what way, if any, was location a factor?
 - 5.2.1) Does your son/daughter/ward live with you, campus, elsewhere?
- 5) What friends/peers does your son/daughter/ward have?
 - 5.1) How have they influenced your son's/daughter's/ward's college going behavior?
- 5.2.) What capital did your son/daughter/ward gain from peers if any that may have helped him/her go to college?
- 6) Describe your son's/daughter's ability to navigate the system found at educational institutions, such as filling out admissions paperwork, applying for accommodations, etc.
- 7) What (historical) oppression if any have you experienced regarding your son/daughter/ward and his/her education?
 - 7.1) What knowledge and skills have you acquired through this opposition?
- 8) Describe your activity in annual review meetings regarding transition with the local education agency/high school?
 - 8.1) What IEP transition goals, if any, did you help create? Feel strongly about?
- 9) Did your son/daughter/ward graduate from high school with a regular high school diploma? IEP diploma? Certificate?
- 10) How have you helped your son/daughter/ward academically prepare for college? 10.1) Did he/she take the ACT/SAT?
- 11) What extracurricular activities did you support/encourage for your son/daughter/ward during high school?
 - 11.1) What about now?
- 12) How would you describe your involvement with your son's/daughter's/ward's elementary and secondary schools (PTA, parent-teacher conferences/communications, home school, etc.)?
- 13) What are your thoughts about inclusive education at elementary and secondary school?
 - 13.1) What action did you take, if any, to have your son/daughter in general education classes?

Demographic and Closed ended background questions:

- 1) What is your marital status?
- 2) What is your approximate annual income?
- 3) Are you currently working? If so, what is your occupation?
- 4) Did you go to college? If so, what is the highest degree obtained? (If married, ask about spouse's educational level).

Encompassing closing question:

1) What do you think were the key factors that contributed to your son/daughter/ward going to college?

APPENDIX D

PEER REVIEWER LETTER



Charles Cook, Ed.D. Provost/EVP for Academic Affairs

Letter of Attestation

June 14, 2021

Dear Dissertation Committee and University of North Texas:

rles W. Cook

By this letter I am attesting that I acted as an independent peer reviewer of the qualitative study entitled "Forging Pathways: A Multi-Case Study of Individuals with Intellectual Disability Pursuing Postsecondary Education at the Community College." I was not involved in any aspect of the proposed or completed qualitative study, outside of this review.

I examined the transcripts for each interview and the codes/themes generated from those transcripts as proposed by Amanda Jackson. The transcripts/data I received used pseudonyms to ensure confidentiality. Based on established precedent in qualitative research, I was able to assess the dependability of the research study results, as well as degree of researcher influence/bias.

After the completion of my audit, I met with Amanda via Zoom on June 9, 2021. The meeting lasted approximately an hour and half. I provided feedback, and we discussed each case including the codes and themes. I attest that dependability was consistent and transparent, representing a credible account of the data.

Sincerely,

Charles M. Cook, Ed.D.

Provost/Executive Vice President

for Academic Affairs

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