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Community College Success of Students with Disabilities

A Dissertation by

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Chapman University

Orange, CA

Attallah College of Educational Studies

Submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Education, emphasis in Disability Studies

May 2021

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Meredith Dorner, Ph.D.

March 2021

Community College Success of Students with Disabilities

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To my committee—Dawn, Margaret, and Meredith. Dawn, thank you for all of your support and encouragement along the way, especially during my credentialing and master's program. Your response when I told you I wanted to get a Ph.D. one day was exactly what I needed to hear to ensure that I followed through with my goal. Margaret, thank you for your support in developing the key methods in my research. Our work together during the independent study was what helped my dissertation take shape. Meredith, thank you for your valuable insight into students in community college. Your questions have helped me develop into a better researcher.

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ABSTRACT

Community College Success of Students with Disabilities

by Shayne M. Brophy-Felbab

The purpose of this study was to identify aspects of home life, college life, or high school preparation that supported the success of students with disabilities at community colleges. As students with disabilities are rarely represented in the literature, this study offered a space for students with disabilities to share their voice and further develop their sense of agency. The six participants had a range of disabilities and enrolled in Disabled Student Programs and Services (DSPS) at their community college. They had all completed at least one year and three students were completing their final year and had plans in place to transfer to a 4-year university the following school year. Each participant engaged in two individual interviews and a series of three focus groups. The focus groups used photovoice to highlight aspects of student lives that lead to their success in community college. Participants identified engagement with learning, health and wellness, self-reliance, trusting relationships, and diversity and inclusion as factors that contributed to their success. All participants mentioned stress or anxiety impacted their success. A large portion of the photos participants took centered around ways to reduce stress or anxiety or ways to maintain focus and engagement in class, particularly when feeling stressed or anxious. The students identified a list of recommendations they wanted to share with colleges to create greater access and support future students with disabilities. Implications and areas of future research are discussed.

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Meaning</u>
AAP	Academic Accommodation Plan
ACEs	Adverse Childhood Experiences
ADHD	Attention-Deficit/Hyperactivity Disorder
CCCCO	California Community Colleges Chancellor's Office
DSPS	Disabled Student Programs and Services
EHA	Education for All Handicapped Children Act
FAFSA	Free Application for Federal Student Aid
FAPE	Free and Appropriate Public Education
IDEA	Individuals with Disabilities Education Act
IDEIA	Individuals with Disabilities Improvement Act
IEP	Individualized Education Program
NCSET	National Center on Secondary Education and Transition
NLTS	National Longitudinal Transition Study of Special Education Students
NLTS2	National Longitudinal Transition Study-2
OSERS	Office of Special Education and Rehabilitative Services
SOP	Summary of Performance
SWD	Students with Disabilities

CHAPTER 1—INTRODUCTION

Under the Individuals with Disabilities Education Improvement Act (IDEIA, 2004), K-12 schools are required to identify and support students with disabilities by providing access to a Free and Appropriate Public Education (FAPE). However, once students move to the community-college level, high school supports, such as access to accommodations or specialized instruction, end. Due to the Americans with Disabilities Act (1990) and the Rehabilitation Act of 1973, only the student can disclose their disability to the college. Staff at community colleges cannot identify students who may need supports. Thus, the student is responsible for requesting support.

Students who receive transition planning in high school are more likely to disclose their disabilities to postsecondary institutions (Newman et al., 2016). Students who choose to disclose their disabilities receive services through college disability service centers, which offer a wide array of supports to help students achieve success in college. Services include tutoring, career counseling, faculty education, and testing accommodations (Brown & Coomes, 2016). With these supports, students with disabilities should be able to persist from year to year and obtain degrees with rates similar to their peers without disabilities; however, over 50% of students with disabilities at 2-year institutions experience difficulty with retention and graduation (Brown & Coomes, 2016). Currently, there is a lack of understanding of what supports students with disabilities need to be successful at community colleges.

Special Education Law

With the passing of the Civil Rights Act of 1964, violations of civil rights became a national concern and resulted in additional legislation to minimize the segregation of minority groups (Davis, 2015). Although people with disabilities were not considered a protected group,

disability activists began to fight for equal rights, including the rights of children with disabilities (Gavish, 2017; Phelps & Hanley-Maxwell, 1997). Parents began to push for expanded educational opportunities for students with disabilities (SWD), in part due to the ruling of *Brown v. Board of Education* (1954), which established segregation in schools as unconstitutional (Yell, 2012). This public call for equality became the catalyst necessary for passing Public Law (PL) 94-142, also known as the Education for All Handicapped Children Act (EHA, 1975). This law mandated each student with a disability had the right to a FAPE.

Education for All Handicapped Children

Since 1975, the EHA was significantly amended five times (i.e., 1983, 1986, 1990, 1997, 2004) and is now known as the Individuals with Disabilities Education Act (IDEA; Jones, 2015). The authors of the initial version of the law did not address transition services for SWD; however, the 1983 update established a source of funding to support programs that included transition services to postsecondary education, vocational training or employment, and adult services (EHA, 1983). With the 1986 update, these transition services became mandatory to facilitate the smooth transition of young children with disabilities to special education in public schools (Association for Retarded Citizens, 1990; EHA, 1986). Transition services for students exiting special education were not yet required; however, advocates outlined potential funding sources to stimulate the development and improvement of secondary transition (EHA, 1986).

Individuals with Disabilities Education Act

In 1990, the EHA was renamed the Individuals with Disabilities Education Act (IDEA; i.e., PL 101-476), revealing a shift in thinking about disability (Office of Special Education and Rehabilitative Services [OSERS], 2010); people-first language was incorporated throughout this amendment. In a discussion about disability and language, Dunn and Andrews (2015) explained

person-first language (e.g., people with disabilities) puts the individual before the disability in an effort to emphasize aspects of the person beyond their disability. People-first language maintains human dignity and reduce stigma, stereotyping, and prejudice (Dunn & Andrews, 2015). The goal of shifting language use was to move away from using insensitive or offensive language. While person-first language is the current norm in academic and professional psychology, disability-first language is making a reemergence (Dunn & Andrews, 2015). Groups who promote disability culture (e.g., autistic people, Deaf people) use this method of reference as they believe their disability and identity are integrated (Dunn & Andrews, 2015). Disability-first language allows disability to be claimed and valued by the individual, instead of dissociating the disability from the person. In this paper, I adhere to academic norms and current language of IDEA by utilizing person-first language, unless a participant preferred identity-first language.

In addition to a shift in language, the 1990 IDEA revision was the first time there was a requirement to offer transition services for SWD into adult life (IDEA, 1990; Jones, 2015). With the new mandate to include transition planning, parent involvement increased (Johnson & Sharpe, 2000). Knowledgeable about the skills and interests of their child, parents were necessary facilitators of their student's shift into adult life (Johnson & Sharpe, 2000). Despite this increased involvement in 1990, transition planning was still an informal process (Congress, 1994). Few students had official transition plans, and the transition process did not generally include service providers (Congress, 1994).

Although the 1990 IDEA amendment was a critical revision, results from several federal studies conducted in the next decade informed additional reforms in 1997. One such study was the National Longitudinal Transition Study of Special Education Students (NLTS), which began in 1987 and spanned 5 years. This study indicated SWD underperformed in school when

compared to students without disabilities (Blackorby & Wagner, 1996). However, SWD who had classes in general education received vocational education, and obtained diplomas had significant economic and educational benefits when compared to those special education students who did not (Phelps & Hanley-Maxwell, 1997). The 1997 amendment to IDEA mandated that teachers discuss the transition needs of SWD at age 14, including instruction and educational experiences to prepare the student for adult life (National Center on Secondary Education and Transition [NCSET], 2002). As part of the transition process, special education teachers were to invite transition-age students to Individualized Education Program (IEP) meetings as their needs, preferences, and interests were important to consider in the development of the individualized transition plan (Johnson & Sharpe, 2000). Additional coordinated transition activities used to identify transition services became a required part of the IEP before students turned 16 (Madaus & Shaw, 2006; NCSET, 2002).

Despite the transition services outlined in the 1997 IDEA amendment, of all the special education youth who left high school during the 2020-2001 school year, only 57% of students in special education received a diploma, 11% received an alternate credential, and the remaining group failed to graduate in the 2000-2001 school year (General Accounting Office, 2003). Furthermore, in a secondary analysis of National Longitudinal Transition Study-2 (NLTS2), Bouck and Joshi (2016) found only 39% of SWD ($n = 32,239$) were living independently 2 to 4 years after graduating from high school in 2001. While students received transition services in high school, few students received post-school transition services, suggesting that to bridge the gap between K-12 schooling and postsecondary life, transition planning needed to extend beyond school personnel. As part of the plan for improved transition services, federal lawmakers required local educational agencies to add a Summary of Performance (SOP) to a student's

record when students graduated from high school with a regular diploma or reached 22 years of age (Cortiella, 2007; IDEIA, 2004). The SOP included a summary of academic achievement, functional performance, and recommendations to help students reach their postsecondary goals (Cortiella, 2007; IDEIA, 2004). In addition to adding the SOP, federal lawmakers clarified transition requirements, requiring transition activities to begin at age 16 (Madaus & Shaw, 2006). Advocates were concerned beginning transition planning at age 14 was too late; thus, the mandate to begin at age 16 was viewed as a shift in the wrong direction (Hunter et al., 2014; Madaus & Shaw, 2006). With official transition planning beginning at age 16, early planning (both formal and informal) was critical as decisions made before age 16 may prevent a student from earning a high school diploma or meeting requirements needed for admission into a 4-year university (Hunter et al., 2014).

Section 504 and the Americans with Disabilities Act

At the postsecondary level, Section 504 of the Rehabilitation Act (1973) and the Americans With Disabilities Act (1990) ensure people with disabilities have equal access to education by creating protections for accommodation use. Due to federal laws, university and college staff require students to disclose their disability to educators before they can receive accommodations and supports (Kim & Lee, 2016; Newman et al., 2016). California Community Colleges Chancellor's Office (CCCCO, 2018) reported only half of SWD identified in K-12 education seek support from the Disabled Student Programs and Services (DSPS) on community college campuses. Choosing not to disclose may only be one factor. This reduction may also indicate SWD are choosing to enter the workforce instead of attending college, starting at 4-year universities, or encountering barriers to DSPS registration.

Once a student has self-identified and the student's disability has been verified and determined to meet the legal definition of a disability outlined in Section 504:

The DSPS program provides support services and educational accommodations to students with disabilities so that they can have full and equitable access to the community college experience. In addition, many colleges provide specialized instruction as part of their DSPS program. An Academic Accommodation Plan (AAP) is developed for each student served by DSPS. The AAP defines the student's educational goals and outlines the support services and academic accommodations to be provided to address the student's specific disability-related educational needs. (California Community Colleges, 2020, p. 1)

These services create equal access, protect students from discrimination, and support SWD in their shift from high school to postsecondary education (Brown & Coomes, 2016).

Statement of the Problem

A secondary analysis of the Beginning Postsecondary Students Longitudinal Study, used a nationally representative of college SWD to determine almost 25% of students with disabilities ($n = 890$) left postsecondary education after the end of their first year, and nearly 51% left by the end of their third year (Mamiseishvili & Koch, 2012). Table 1 shows data collected in 2015-2016 and 2016-2017 from California Community Colleges indicated DSPS students and non-DSPS students had similar persistence rates from year to year (CCCCO, 2018).

Table 1: Persistence Rates of Students in California Community Colleges

Type of student	2015-2016	2016-2017
DSPS Students	70%	68%
Non-DSPS Students	67%	67%

Despite similarities in persistence rates, DSPS students have significantly lower completion rates of degrees and certificates, lower completion of basic skills courses, lower transfer preparedness, and spend more time reaching their goals than peers without disabilities (CCCCO, 2018). One possible explanation for the discrepancy between DSPS students and non-DSPS students may be the change in supports. Students with disabilities are entitled to supports and services at the secondary level, whereas students in postsecondary education are only protected from discrimination (Brown & Coomes, 2016). In other words, responsibility for advocacy shifts away from the school and becomes the responsibility of the student as they enter college. To receive the supports to which they are accustomed, a student must disclose their disability to the college (Newman et al., 2016).

Students face many difficulties at the college level, including challenging requirements for disability verification, stigma associated with accommodation use, and negative instructor perceptions of disability (Kim & Lee, 2016). Families and SWD specifically identified a lack of awareness of postsecondary education opportunities and requirements, a lack of postsecondary support, difficulty recognizing accommodation needs, and difficulty utilizing self-advocacy skills necessary to access accommodations as barriers to postsecondary education (Connor, 2012). In addition, Korbel et al. (2011) found students had difficulty making decisions, as they previously relied on the support of parents and case carriers to make decisions for them.

Despite increased awareness of challenges SWD face at the college level, researchers continue to focus on primary and secondary education for SWD (Brown & Coomes, 2016). It is important to note SWD have varied goals when entering community college; therefore, I measured success as a student's completion of a certificate, associate's degree, or transfer-related outcomes in this study.

Situation to Self

In qualitative research, researchers increase the trustworthiness of their studies by positioning themselves in relationship to the study (Creswell & Poth, 2018). By sharing their backgrounds and how they arrived at the research questions, others are able to understand how their own life experience may inform their interpretation of the data (Creswell & Poth, 2018). In the following section, I outlined the important elements in my life related to this area of study.

The first important element to note is my training and experience as a high school special educator and how my work has impacted what I want to study. Over the last 6 years, I have taught high school students transitioning from a highly supportive environment to college, where it is their choice to find and utilize supports. Although I try to properly prepare students, I do not know about their experiences once they get to college. I have heard from several students after their first semester of college, and they reported college is “different” and “challenging.” A few mentioned they had to retake courses due to failing grades. Usually, students stop visiting after their first year, so I do not have much additional insight.

The second element is my own experience with a disability label. I have struggled with reading and spelling, and I was given the label “dyslexia.” I identify with my students’ struggles. While I never accessed special education services, I did use available accommodations when I was granted them by understanding teachers (e.g., use of spelling devices, no points off for spelling mistakes unless that was the objective of the assessment). As a child who saw herself as smart, this perceived deficit was difficult to incorporate into my identity. Having dyslexia created a disconnect between how I perceived myself and how I was able to perform. Growing up, I often struggled with embarrassment, wondering why spelling and reading new words did not come as easily for me as it did for others.

As I continued through high school, I integrated effective tips and tricks into my study habits. By the end of high school, I no longer felt the need to speak to my teachers about my challenges, and I actually preferred not to have those conversations due to the embarrassment I experienced. Once I became a special education teacher, I felt the need to have conversations about my disability again. It feels important to share with my students that I empathize with their experience. I believe sharing my personal experiences fosters open relationships with my students and their families.

Exposure to the field of disability studies created a shift in my thinking and reframed my beliefs surrounding my label. I have begun to explore the benefits (e.g., shifts in habits and different ways of thinking) that have resulted from my experience with a disability. I also think more broadly and more critically about disability. It is no longer enough to think of the impact of disability in the school context. Instead, I now think about how the stigma associated with disability labels impact my students as they enter the adult world and how they will negotiate what it means to have a disability in broader society.

In college, students start fresh, unencumbered by previous labels. As a special educator, I know about SWD's high school experiences and how their transition to college generally works. What I do not know is whether what I teach students is beneficial for their success in college. Although I will be entering my research from positions of power (e.g., teacher, professor, PhD student, researcher), I do believe these positions provide me with the experiences I need to understand my participants and facilitate important conversations. Through this process, I hope researchers, educators, and community members are able to hear what college SWD choose to share.

Purpose of the Study

The purpose for this study was to identify aspects of home life, college life, or high school preparation that SWD used to be successful at community colleges. The questions developed out of my personal experiences as a special education teacher and my desire to set students up to be successful in community college. In this study, I asked community college students who completed one or more semesters to reflect on what contributed to their success in community colleges. As SWD are rarely represented in the literature (Whitney, 2006), I designed this study to give SWD a voice and further develop their sense of agency. I used interviews and photovoice to delve deeply into both group and individual experiences and allowed a space for SWD to share their voices. In the photovoice process, the group identified and analyzed meaningful photos. A series of questions taken from the SHOWeD method (Hergenrather et al., 2009) guided the analysis. Using this method, participants concluded the research process by considering how they could share this newfound information with others. In this study, participants designed a letter to share their concerns with the directors of DSPPS at their community colleges. Use of photovoice allowed for the creation of a communal perspective, while participants discussed more sensitive topics during individual interviews. Use of both methods of data collection created a more comprehensive picture of the experience of SWD at community colleges.

Research Questions

I designed the research questions for this study to focus on aspects of success instead of barriers encountered by the participants. Guided by sociocultural theorist and disability studies researchers, I focused the guiding question (GQ) and sub-questions (SQ) on personal experiences.

GQ. What home, college, and/or high school aspects do students with disabilities perceive as contributing to their success in community college? To what extent do these factors contribute to their success?

SQ1. How do students with disabilities experience the transition process from high school to community college?

SQ2. To what extent, if any, do students with disabilities use supports during their years in college?

SQ3. To what extent, if any, did self-discovery contribute to college success?

SQ4. What do participants want others to know about supporting students with disabilities at the community-college level?

Significance of the Study

In this research, I sought to promote self-determination growth in people with disabilities, including the establishment of agency over their own lives. Specifically, participants engaged in a self-reflective process, where they had the opportunity to review the effectiveness of their actions to gain a better understanding of strengths, weaknesses, and driving forces. As part of the photovoice process, participants also had the opportunity to voice their individual and collective experiences. In a study using photovoice with college SWD, Agarwal et al. (2015) found participants felt others on their campuses validated their perspectives and needs, and, through the process, they were able to achieve personal growth. Participants also reported recognizing they could affect change in their physical and social environments. In particular, the photovoice method was mentioned as a potent tool, as participants who would not generally speak out were given the opportunity to do so. In this study, I sought to create similar positive outcomes for

participants. Only by allowing spaces for multiple voices and perspectives to be heard will we be able to make informed choices that benefit all members of society.

Educators may be able to use the result of this study to understand what supports facilitate the success of SWD in community college. This information is valuable, as educators need to know what skills to teach students when they are in K-12 education and what community partnerships to foster. Community colleges, high school teachers, and students may benefit from the results of this study, as it provides information needed to lay the foundation for a successful transition for SWD. While I sought to provide recommendations to educators with my findings, the findings may also inform policymakers as they begin to revise current special education law.

CHAPTER 2—REVIEW OF LITERATURE

Due to my background as a special education teacher, I have taught students for whom *normal* education does not work. Through the government-regulated process, struggling students are identified and given IEPs to support their unique needs. In my Masters of Special Education and credentialing program in Mild, Moderate, and Severe Disabilities, I learned the importance of accommodating and modifying curriculum for students to create access to the curriculum being taught. Through this program and my prior experience working as an Applied Behavioral Analysis-trained service provider, I learned to focus on students' individual needs. Once I began teaching, I realized I would only be able to teach my students as a whole class by understanding and teaching students as individuals. I maintained this perspective as I continued through my PhD program, and this perspective has informed and shaped who I am as a researcher.

When thinking about the type of research I wanted to do, I knew quantitative research would not fit with the questions I was beginning to ask. Pulling from my experience as a teacher, I knew perspectives and beliefs about what is “true” vary drastically from one situation to another, thus it is essential to consider multiple viewpoints to best support students. My experience with students has also taught me no two perspectives of disability are the same; instead, perspectives are as unique as each individual's experience, influenced by the structures and context surrounding the student.

Theoretical and Experiential Frameworks

One key component of qualitative research is the idea that individuals construct meaning through their interpretation of their interactions with their world (Merriam, 1991). Researchers use this tenet of qualitative research to examine the daily interactions that people use to construct and reconstruct meaning (Leavy, 2017). Social-historical contexts impact this social construction

of reality, and our experiences in these contexts shape our beliefs and actions (Bailey, 2007; Leavy, 2017). People with disabilities have multiple unique realities impacted by social-historical contexts. The subjective experiences of people with disabilities inform research and practice to best support people with disabilities.

Disability studies, neurodiversity, and sociocultural theory are the theoretical underpinnings of this study. I attempted to integrate my own experiences and explain how the frameworks became integral to my thoughts and beliefs. I discuss special education as an experiential framework in this paper. My experience as a special educator, my participants' experiences in special education, and the educational structure set up by disability laws are part of our lived experiences and cannot be removed from the context of this study.

Disability Studies and Neurodiversity

The majority of my training as a special educator stemmed from the medical model of disability. People who align themselves with the medical model of disability believe professionals are authority figures who are needed to support students in remediating limitations associated with their disability (Gabel, 2005). The disability is seen as a problem located in the individual student, often reinforced through the achievement gap when students are compared to peers without disabilities (Lambert & Tan, 2017).

Moreno-Rodríguez et al. (2017) highlighted the controversy that historically surrounds disability. They noted the divide between the classic medical model view of disability, which focuses on remediating the limitations of people with disabilities, and the social model view, which stresses the social and architectural barriers that impact people with disabilities. This controversy stems from the 1960s humanist movements, which raised concerns about the continued segregation and discrimination of minority groups (Gavish, 2017). Legislators passed

the Civil Rights Act of 1964 prohibiting the discrimination of minority groups on the basis of race, religion, sex, or national origin; however, people with disabilities were not considered a protected class (Davis, 2015). During this time period, the idea of disability as *deviance* began to emerge (Haber & Smith, 1971). Thus, the concept of disability as a social phenomenon, located in social and cultural contexts, started to take shape (Taylor, 2006). Critiques of the medical model and the idea of disability as deviance provided the foundation for the interdisciplinary field of disability studies. Researchers of disability studies critique historical views of disability and position disability as a basic human condition worthy of inclusion, equity, and respect (Olkin & Pledger, 2003).

From the field of disability studies, disability studies in education emerged. This subfield focuses on how concepts that stem from disability studies are carried out in schools, including the “interrogation of rarely questioned assumptions about what disability is; what disabled persons need, want, and deserve; and the responsibilities of education and educators in relation to such matters” (Danforth & Gabel, 2006, p. 2). Disability studies as a field includes a focus on the importance of allowing people with disabilities to speak for themselves and their communities (Charlton, 2004). That is, if reform occurs in educational systems, voices of people with disabilities served by those systems should be present.

A recent education reform included a push to include SWD in general education to the greatest extent possible (United Nations, 2006). Originally, this practice was termed mainstreaming, which is now considered an outdated term replaced by inclusion (Yell, 2012). Yell (2012) explained inclusion is actually very different from mainstreaming (Yell, 2012). In the practice of mainstreaming SWD benefit from learning alongside general education peers; however, SWD must show they are capable of learning in the general education environment.

On the other hand, inclusion is based on the idea that separation is segregation. Students should be placed in classrooms with their peers and receive the supports they need to be successful (Sailor & McCart, 2014). Only when all supports have been exhausted (e.g., curriculum adaptations, teaching methods, assessments), and the student is still not making educational progress, should a more restrictive environment be considered (Prince & Hadwin, 2013).

Without inclusive education, SWD would remain marginalized both in the educational systems and broader society due to the perceived deficits associated with disability labels (Sailor & McCart, 2014). Rather than viewing disability as a deficit, I incorporated the theoretical and political movement known as *neurodiversity*, which stemmed from the 1990s' autism rights movement. Proponents of neurodiversity understand disability as a natural and beneficial variation resulting from the diversity in human biology (Robertson & Ne'eman, 2008). If disability is viewed as part of the range of human diversity, those unique "ways of knowing" need to be honored (Berryman et al., 2015). People with autism and other disabilities are experts in their learning, bringing experiences, understandings, and ideas to situations that others without disabilities may not (Grandin, 2006). Situated in the field of disability studies and using a neurodiversity lens, I sought to provide a space for people with disabilities to voice the challenges and successes they had transitioning from the more supported high school setting to the less supported community college setting.

Sociocultural Theory and Disability

Vygotsky (1978) theorized human learning is a social process, in which development initially occurs on a social and cultural level before it is internalized, and can occur on an individual level. Vygotsky used this framework in his work on defectology to explore human

diversity and the impact of disability. Vygotsky argued it is necessary to distinguish between the two components of disability—primary and secondary disability—to understand disability.

Vygotsky (1993) identified primary disability as differences in biology, while secondary disability was a result of social and cultural consequences. In his work, Vygotsky focused on difference, not deficit (Smagorinsky, 2012). While a person may have a loss of eyesight (primary disability), it is not only the loss of vision that causes disability. Social organization of spaces, such as crosswalks, also results in disability (secondary disability), as a person with a loss of eyesight has a difficult time navigating their environment independently if adjustments are not made.

Vygotsky (1993) noted disabilities are not only a manifestation of *defects*, but also a manifestation of ability and strengths. If properly nurtured, a person could manifest abilities that would be considered strengths, including unconventional abilities that lead to the same outcome (Smagorinsky, 2012). For example, a person who is blind may cross the street using tactile input from the sidewalk, curb cut, or the crosswalk paint in the road. While their tactile sense is not stronger than someone who has sight, they would develop the ability to perceive and process this information quicker, as they are not distracted by visual input (Campbell, 2018). A person needs to engage with obstacles productively to manifest these strengths, meaning if people with disabilities are denied access to participate fully in society, they are also denied essential opportunities for learning (Smagorinsky, 2012).

Special Education

I used special education as an experiential framework as special education is the system in which I work and the system in which students learn. The constraints of this system require teachers and students to operate under a specific set of rules and assumptions implicit in how

special education services are delivered (Katowitz & Thurman, 2017). The concept of special education stems from the medical model, where experts use psychological measurements to identify and classify those that deviate from the norm (Danforth, 2006). This process is done through “standardized and normative referenced assessments that are not culturally sensitive, designed to identify strengths or skills for those with individual differences and cannot explain why an individual may obtain a certain score” (Katowitz & Thurman, 2017, p. 158). Once students are identified as in need of special education services, those in the profession help the students adapt to existing social conditions through services designed to treat and increase areas of functionality (Katowitz & Thurman, 2017). Professionals provide services based on goals that emphasize individual change and progress, instead of change in the system that encompasses the child (Katowitz & Thurman, 2017). While there is a call to create access and fully include students in general education environments, the experiences of marginalization and social injustice of people with disabilities in the schooling system (Danforth, 2006) and “the gap for individuals with disabilities in graduation, employment, postsecondary enrollment, and functional skills compared to that of their typically developing peers” (Katowitz & Thurman, 2017, p. 159) have not been addressed.

Introduction to the Review of Literature

In this literature review, I identify current research that addresses the success of SWD at the community-college level which provides a foundation for this study. According to Newman et al. (2011), SWD are less likely than their general education peers to graduate. While legislative changes in transition planning promoted postsecondary education for SWD, early identification and intervention services will likely continue to result in improved outcomes for SWD (Adreon & Durocher, 2007). Because of this, SWD will likely continue to attend

postsecondary education institutions in high numbers, making it essential to understand what facilitates the success of SWD at community colleges.

Literature Review Method

I searched Academic Search Premier, Education Full Text, ERIC, and PsychINFO databases to obtain articles about SWD success at community college. I limited the search to peer-reviewed articles published in the last 20 years. Keywords included disability and community college, disability and community college and success, disability and transition, special education and transition, disability, postsecondary education, and community college success and mental health. I scanned titles and abstracts for relevance and obtained additional sources via the ancestry method, as I reviewed articles for additional relevant references.

In addition, I set up two Google Scholar alerts. Alert terms included “special education transition” and “community college success.” Each week for 2 months, relevant articles titles arrived via email. I read titles and abstracts. If I deemed the article suitable, I searched for the title using the Chapman University online database. I then obtained and read articles available through the Chapman databases or interlibrary loan services.

Literature Review Results

Over the past 2 decades, SWD have attended postsecondary education at higher rates than in previous decades (Garrison-Wade, 2012; Madaus & Shaw, 2006). However, SWD frequently attend 2-year colleges with plans to transfer to a 4-year university in lieu of starting directly at 4-year universities (Garrison-Wade & Lehmann, 2009; Hunter et al., 2014). Data from the U.S. Department of Education indicated nearly 60% of SWD who choose to attend postsecondary education begin at community colleges (Ankeny & Lehmann, 2010).

Several reasons students may decide to start at community colleges include open-door admission policies, affordability, smaller college size, and proximity to family homes (Ankeny & Lehmann, 2010; Hunter et al., 2014). Other reasons students may choose to start at community colleges include counseling components and specialized services for unique populations (Ankeny & Lehmann, 2010; Burgstahler et al., 2001). Additionally, access to remedial classes and wider variety of degree options, such as certificates, impact student choice (Hunter et al., 2014; Mamiseishvili & Koch, 2012).

Mamiseishvili and Koch (2012) found 77% of SWD at community colleges hoped to earn a bachelor's degree or higher. However, SWD have difficulty persisting from year to year and completing requirements needed for graduation (CCCCO, 2018; Mamiseishvili & Koch, 2012; Newman et al., 2009). Davis et al. (2018) explored the issue of the persistence of students attending 2-year and 4-year colleges in Indiana's high school class of 2014. They found student with IEPs were overrepresented in 2-year colleges and underrepresented in 4-year colleges. Additionally, students who had an IEP in high school and attended 2-year colleges ($n = 1,222$) were less likely to achieve early college success when compared to peers without IEPs who also attended 2-year colleges. Specifically, students with IEPs took only nonremedial coursework 25% less often, earned all of their attempted credits 4% less often, and persisted into their second year 3% less often.

During a 3-year study, Mamiseishvili and Koch (2012) reported 50% of SWD left community college without returning. This study is of particular significance due to the large sample population, as the researchers used data from the Beginning Postsecondary Student Longitudinal Study and included a base-year sample of 23,090 students across the United States. The researchers noted SWD generally took longer to complete coursework. There was no way to

determine if students who persisted over the 3 years eventually met their completion goals, implying the dropout rate for SWD could be higher than 50%. This limitation could have potentially increased the dropout rate, indicating that SWD's experiences do not align with their initial community college goals.

The *Disabled Student Programs and Services Reports* revealed the California Community Colleges serve approximately 2.1 million students (CCCCO, 2018). Students with disabilities represent 5% of the population at community colleges. The California Community Colleges appear to only publish information about DSPS students in the *Disabled Student Programs and Services Reports*. They do not include information about DSPS students in reports about the colleges as a whole. However, data were available for all students in the *2018 Student Success Scorecard* and were broken down by gender and ethnicity (California Community Colleges, 2018). This report included data from the California Community Colleges (2018) that showed 48.2% of students beginning college for the first time in 2011-2012 completed a degree, certificate, or transfer-related outcomes in 6 years. This information was further broken down into students who were prepared for college (defined as only taking college-level math and English classes) and students who were unprepared for college (defined as students who took one or more remedial-level math and/or English courses). These data show a marked difference in completion rates with 70.4% of prepared for college students completing a degree, certificate, or transfer-related outcomes in 6 years and only 41% of the unprepared for college group. SWD often enroll in remedial courses (CCCCO, 2018; Hu et al., 2019; Mamiseishvili & Koch, 2012), which would place SWD in the unprepared for college group.

Data collected in 2015-2016 and 2016-2017 by the CCCCCO (2018) revealed students registered with DSPS persisted and dropped out at rates similar to non-DSPS students; however,

there was disproportionate attainment of completion goals. Students with disabilities earned a degree or certificate, or completed transfer requirements, approximately 6% of the time compared to non-DSPS students (i.e., 119,828 non-DSPS students earned a degree while only 7,902 DSPS students earned a degree). This lack of degree obtainment may be due to the length of time needed to complete degree requirements, particularly if students start in developmental or remedial classes, as they will need to complete remedial classes before taking courses required for a degree or certificate (Hu et al., 2019).

The report from CCCCO (2018) indicated SWD took educational assistance courses at higher rates than non-DSPS students and completed these basic skills courses at lower rates than non-DSPS students. Starting in and repeating developmental courses requires SWD to spend more time working toward their completion goal, which may impact their desire to persist. This is not a new trend. Ponticelli and Russ-Eft (2009) studied a cohort of 26,751 SWD from California Community Colleges for 12 years (1995-1996 to 2006-2007). They found SWD were more likely to transfer to a 4-year university if they took more transfer or degree-applicable courses and passed those courses while at community college. While SWD from California Community Colleges completed associate degrees and transferred at rates similar to peers without disabilities (18%), this was not consistent with national statistics (7%). In addition, SWD from California Community Colleges took an average of 5.83 years in community college before fulfilling requirements to transfer to a 4-year university. Students without disabilities took an average of 4.1 years (Campaign for College Opportunity, 2016).

In the following sections, I review literature surrounding factors that impact the success of SWD at the community-college level. Each section highlights how student success is promoted and inhibited by these factors. Themes relevant to the success of SWD emerged from

the literature and include high school preparation (CCCCO, 2018; Hu et al., 2019; Mamiseishvili & Koch, 2012), Disabled Student Programs and Services (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015), faculty effect (Grigal & Hart, 2010; Highlen, 2017), and self-reliance (Highlen, 2017; Virginia et al. 2005). Fichten et al. (2014) highlighted barriers to student success, including social connections and factors that make students nontraditional, such as differences in enrollment patterns, finances, and attention. In addition, I also identified mental health factors in the literature (Porter, 2018). Many of these factors are intertwined, and thus, I explored them together (Fichten, 2014).

High School Preparation

Transition planning for SWD in high school is required under IDEA, although the planning process differs widely depending on each school district's interpretation of the law (Darden, 2013; General Accounting Office, 2003; Gluckman, 2014). Researchers suggested high school experiences do not adequately prepare SWD for success at the college level (Bangser, 2008). Inadequate transition planning in high school was one of the factors associated with low college completion rate (Garrison-Wade, 2012). Adequate planning in high school should prepare students for the shift in roles and responsibilities, change in legal protections, and need for greater self-reliance and self-advocacy (Garrison-Wade, 2012; Hunter et al., 2014). Also, the transition process should support students obtaining success. For example, high school attendance was an important factor for later success (Davis et al., 2018), meaning high school staff should take time to address attendance issues by facilitating conversations and identifying potential solutions, particularly if attendance issues are related to the disability.

The Impact of High School Experiences

The formalized transition planning process is designed to help students and families identify postsecondary supports (Garrison-Wade, 2012). However, students often run into challenges at the college level because students are required to verify and disclose disabilities before they can access these supports (Kim & Lee, 2016; Newman et al., 2016). Newman et al. (2016) identified that a student's experience in high school impacts their postsecondary education. Students who received more transition planning before entering college were more likely to make the decision to disclose their disabilities in postsecondary education, which correlated with higher grade point averages. Additionally, students who had negative attitudes toward special education in high school were less likely to disclose disabilities in college, effectively removing a significant source of support.

Creating Positive High School Experiences

High school staff can do several things to create a positive experience for SWD, including the extension of transition planning beyond school-based personnel (Bouck & Josi, 2016). For example, at the Post-secondary Academy, a 1-day conference for juniors and seniors, high schools partnered with three community colleges in Oregon to engage in activities to promote successful transitions for SWD (Connor, 2012). While many colleges offer registration days to incoming students, this program was unique, as it was specifically designed for SWD. Participants identified campus tours, personal stories from SWD, and college resource identification as the most beneficial activities (Connor, 2012). Researchers also noted students were *excited* to see campuses and hear personal stories from current college students and it helped them to plan for unexpected challenges. Sweet et al. (2011) reported students who were more aware of college campuses, knew about various pathways in higher education, and received

academic coaching in high school were more likely to be successful postgraduation. This finding reinforces the importance of transition planning, beginning early, and covering a wide variety of domains.

Academic Preparation

Additionally, academic preparation is an essential factor for success (Davis et al., 2018; Fichten et al., 2014). Garrison-Wade (2012) found students ($n = 59$) who experienced low expectations from others were not challenged throughout high school, had a lack of understanding about their disability, and found it difficult to capitalize on self-determination skills. Students with disabilities who completed requirements and graduated from high school, as opposed to dropping out, were more likely to enroll in postsecondary education programs instead of vocational courses of study, if they were academically prepared (Newman et al., 2009). As the percentage of workers who need at least some college has increased, so has the number of students, with and without disabilities, taking rigorous college-preparatory courses in high school (Newman et al., 2009). Students with disabilities who took rigorous courses in high school were more likely to enroll in postsecondary education and be successful (i.e., earn more credits and have higher GPAs) while enrolled in college (Long et al., 2012).

Furthermore, researchers of a 6-year longitudinal study of 23 California State Universities found college-ready students were 6.1% more likely to persist into their second year, and 8.7% more likely to complete college than students who started in remedial courses (Jackson & Kurlaender, 2014). However, SWD were identified as less academically prepared than peers without disabilities due to poor advisement and support (Garrison-Wade & Lehmann, 2009). Students with disabilities were rarely advised to take classes that met college entrance requirements. When SWD did access general education classes in high school, they only

received necessary supports about half the time (Garrison-Wade & Lehmann, 2009). Studies examined by Garrison-Wade and Lehmann (2009) indicated college preparation was a significant area of need, as many students felt unprepared academically for college courses. Students who feel unprepared for college courses will likely take one or more remedial courses (CCCCO, 2018; Hu et al., 2019; Mamiseishvili & Koch, 2012). Students in remedial classes were more likely to leave college than students who did not take remedial courses (Mamiseishvili & Koch, 2012) and were less likely to earn postsecondary credentials (California Community Colleges, 2018; Davis et al., 2018).

Colley and Jamison (1998) identified one way to support high school students in feeling prepared for college was to encourage SWD to take general education courses in reading, writing, math, and computer literacy, as students identified these courses as critical to their success in college. More specifically, SWD should take these courses in inclusive settings, as SWD who took general education courses in separated special education settings identified these classes as less helpful in preparing for college-level courses. Although inclusion in academically challenging courses helps set students up for postsecondary success (Davis et al., 2018; Fichten et al., 2014), additional options like dual enrollment programs may also provide benefits.

Dual Enrollment Programs

Some high school students can earn college credits for classes taught by college professors on their high school campuses (Hugo, 2001) or take courses on college campuses while in high school (Grigal & Hart, 2010) in dual enrollment programs. These programs typically include remedial courses, college success courses, or electives that meet college graduation requirements. Students who attended 2-year colleges in Indiana and participated in dual enrollment were more likely to take only nonremedial course work, earn all credits

attempted their first year, and persist to their second year of college when compared with students who did not participate in a dual enrollment program (Davis et al., 2018). In an examination of dual enrollment programs offered through Santa Monica College, dual enrollment programs improved access for diverse populations by increasing academic self-image, enhancing study skills, and providing information about attending college (Hugo, 2001). By learning the necessary skills from college staff, students better understood how college learning was more challenging and identify resources needed for success (Connor, 2012). While the limited research on dual enrollment appears to indicate potential benefits for SWD, I did not find research through this literature review specifically on the impact of dual enrollment for SWD.

Disabled Student Programs and Services

Disabled Student Programs and Services are an important component of student success (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015). DSPS programs on the larger college campus may be beneficial for SWD, as institutional practices such as locating information, finding services, and identifying resources can be difficult for students to navigate (Milsom & Sackett, 2018). By enrolling with DSPS, students have a place on campus where they can seek help and access necessary accommodations. Section 504 of the Rehabilitation Act (1973) and the Americans with Disabilities Act (1990) mandate equal access for individuals with disabilities by creating protection for accommodations that allow people with disabilities to access the same benefits and achievements as those without disabilities. At the community-college level, students access an equitable learning experience by using accommodations, but the accommodations do not modify the essential function of the course or course material (Irvine Valley College, 2017).

Registering with DSPS

Students with disabilities noted institutions that communicated available support (e.g., DSPS), provided coordinated services, and focused on individual needs created a smoother transition process from high school to college (Burgstahler et al., 2001; Milsom & Sackett, 2018). This finding is particularly important to note, as IEPs and the accommodations outlined in IEPs do not automatically transfer to college, which can surprise students and their families (Shaw et al., 2010). To access accommodations and disability support, students must first register with DSPS. Although this process varies somewhat from university to university, frequently to register, the student must schedule an intake meeting with DSPS staff and provide DSPS with verification of disability. Verification of disability includes written documentation from a licensed professional (e.g., physician, psychologist, psychiatrist) or the most recent standardized test scores provided in a psychoeducational or triennial report (Irvine Valley College, 2020). Disabled Student Programs and Services staff use this information to determine which accommodations and supports would be appropriate for the student (Irvine Valley College, 2017).

Students with disabilities who registered for DSPS and used accommodations in their first year were more likely to continue in college than those who chose not to use accommodations (Fichten et al., 2014; Kim & Lee, 2016). Students who registered for services were also more likely to have higher grade point averages, higher degree aspirations, and take full-time course loads (Mamiseishvili & Koch, 2012; Quick et al., 2003). Additionally, SWD who identified that they intended to graduate were more likely to register with DSPS than students who did not intend to graduate (Fichten et al., 2014). Despite the benefits, analysis of

the NLTS2 indicated 98% of SWD used accommodations in high school while only 24% did so in college (Newman & Madaus, 2015).

Accommodations

Disabled Student Programs and Services provide a variety of accommodations including both test accommodations (e.g., an extension of time and transformation of materials) and course accommodations (e.g., note-taking support and sign language interpreters) to improve the possibility of academic success (Kim & Lee, 2016). In addition, DSPS providers act as counselors by supporting students in developing balanced schedules, considering disability-related concerns, supporting students in changing majors, assisting with problems resulting from academic difficulties, and referring students to community resources (Graham-Smith & Lafayette, 2004). As explained on the California Community Colleges website:

Examples of services available through DSPS that are over and above those regularly offered by the college would be test-taking facilitation, assessment for learning disabilities, specialized counseling, interpreter services for hearing-impaired or deaf students, mobility assistance, note taker services, reader services, transcription services, specialized tutoring, access to adaptive equipment, job development/placement, registration assistance, special parking and specialized instruction. (California Community Colleges, 2020, p. 1)

Although these accommodations may not completely match services students received in high school (e.g., no curriculum modification or paraprofessional support), they provide students with the services they need to access the curriculum (Irvine Valley College, 2017).

Other Support Services Provided by DSPS

Students with disabilities identified a variety of services provided by DSPS that they found supportive, including counseling, extended time on tests, time management mentoring, and self-advocacy training (Graham-Smith & Lafayette, 2004). Students with disabilities ($n = 300$) also reported the facilitation that occurred through campus disability-related services had the most crucial impact on their academic experience (Fichten et al., 2006). However, in the Graham-Smith and Lafayette (2004) study, SWD ($n = 71$) indicated the most important benefit of accessing disability services was having caring people who provided a sense of security. Other researchers showed the majority of students had positive remarks about the effectiveness of DSPS. Specifically, they indicated counselors were friendly and helpful (McCleary-Jones, 2008). They also found it beneficial when service providers understood their specific needs (Johnson & Fann, 2016).

Academic accommodations vary from college to college and are impacted by resources and student population (Brown & Coomes, 2016). Some students indicated they initially chose or switched community colleges based on evaluations of DSPS done by other students (Johnson & Fann, 2016) or advice from teachers or high school guidance counselors (Hunter et al., 2014). When picking a community college, the student must consider if the college can support their unique needs; thus, information from peers and school staff is important.

Federal laws mandating equal rights and participation for SWD are attributed to the increase in the number of SWD enrolling in postsecondary institutions (Summers et al., 2014). Specifically, the number of students entering college increased from 27% in 2003 to 57% in 2009, making the percentage of SWD similar to that of students without disabilities who attend postsecondary education (National Council on Disability, 2011). While support and services are

available, many students fail to disclose their disabilities, which is an important first step in obtaining services (Marshak et al., 2010).

A thorough review of the literature indicates DSPS are one of the main factors that promote positive postsecondary outcomes (Fichten et al., 2014; Garrison-Wade & Lehmann, 2012; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Quick et al., 2003). However, due to the low rate of SWD obtaining certificate, degree, or transfer-related outcomes, barriers to accessing accommodations must be removed (California Community Colleges, 2018). That is, some students do not register for DSPS services due to a lack of self-determination skills or a perceived stigma of receiving these services. Or they may be unaware these services are available to them. Hence, they may be missing a service they could use to support their success in reaching their academic goals.

Faculty Effect

One reason SWD choose community colleges is that there is an emphasis on faculty teaching instead of faculty research (Ankeny & Lehmann, 2010). The small class sizes associated with community college, instead of the large lecture halls associated with universities, appear to be more supportive of SWD as there is an added element of individualized assistance (Grigal & Hart, 2010; Highlen, 2017). In a smaller setting, professors have more opportunities to connect with students and provide one-on-one support (Grigal & Hart, 2010). In a review of the literature, Trammell and College (2009) identified interaction with faculty is an essential factor for student success. In their book, Grigal and Hart (2010) corroborated this finding and identified student use of tutoring supports, office hours, and student groups resulted in greater academic success and persistence in completion of educational goals. Below, I discuss the impact of faculty relationships and attitudes, and training faculty about SWD.

Faculty Relationships and Attitudes

Relationships with faculty and faculty attitudes are important factors contributing to the success of SWD (Denhart, 2008; Kim & Lee, 2016; Rao, 2004). Successful student outcomes were related to how empathetic and approachable students viewed faculty (Orr & Hamming, 2009). Positive faculty interactions created a space where students felt comfortable discussing their disability and their barriers to education (Yssel et al., 2016).

Positive faculty attitudes and experiences are a predictor of students' intentions to graduate (Fichten et al., 2014). Specifically, students identified connections with encouraging faculty and staff as integral to their sense of belonging, as positive interactions provided experiences of comfort and helped students build confidence about their ability to be successful in college (Vaccaro et al. 2015). Furthermore, students emphasized a caring staff who could identify individual needs, suggest resources, and provide encouragement was beneficial (Graham-Smith & Lafayette, 2004). However, in a survey of 300 faculty from the Adult Basic and Literacy Education program in one Midwest state, nearly half of respondents reported they did not refer students with suspected learning disabilities for further assessment, even though they believed an assessment could provide students with important information about their strengths and weaknesses and provide potential access to accommodations (Reynolds & Hitchcock, 2014). This lack of referral to disability services may stem from the faculty's lack of knowledge about disability resources and limited experience discussing disability issues with students (Brown & Coomes, 2016).

Students have confirmed these findings, reporting some professors do not understand disability and believe letting a student use accommodations provides an unnecessary advantage (McCleary-Jones, 2008; Wright & Meyer, 2017). In a phenomenological study utilizing student

voice as data, 10 of 11 participants with learning disabilities, from a private college or a community college in the Pacific Northwest, spoke of being misunderstood by faculty (Denhart, 2008). This group indicated faculty believed they were lazy or attempting to cheat instead of utilizing necessary support to create equitable access (Denhart, 2008). They also thought faculty saw them as *disabled*, rather than intellectually healthy but *different*. Students' voices in Denhart (2008) highlighted how the social pressure and stigma associated with using accommodations further created disability, as "disability is imposed upon these participants where out of fear of stigma they refused to ask for the accommodations that would have eased their workload and improved their performance" (p. 493).

Other researchers (Kim & Lee, 2016; Trammell & College, 2009) acknowledged the social stigma surrounding disability and confirmed views of the instructor could further impact students' accommodation use. More specifically, if an instructor reported positive views of accommodation use, student use increased, while if they expressed negative views, students felt discouraged from using accommodations (Kim & Lee, 2016). Wright and Meyer (2017) found instructors reported they did not always feel equipped to deal with accommodations requests, but the more a student disclosed about their disability and need for accommodations, the more self-efficacy faculty felt in meeting the accommodation request. Additionally, as faculty had more experiences teaching and interacting with people with disabilities, faculty attitudes became more positive (Rao, 2004).

Training Faculty About SWD

Research also indicated college faculty need continued exposure to common characteristics of disabilities, information about accommodations, and inclusive teaching methods like Universal Design for Learning (Korbel et al., 2011; Quick et al., 2003). In research

conducted by Brown and Coomes (2016) faculty reported they were rarely familiar with disability resources and accommodation supports. However, training about disability can increase faculty knowledge, ideally leading to curriculum choices that remove barriers to education. Colleges must enforce inclusive practices and provide faculty with the education and support they need to work successfully with SWD. Disability-focused training for faculty can increase faculty skills and alter negative perceptions on disability and need for accommodation use (Kim & Lee, 2016; Rao, 2004). Several researchers suggested universities should require disability-related training for staff (Fichten et al., 2014; Kim & Lee, 2016). Important aspects of instructor training include approachability; flexibility; choice, specifically to increase motivation; and meeting the needs of and empowering individuals (Orr & Hamming, 2009). Additionally, trainers should provide faculty with information about SWD so they can make curriculum choices that improve students' learning opportunities (Garrison-Wade, 2012). When faculty were trained to make accommodations for students that did not harm the integrity of the class, they provided more support, and SWD were more successful in their classes (Joles, 2007).

Students with disabilities obtain higher levels of success when faculty promote various ways of expression, allow for individuality, and build relationships with students (Highlen, 2017). Instructors positively impact students when they have an increasing willingness to accommodate various learning styles (Wright & Meyer, 2017). For example, SWD may feel less stigmatized, as they would not need to identify themselves as having a disability if supports were already built into the course to accommodate their learning style (Wright & Meyer, 2017). Furthermore, faculty training allows the DSPS office, faculty, and students to work together toward positive outcomes by setting up realistic expectations that foster student independence (Duggan, 2010).

Self-reliance

The umbrella term, self-reliance, is used to capture a range of skills (e.g., self-advocacy, self-determination, self-regulatory behavior) that require action from the individual. In the following subsection, I discuss the literature related to these processes.

As students transition to college, their environment shifts from a highly structured environment to one where they must manage their own time and make their own decisions (Highlen, 2017). With this shift to a new environment, students have a fresh start, where they are introduced to new peers and educators. In a study of 16 SWD conducted by Marshak et al. (2010), students commented on their desire to start over and prove they were self-reliant or could do things on their own as they began their college experience. This desire to prove their self-sufficiency required considerable time and effort from the student and was driven by a desire to shed disability labels and the *special treatment* provided through disability supports. Students shared the accommodations, or special treatment provided through disability services, resulted in situations where peers treated them differently or believed the disability was used as an excuse to receive accommodations. Marshak et al. suggested prospective students need to recognize accessing disability supports does not define them in the way it may have in K-12 education, and self-disclosing simply allows access to reasonable accommodations, instead of limiting their academic options.

In their study of 34 community college and university students, Virginia et al. (2005) used focus groups to understand the skills students with disabilities described as important to their educational success. Participants identified problem-solving skills, learning about oneself, goal setting, and self-management as essential skills. Students shared they were responsible for managing their own time, their own study habits, and finding support when they needed it. While

others were available for help, ultimately, it was up to the student to identify when they needed support and follow through with obtaining that support. Thoma and Getzel (2005) suggested students should begin exploring information on disabilities, accommodations, careers, and colleges in high school. They believed exposure to this information would help students learn more about themselves, develop an understanding of problems they may encounter at the postsecondary level, and help set students up for future success. By reviewing this information before entering college, ideally, students should have a better understanding of what they will need in college and understand, as Marshak et al. (2010) suggested, obtaining disability supports does not limit their academic options.

Self-advocacy Skills

While students can obtain accommodations by registering for disability support services, students must advocate for themselves to use these supports in their classes (Irvine Valley College, 2017). Self-advocacy skills, or the individual's ability to recognize and express one's needs and rights (Holzberg et al., 2019), are not a required part of individualized transition plans in high school, but schools are responsible for helping students achieve a minimal level of postsecondary readiness (Darden, 2013). Part of that readiness includes supporting students in understanding postsecondary accommodations may not match accommodations students received in high school; thus, students must learn what accommodations work so they can articulate this need to others (Kim & Lee, 2016). Being able to communicate their needs is key, as students are less likely to experience resistance from faculty if they are able to discuss the need for and types of accommodations they find beneficial (Wright & Meyer, 2017). Burgstahler et al. (2001) stated: "It is abundantly clear that college students with disabilities must have a greater understanding of their needs and stronger self-advocacy skills than pre-college students"

(para. 7). These skills are needed due to the greater self-reliance students need to handle the shift in support structures.

Self-determination Skills

At the Association for Higher Education and Disability (AHEAD) conference in 2001 (as cited in Finn et al., 2008), disability support providers identified self-determination skills as a critical area of need for students attending postsecondary education. Ideally, self-determination skills should be taught before attending postsecondary education, as multiple researchers have tied self-determination to success (Field et al., 2003; Finn et al., 2008; Skinner, 2004; Thoma & Getzel, 2005). Self-determination is the ability to be a causal agent in one's life by making decisions in a self-regulated and self-reflecting manner (Jameson, 2007). Various aspects of self-determination have been identified and include skills like decision-making, problem-solving, goal setting, self-advocacy (Jameson, 2007), and regulating and reflecting on one's behavior (Korbel et al., 2011). Prior to graduation, K-12 schools should help students hone their self-determination skills to increase students' self-confidence and ability to succeed (Garrison-Wade, 2012).

Thoma and Getzel (2005) reported students learn self-determination skills through trial and error, from peers or mentors, or by their parents teaching them these skills. These skills are best learned over time and having time to practice these skills in a variety of settings before transitioning to postsecondary education ensures a smooth transition (Hunter et al., 2014). It is recommended that self-determination skills be taught as early as ninth grade (Thoma & Getzel, 2005); however, as these skills take a long time to develop, it may be wise to begin earlier (Hunter et al., 2014). Additionally, Jameson (2007) found students with a high level of self-regulatory and autonomous behavior had a postsecondary experience that yielded higher levels

of success and was described by SWD in more positive and hopeful terms. They related the increased positive experience to the student's ability to identify problems, create a plan of action, and follow through with their plan. Attention to the development of self-determination skills could lead to more positive outcomes for SWD.

Students have reported that being able to advocate for yourself and having self-awareness is an important factor impacting success (Connor, 2012). Furthermore, students have indicated self-determination skills were necessary in taking courses, finding support, and advocating for their rights (Thoma & Getzel, 2005). Students who used support services were more likely to persist and remain in college (Garrison-Wade, 2012). Garrison-Wade (2012) suggested disability support services should focus on developing self-determination skills, teaching self-management, and exposing students to assistive technology to promote self-reliance. Supporting students in increasing personal motivation and improving study habits can help increase the chance of success (Fichten et al., 2014). In addition, Trainor et al. (2016) concluded self-efficacy and self-determination skills were correlated with successful postsecondary education and employment. This conclusion indicated self-determination skills are beneficial post college as well and learning additional self-determination skills is warranted at the college level.

Goal Setting

Researchers found students' ability to set goals and make decisions to achieve those goals is frequently weak, as SWD exiting high school are often dependent on parents or case carriers to make decisions for them (Highlen, 2017; Korbel et al., 2011). However, researchers identified goal setting as an important factor in student success (Korbel et al., 2011; Skinner, 2004; Thoma & Getzel, 2005). While participants recognized family members as important to setting and achieving goals (Skinner, 2004; Thoma & Getzel, 2005), ultimately, students need skills, like

self-determination or self-advocacy, to follow through with the steps necessary to achieve their goals (Field et al., 2003; Thoma & Getzel, 2005).

Students with disabilities identified as achieving success highlighted the importance of goal setting. For example, 16 of 20 SWD in Skinner's (2004) study indicated they acted proactively by setting goals for themselves and planning their lives accordingly. Additionally, Field et al. (2003) reported all 88 participants appeared to understand they were responsible for carrying out plans to achieve their goals. Participants deemed more successful (as identified by their higher GPAs) noted the importance of both focus and flexibility. Being flexible was described as an important component, as it allowed students to adapt to obstacles. Participants who were deemed less successful (as identified by GPAs more than one standard deviation below the mean) did not articulate the qualities of focus and flexibility. Finally, Finn et al. (2008) indicated the importance of goal setting as an aspect of self-determination. In a pilot study, SWD participated in a series of lessons, designed to help students develop goals and identify the steps necessary for reaching their goals. All participants reported an increase in their ability to set goals, break goals into manageable steps, and stick to a plan. The findings indicated SWD may benefit from similar lessons that include explicit goal setting skills.

Social Connections

The transition to college often coincides with a period of instability in which students separate from familiar people and must adjust to new expectations of faculty and staff (O'keeffe, 2013). Students with disabilities reported challenges due to differences in their college-level social experiences (Burgstahler et al., 2001). More specifically, students leave behind a highly structured environment and an intact social group—this can be a challenge for students who have difficulty socializing and rely on a structured schedule to provide opportunities for social

interactions (Highlen, 2017). After high school, students often disperse to a wide variety of settings, which means that students enter the college environment with a limited support network and must work to build a new one (Highlen, 2017). Adjusting to a new environment and making new friends was shown to be a concern for college students across disability categories (Burgstahler et al., 2001).

Support from Peers, Staff, and Faculty

The absence of social alienation and having friends correlates positively with success in college (Fichten et al., 2014). Similarly, a sense of belonging, peer support, and faculty support were all factors related to an intention to persist (Morrow & Ackermann, 2012; O’keeffe, 2013). These positive outcomes may be because friendships with peers and joining groups or seeking out supportive staff members on campus create support systems for students (Getzel & Thoma, 2008). The people in these support systems provide opportunities for networking and mentoring and offer guidance and support (Garrison-Wade, 2012). The 34 participants in Getzel and Thoma’s study (2008) indicated people in their support systems were important in providing encouragement, assistance, and constructive criticism when needed. These relationships, with even one key person, significantly impacted a student’s decision to remain at college (O’keeffe, 2013). As Graham-Smith and Lafayette (2004) highlighted, “Care overcomes the sense of isolation and separateness that a student with disabilities feels and gives him/herself the permission to nevertheless belong and succeed in a frightening and challenging college environment” (p. 2).

Family Support

Families provide a range of support to SWD from a young age and often continue to provide support as students transition to college. In a phenomenological study of four college

students, McCall (2015) confirmed previous findings (Field et al., 2003; Wehmeyer & Palmer, 2003, as cited in McCall, 2015) that better post-high school outcomes were obtained when families had high expectations for their child and when families acted as strong advocates. Students noted they learned successful self-advocacy skills from their families and were able to use them to obtain needed accommodations and support to succeed on college campuses. Additionally, Skinner (2004) confirmed family was an integral part of support systems for SWD. Students were motivated by family expectations, as students strove to meet these family expectations. Additionally, families acted as a source of encouragement and provided financial access to additional supports, like tutoring. Skinner (2004) found strong support systems have a positive effect on SWD and is well documented in the literature.

Fallout From Early Stigmatization

While peers, faculty, support staff, and families provide important opportunities for mentoring and guidance (Garrison-Wade, 2012; Getzel & Thoma, 2008), students also shared stigmatizing interactions with peers and educators, which reinforced negative stereotypes of disability (Banks & Hughes, 2013; Garrison-Wade, 2012). Students with disabilities identified that the sense of stigma stemmed from others viewing “them as being the problem rather than merely having a problem” (Garrison-Wade, 2012, p. 118). Banks and Hughes (2013) confirmed this finding with their study of 12 African American male SWD at a 4-year university. Participants identified experiences where others believed they had limited intellectual capacity or employers questioned their competence because of their disability labels (Banks & Hughes, 2013).

Garrison-Wade (2012) found low expectations from others influenced students’ perceptions about their capabilities, which impacted their ability to succeed. One disability

resource coordinator noted students often focused on their weaknesses, or what they could not do, rather than their strengths (Garrison-Wade, 2012). Students' focus on their weaknesses may originate from prior educational experiences, as participants in Banks and Hughes's study shared social interactions in high school created self-doubt and instilled feelings of incapability, which followed them to college. These situations caused them to shy away from social situations, and it took time to build confidence. Students developed confidence through hard work, overcoming barriers, and shifting perspectives of what it means to have a disability.

Social Support as a Predictor for Success

In another study at a 4-year university, social support was an important predictor of adjustment among SWD (Murry et al., 2013). Murray et al. (2013) measured both total support or the sum of all socially supportive individuals and satisfaction with support. The two types of support were somewhat independent of each other, indicating efforts to build social supports should focus on the breadth of socially supportive individuals and depth of relationships.

Unfortunately, only 38.6% of the 2,629 national community colleges identified by Brown and Coomes (2016) offered support services with a social focus. Furthermore, community colleges that did offer support reported it was challenging to design socially oriented programs for students, as few students attended workshops, instead preferring to meet in a 1:1 format.

Students reported they preferred purely social groups or workshops with a non-disability focus, such as email etiquette. Murray et al. (2013) suggested adapting Mattanah et al.'s (2010) 9-week social support intervention series for students without disabilities. This program provided small groups (e.g., 6-10 students) with semi-structured activities covering topics such as (a) creating new social ties, (b) examining old social ties, (c) creating a school-life balance, and (d) identifying values and dealing with peer pressure. When compared with the control group,

participants reported less loneliness and greater levels of social support following the intervention. While the original study did not include SWD, Murray et al. (2013) suggested DSPS staff could implement a similar low-cost intervention to foster positive social relationships among SWD.

In summary, a limited support network negatively impacts transition success for SWD (Milsom & Sackett, 2018). Students who feel a sense of belonging and make connections with peers, faculty, and staff, increase their chances of success (Fichten et al., 2014; Morrow & Ackermann, 2012; O’keeffe, 2013). Community college staff can facilitate opportunities for social connections by providing guidance and support through services like DSPS (Garrison-Wade, 2012) and by creating opportunities for students to come together and cultivate positive social relationships (Murray et al., 2013). While the literature indicates a greater likelihood of success if students feel academically and socially connected to their educational institution, it is important to consider how to foster those connections before students attend community college. As previously discussed, conferences at community colleges (Connor, 2012) and dual enrollment programs (Hugo, 2001) provide information about attending college and creating connections to college students and staff. These high school experiences are important first steps in establishing social relationships that are important for the success of SWD in community college.

Nontraditional Enrollment Factors

Students with disabilities may have life factors that impact their enrollment in community college, thus identifying them as nontraditional students. Students with disabilities may need to take classes part time due to a variety of reasons (e.g., having children, needing to work), or they may not enroll in community college immediately out of high school (Rooney, 2002). These factors were found to have a negative impact on student success (Complete College America,

2011; Mamiseishvili & Koch, 2012; Rooney, 2002). The research on these nontraditional factors appears to be interrelated and, thus, impact each other. The following sections explore the impact of delayed or part-time enrollment, divided attention, and disability-related needs as separate aspects of enrollment.

Delayed or Part-time Enrollment

In a statistical analysis of 16.5 million undergraduates (at both 2-year and 4-year schools), Rooney (2002) identified several factors related to enrollment that impacted student success. For example, students who delayed enrollment by 1 or more years after high school, enrolled part-time, or were older when they enrolled were less likely to be successful in college. Rooney identified that this group of students had more risk factors that impacted their success. Specifically, this group was more financially independent, more likely to work full time, and more likely to have children or dependents. Thus, students with these characteristics were more likely to have life factors that diminish the time, attention, and money they could use to focus on their school goals.

In another sizeable quantitative study, Mamiseishvili and Koch (2012) examined data from the Beginning Postsecondary Students Longitudinal Study and found more than half of SWD delayed enrollment. Specifically, 67.4% of students who delayed college enrollment for 1 or more years after completing high school did not persist into their second year, while only 32.6% of students who enrolled in college right after high school did not persist. Mamiseishvili and Koch (2012) also found 51.0% of SWD maintained part-time or mixed enrollments during their first year. Both of these nontraditional indicators put students at greater risk of dropping out and decreased the likelihood of persistence. Mamiseishvili and Koch (2012) corroborated the findings of Rooney (2002), who identified that students who attended community college part-

time were less likely to be successful (Rooney, 2002). Mamiseishvili and Koch (2012) attributed this lack of success possibly to the longer time necessary to complete requirements and the greater likelihood that other life factors pulled student attention away from achieving school goals. However, there were several predictors of persistence, including higher GPAs, high degree aspirations, and full-time enrollment. Students with these characteristics were more likely to persist year-to-year, thus having a greater likelihood of reaching their college goals.

Divided Attention

Students may have experiences, circumstances, or responsibilities outside of school that impact success. In a report providing a statistical overview of 16.5 million undergraduates enrolled in U.S. postsecondary institutions, Rooney (2002) indicated factors that impact success included having children, being a single parent, and working full time. These characteristics are often interrelated with other non-modifiable (e.g., age, gender) and modifiable characteristics that impact success. For example, “students who are financially independent and who have family responsibilities tend to be older and, by necessity, may work full time and/or attend part time” (Rooney, 2002, p. 31). Rooney found undergraduate students with and without disabilities who were parents, especially single parents, were the most likely to have difficulty achieving success in college. This difficulty achieving success was most likely due to the added stress of raising and financially supporting a child or children, particularly if they were raising their child on their own and did not have a robust support system in place.

In another study involving 10 students with learning disabilities, McCleary-Jones (2008) explored the experiences of community college students with learning disabilities using questionnaires and focus groups. One aspect of their research focused on factors that might have negatively impacted students’ continued enrollment. Students were asked if working part-time or

full-time would cause them to withdraw from school. The majority (90%) of the students indicated working would not cause them to withdraw. They were also asked if caring for a dependent would cause them to withdraw. Again, the majority (80%) indicated they would not withdraw. Students shared they would continue their studies by adjusting their lives to fit around their class schedules. This group spoke to their desire to persevere and work diligently to be successful. Despite their beliefs in their ability to persist, researchers have shown students who attended part time were less likely to continue in community college until they reached their goals (Complete College America, 2011; Mamiseishvili & Koch, 2012; Rooney, 2002). As students spend more time in college, their lives continue to fill with jobs, relationships, and children, and college can get left behind (Complete College America, 2011).

Disability-related Needs

One other factor that affected student enrollment was related to a student's disability. Mamiseishvili and Koch (2012) found 51% of students with depression and physical disabilities ($n = 276$) maintained only part-time enrollment and were at increased risk for non-persistence. Mamiseishvili and Koch (2012) noted attributes of depression (e.g., fatigue, insomnia, difficulty concentrating) might impact students' ability to complete coursework. On the other hand, students with physical disabilities shared they had encountered hazardous conditions on campus and obstacles that prevented physical access to areas of need (e.g., bathrooms, stadiums, classrooms), which made attending difficult (Agarwal et al., 2015). These barriers can lead to negative associations with college and potential feelings of isolation, which can impact students' desire to attend and persist in higher education.

In summary, SWD desire to persevere in higher education and continue until they meet their academic goals (McCleary-Jones, 2008). However, some factors inhibit student success.

These factors include (a) delayed or part-time enrollment (Complete College America, 2011; Mamiseishvili & Koch, 2012; Rooney, 2002), (b) factors that result in divided attention—such as working or having children (Complete College America, 2011; Rooney, 2002), and (c) disability-related needs (Agarwal et al., 2015; Mamiseishvili & Koch, 2012). The authors of Complete College America (2011) called for college reforms to better support students and shorten the time that students attend college. They suggested colleges simplify the registration process by enrolling students in cohort programs, rather than individual courses; embedding remediation into the regular curriculum—as California has done with the passing of AB 705; and forming peer support and learning networks. Legislators in individual states are implementing these suggestions at their own pace. In addition to enrollment issues, taking developmental, or remedial, courses may also impact completion of community college for SWD.

Developmental Courses

The CCCCO reported SWD enrolled in developmental courses at higher rates than their peers (2018). Additionally, students who took one or more developmental courses were less likely to complete a degree, certificate, or transfer requirements in 6 years (California Community Colleges, 2018). Students who did complete transfer requirements were more successful at 4-year universities, even when compared with SWD who initially started at 4-year schools (Johnson et al., 2008). Johnson et al. (2008) suggested transfer-level courses at the community college provided a supportive environment where students could build their independence and self-esteem. On the other hand, SWD experienced a negative impact on college success if they enrolled in developmental courses possibly due to the additional time and cost associated with added courses (Hu et al., 2019). Additionally, SWD pass developmental courses at lower rates than their peers without disabilities (CCCCO; 2018), which may impact

their sense of belonging as college students (Vaccaro et al., 2015). Due to the significance of this issue, “the California Community Colleges and the State of California are working hand-in-hand to reform remedial education so students are no longer taking unnecessary remediation courses that can have long-term and damaging consequences” (CCCCO, 2017, p. 14).

AB 705 Reform Legislation

AB 705 was implemented in California in January 2018. Legislators passed this reform so students entering community college no longer were required to take placement exams. Instead, math and English placements are decided using multiple measures, including high school performance and previous math and English courses. California lawmakers implemented this legislation following other states, such as Florida. After the introduction of a similar bill in 2014, Florida saw a decrease in developmental course enrollment and an improvement in passing rates of introductory-level college courses (Hu et al., 2019). These data highlighted a closing of the performance gap for both Black and Hispanic students, an important step toward equitable access at the college level (Hu et al., 2019).

While California legislators recently implemented this reform, the goals of implementing AB 705 aligned with Florida’s goals. CCCCCO (2017) stated this “legislation is intended to support assessment and placement strategies proven to increase student completion rates and close achievement and equity gaps” (p. 14). Legislators implemented a pathway in which students could complete transfer-level math and English courses in 1 year, instead of allowing students to spend valuable time and money stuck in courses that would not count toward their educational goals (Dorr, 2017).

However, there are concerns associated with this new legislation. For example, the California Acceleration Project (2018) found that not all students entering community colleges

are predicted to succeed in transfer-level courses. Thus, the California Acceleration Project included recommendations that students have access to low-unit concurrent support classes, which focus on the knowledge and skills that students truly need to succeed in transfer-level math and English. The California Acceleration Project also suggested community colleges do not keep traditional pre-transfer-level math courses as an option for students, as students who were eligible for transfer-level courses frequently and severely under placed themselves. However, complete removal of these courses limits course selections for students and removes options for students who are not successful in transfer-level courses with support. Removal of these courses is particularly impactful to student who may be unprepared for college level courses, as students only have three attempts at a course before they are no longer able to retake the course at that community college (California Acceleration Project, 2018). Staff working on the California Acceleration Project (2018) noted more intensive math support is not the best way to support failing students. For example, two-thirds of Tennessee students who failed transfer-level math with support failed every course they attempted. This high failure rate indicated there may be other factors impacting student success and more information is needed to identify the source of student difficulties.

With the new community college reforms, California community college administrators are reducing and removing the number of offered remedial or developmental courses (California Acceleration Project, 2018; CCCCO, 2017). While the goal is to reduce the time students spend in community college and, thus, increase student completion (California Acceleration Project, 2018; Hu et al., 2019), there continues to be concerns. As previously stated, students have limited attempts to pass a course before they are no longer able to retake it (California Acceleration Project, 2018), which may contribute added stress and a desire to start in remedial

courses. Starting in remedial courses is associated with decreased persistence (Ponticelli & Russell, 2009). However, SWD took educational assistance courses at higher rates than non-DSPS students and completed these basic skills courses at lower rates than non-DSPS students (CCCCO, 2018), suggesting SWD who are not successful in remedial courses will likely not be successful in college-level courses. As this legislation is new, it is unclear what additional supports will be needed for SWD.

Finances

Students can be impacted by finances in several ways at the community-college level. For example, financially independent students with and without disabilities were less likely to be successful in college, possibly because financial independence comes from working (Rooney, 2002). Students who worked often had impacted enrollment status, as they did not have as much time for school, or they needed to work their school schedules around their jobs (California Acceleration Project, 2018; Rooney, 2002). In addition, SWD generally had lower incomes than their peers without disabilities, and a greater majority (i.e., 37% versus 20%) came from households with incomes below \$25,000, meaning financial support from family was limited (Wolanin, 2005).

Students from Low Income Families

Students from low-income families frequently face barriers to success. For example, Davis et al. (2018) explored the college success of Indiana's high school class of 2014 ($n = 28,525$) and found students who received free or reduced lunch in high school were academically behind on indicators of success as compared to students who did not receive free lunches. Pell Grant recipients—determined eligible for the grant by their low-income status—were also less likely than their peers to achieve success in college, even when other factors (e.g., used other

types of financial aid, demographics, high school preparation) were controlled. Furthermore, approximately 50% of students who were eligible for free or reduced lunch and attended community college took remedial classes, while only 36% of their peers did. This finding is important because enrollment in developmental courses had a negative impact on college success, and students taking one or more developmental courses were less likely to meet their college goals (Hu et al., 2019).

In Brogden and Gregory's phenomenological study (2019) with 15 individuals with adverse childhood experiences (e.g., abuse, neglect), students expressed that financial resources were highly valuable. All participating students accessed financial assistance programs and regular financial aid. Students used financial supports to help pay for childcare, tuition, books, and support services. Work-study positions were highlighted as valuable for the needed income and ease of working around school schedules. Brogden and Gregory emphasized colleges should make every effort to provide financial support for students, as students identified financial supports as a top reason they remained in school.

In an effort to close gaps associated with socioeconomic status, administrators in the California Community College system announced a new grant aimed to increase college preparation for recent high school graduates. This grant was titled the California College Promise Grant (CCCCO, 2017). This grant is unique "because it is a first-dollar plan, meaning the state covers the tuition costs first, and any other financial aid awarded to the student can be used to offset the cost of textbooks, transportation and other non-tuition expenses" (CCCCO, 2017, p. 16). Unlike previous grants, the California College Promise Grant does not set eligibility guidelines based on age, academic merit, or attendance status. While financial support like the California College Promise Grant is helpful, students are required to complete a Free Application

for Federal Student Aid (FAFSA) to access the grant and other financial aid. This application can be time consuming and complex, as it requires families to report extensive financial information (Hunter et al., 2014). Due to this complicated process, students may choose not to file a FAFSA, which prevents them from accessing federal aid.

Additional financial support, through programs like the California College Promise Grant, is important for SWD. In a 10-year longitudinal study based in the mid-Atlantic region, Herbert et al. (2014) determined most (82%) of the 546 students who accessed DSPS services received no financial aid while attending college. This lack of financial aid is concerning, as Newman et al. (2011) indicated financial burdens are one of the most common reasons SWD do not finish their college programs. Murray et al. (2013) also identified financial stress as a risk factor in the college adjustment and retention of SWD. Specifically, they found SWD who experienced financial stress felt less able to execute the necessary skills to succeed in their courses. However, the negative impact of financial stress was mitigated if students identified they had high levels of social support (Murray et al., 2013).

Additional Costs Associated with Having a Disability

Students with disabilities disproportionately experience lower-income status, and, while all low-income students face financial barriers to higher education, SWD have a higher need for financial assistance than other students (Wolanin, 2005). Students with disabilities often receive services from a variety of professionals, including doctors, counselors, and psychologists. According to Wolanin (2005), insurance payments and support from public and private agencies rarely cover the total costs of services, and the difference must be made up out-of-pocket. There are also other incidental costs associated with having a disability, such as specialty foods needed for dietary restrictions, maintenance costs for wheelchairs or other necessary items, bills

associated with food and care for guide dogs, or higher utility bills from running computers or other assistive devices. To offset these costs, the National Council on Disability (2017) suggested the U.S. Department of Education modify the FAFSA to allow SWD the opportunity to input disability-related expenses and to consider these expenses when determining a student's financial aid package. Currently, costs related to a student's disability may be covered by financial aid under certain circumstances (FinAid!, n.d.).

Loss of Financial Aid

The National Council on Disability (2017) also suggested Congress amend the Higher Education Act to allow SWD extended access to financial aid when, due to their disability, the student needs more time to complete their degree than what traditionally is allowed for under federal aid time parameters. Currently, SWD can access extra time to complete a program if school administrators approve (FinAid!, n.d.). Additional financial aid may be provided during extra terms; however, certain aid programs continue to have term limits, and there is no uniform policy on financial aid packages over time (FinAid!, n.d.). Wolanin (2005) hypothesized extended financial aid would have a significant impact on SWD, as one of the most common forms of accommodations needed by SWD is additional time (in the form of a reduced course load, extended deadline for degree completion, or more time for assessments). The need to take fewer courses each term naturally extends the time SWD spend working toward their college goals. On average, SWD take twice as long as their peers without disabilities to complete their college education (Wolanin, 2005). This extended time results in a higher cost of education, as students still incur the costs of living when taking a part-time course load. Additionally, students who are considered to be enrolled less than full-time can have important federal aid, like Pell

Grants, reduced (Wolanin, 2005), or they may be deemed ineligible for continued aid if they are enrolled beyond 12 semesters (National Council on Disability, 2017).

In summary, the literature indicated there are a host of financial factors that impact SWD. These include disadvantages stemming from coming from a low-income household (Davis et al., 2018; Hu et al., 2019), additional spending associated with having a disability, and loss of financial aid due to longer time needed to complete college goals (National Council on Disability, 2017; Wolanin, 2005). Overall, greater attention is required to fully understand the financial burdens associated with having a disability, including time demands and coordination of the many sources of support (Wolanin, 2005). Standardized financial aid packages fail to address the complex needs of SWD (Wolanin, 2005).

Mental Health

I found minimal research on how challenges with mental health interfere with students' ability to be successful in the postsecondary environment. However, the research I did locate indicated added supports could mitigate some negative effects with mental health challenges (Brogden & Gregory, 2019; Porter, 2018). Porter (2018) provided a snapshot of students' mental health crises over 3 years at a large community college in Ontario, Canada. The data set included 311 documented mental health crises involving 231 individual students. Half (50.2%) of these students were registered with Canada's version of DSPS, meaning they provided the college with documentation confirming they had a disability, the majority of whom indicated the disability was psychiatric in nature. However, students with documented disabilities made up about 10% of the college population, revealing an overrepresentation of SWD in documented mental health crises. This overrepresentation indicated students with psychiatric disabilities are vulnerable and would likely benefit from proactive supports. Porter reported the most frequent crisis incidents

included suicidal ideation (78.1%), threatening others (10.3%), and self-injuring behavior (9.0%). While most incidents had an unknown trigger (42.8%), conflicts in relationships (26.7%), and academic stress (13.8%) were found to have an impact on mental health crises. Porter called for staff at postsecondary institutions to recognize the potential seriousness of relationship conflicts and academic issues for students. Furthermore, Porter identified a need to have campus-wide steps to address student crises.

The National Council on Disability (2017) received 148 responses to an open-ended questionnaire and conducted 48 interviews with students with mental health disabilities. Similar to a report issued by CCCCO (2019), the National Council on Disability identified that colleges are struggling to meet the needs of the increasing number of students with mental health needs, which has adversely impacted student retention and academic success. Symptoms associated with mental health diagnosis (e.g., insomnia, fatigue, decreased ability to concentrate) interfered with a student's ability to fulfill the requirements of postsecondary education and, thus, impacted a student's ability to persist from year to year (Mamiseishvili & Koch, 2012).

Mental Health Support

The National Council on Disability (2017) identified that students with mental health disabilities face additional barriers beyond those related to their disability. These included limited access to counseling, long wait times to see counselors, and difficulty accessing the accommodations necessary to provide equal access to their education. These barriers impacted students even with mild or moderate depression or anxiety symptoms, resulting in more academic difficulties and lower GPAs than students without mental health needs. However, campuses with strong mental and behavioral health supports showed an increase in the academic performance of students with mental health needs and an increase in their resilience and ability

to handle stress. In addition, students who felt like they belonged on campus and had strong connections to faculty, counselors, or peers exhibited persistence and resilience (Brogden & Gregory, 2019). The National Council on Disability (2017) highlighted, at one university, 31% of students who received treatment for depression reported more satisfaction with their ability to study or work, and 34% reported more satisfaction with how much schoolwork they could get done.

Access to mental health support on campus is critical, as the CCCCCO (2019) found nearly half of students reported one or more mental health conditions in the California Community College system. The CCCCCO highlighted that, as mental health supports increase at colleges, there is an increased need for culturally competent mental healthcare. While two-thirds of California community college students identify as a race or ethnicity other than white, these students of color “have less access to services; are less likely to be referred to mental health services; are less likely to receive high-quality services; and are less likely to continue treatment” (CCCCCO, 2019, p. 12). Culturally competent mental healthcare needs to be embedded into training for faculty and staff, as campus respondents identified an ongoing need for training surrounding mental health (CCCCCO, 2019). Staff at the CCCCCO suggested trainings include basic information about mental health supports on campus, as in 2016, 40% of faculty and staff shared they did not know where to refer a student in distress.

Policy Barriers

While administrators of the California Community College system identified a series of goals and objectives (e.g., increase mental health services, increase training for faculty and staff, foster stronger relationships with community-based mental health services) to guide decisions moving forward, the National Council on Disability (2017) addressed several policy barriers that

impact students with mental health disabilities. Interviewees ($n = 8$) and questionnaire respondents ($n = 37$) highlighted that mandatory leaves of absences policies (after threats to self) deter students from seeking help, as participants were concerned they would be forced to leave school. Readmission policies can also be unclear, and legal experts have expressed the need for clearer guidelines, particularly to determine if colleges can require medical records or other documentation upon student return. Respondents also called for more flexible financial aid policies if students must take a leave of absence or need to enroll part-time due to mental health issues. As previously discussed, federal funding is tied to enrollment status, and students can lose funding if they spend too many semesters in college or do not attend full-time (National Council on Disability, 2017; Wolanin, 2005).

In summary, with the increase in mental health needs, staff at colleges are struggling to meet students' needs, particularly those from diverse backgrounds (CCCCO, 2019; National Council on Disability, 2017). Student retention and academic success is impacted by poor mental health (CCCCO, 2019; National Council on Disability, 2017). Students are negatively impacted by current policies, and thus struggle to continue with school until they reach their goals (CCCCO, 2019; National Council on Disability, 2017). When students felt they belonged on campus, had strong social connections (Brogden & Gregory, 2019), or had access to strong mental and behavioral health supports (National Council on Disability, 2017), they performed better and showed an increase in their resilience. Thus, it is important for college staff to explore a variety of supports for students and look at how current policies create barriers to student success (National Council on Disability, 2017).

Conclusion

Several themes emerged from the literature, including the support of DSPS, the importance of high school preparation, the impact of college faculty, and the need for self-reliance. Findings indicated self-determination skills and self-regulatory behaviors relate to student success in postsecondary education (Connor, 2012; Garrison-Wade, 2012; Jameson, 2007; Thoma & Getzel, 2005; Trainor et al., 2016). Although it is vital that high school staff begin teaching these skills (Kim & Lee, 2016; Garrison-Wade, 2012; Newman et al., 2016; Sweet et al., 2011), staff at postsecondary institutions need to examine architectural, programmatic, and informational barriers to ensure they support SWD in addressing aspects of the institution that may hinder student success (Garrison-Wade, 2012). This evaluative process should extend to faculty, as their interaction with students (Fichten et al., 2014; Kim & Lee, 2016), beliefs about disabilities (McCleary-Jones, 2008; Wright & Meyer, 2017), and teaching style impact the success of SWD (Garrison-Wade, 2012; Korbel et al., 2011; Orr & Hamming, 2009; Quick et al., 2003; Wright & Meyer, 2017).

While my focus of this literature review was on indicators that promote student success at the community-college level, counter indicators of success also emerged. Those indicators included social challenges faced by SWD, enrollment status, developmental courses, and financial needs. Many of these counter indicators are intertwined, and students impacted by one may inherently be impacted by others. This impact is significant because students who have more counter indicators for success are much less likely to be successful than those who have fewer or no counter indicators of success (Rooney, 2002).

Poor mental health was also identified as a counter indicator for success, as it impacts student retention and academic success (CCCCO, 2019; National Council on Disability, 2017).

However, students who had strong social connections (Brogden & Gregory, 2019) and access to mental and behavioral supports (National Council on Disability, 2017) were more successful and showed greater resilience. The research on mental health and college success for SWD is limited, and, thus, community college administrators have limited information to guide current policy changes and decisions. As more supports are put in place for students with mental health needs, colleges leaders need to pay close attention to student voices to fully grasp what would work and what could create potential barriers.

Success for SWD at community colleges is a particularly important area of study, as the majority of SWD start at community colleges (Garrison-Wade & Lehmann, 2009). Many have plans to transfer to 4-year institutions; however, once enrolled in community college SWD have difficulty completing the needed requirements (Mamiseishvili & Koch, 2012). They complete degrees at lower rates than their peers, and, if they do complete the requirements, they take longer, particularly if they started in developmental courses (California Community Colleges, 2018; CCCCCO, 2018; Newman et al., 2009). Completion of community college sets SWD up for success, as those who complete the transfer requirements are more likely to graduate from 4-year universities when compared to SWD who start directly at 4-year colleges, although it is unclear why (Johnson et al., 2008). Johnson et al. (2008) indicated the community college experience helped students build their self-esteem and provided a supportive environment where students built their independence.

Overall, postsecondary education is one of the best ways to prepare students for careers and increase employability, which is likely why community colleges are seeing an increase in enrollment (CCCCCO, 2018). As more SWD enroll, leaders at community colleges need more information to identify clear paths that promote student success (CCCCCO, 2018). As skills that

promote success may take a long time to develop in SWD (Hunter et al., 2014), secondary schools need to be aware of the factors that support student success in college. While there is a body of research that includes the success of SWD, these students' voices are rarely represented in the literature (Whitney, 2006). In this literature review I found only 20 original studies used the voices of SWD in this literature review. As the California Community College system continues to evolve (e.g., removal of placement exams, offering of California College Promise Grant) to create more access for those that have historically been marginalized, it is imperative the voices of people with disabilities be included.

CHAPTER 3—METHOD AND METHODOLOGY

Qualitative research is based on the idea that “meaning is socially constructed by individuals in interaction with their worlds” (Cypress, 2017, p. 208). Researchers use qualitative research to answer questions that explore social experiences and engage in interpretive practices with a comprehensive set of nonordinal data. These data include participants’ voices, the memos of the reflexivity of researchers, and the detailed description and interpretation of the problem (Creswell & Poth, 2017). Qualitative research is a situated activity in which researchers content the world is dynamic, where there are multiple constructions and interpretations of reality, which can shift over time (Cypress, 2017). The researchers who work within the social constructivism paradigm assume meanings are negotiated socially and situated historically (Cypress, 2017). Patterns and meanings emerge as individuals explore their subjective experiences and world views (Creswell & Poth, 2017).

The purpose for this study was to explore the experiences of successful community college SWD. In this study, I used a social constructivist perspective to better understand the lived experiences of college students with disabilities. I accomplished these objectives through the use of qualitative case study and photovoice methodologies.

Research Questions

I designed the research questions for this study to focus on aspects of success instead of barriers encountered by the participants. Guided by sociocultural theory and disability studies, the guiding question (GQ) and sub-questions (SQ) focus on personal experiences.

GQ. What home, college, and/or high school aspects do students with disabilities perceive as contributing to their success in community college? To what extent to these factors contribute to their success?

SQ1. How do students with disabilities experience the transition process from high school to community college?

SQ2. To what extent, if any, do students with disabilities use supports during their years in college?

SQ3. To what extent, if any, did self-discovery contribute to college success?

SQ4. What do participants want others to know about supporting students with disabilities at the community-college level?

Methodological Frameworks

In the following section, I review the methodological frameworks I used in this study. These frameworks included case study methodology and photovoice.

Case Study Methodology

Case study research is a qualitative methodology in which a real-life, bounded system is explored through multiple sources of information (e.g., interviews, observations, and audiovisual data; Creswell & Poth, 2017). Researchers examine and interpret this detailed information in an ongoing manner to reach tentative conclusions and refine the research questions (Hancock & Algozzine, 2011). The final product includes a case description and case themes (Creswell & Poth, 2017). This system, bounded by space and time, should be straightforward and obvious in order to create a case (Smith, 1978). According to Merriam (1991), a case “can be an individual, a program, an institution, a group, an event, [or] a concept” (p. 44). In the current research study, the bounded system was a group of SWD at a Southern California Community College.

Participants from a Southern California Community College created a collective case study in which I examined the phenomenon of success from the perspective of multiple participants (Stake, 1995). Although limitations placed on the case affect generalizability, my purpose for

this study was not to generalize to the population, but rather to use purposive sampling to select a group with specific expertise in the area of disability and community college success. Limiting participants provided an opportunity to learn more about the group and understand the resources available to this population (Hancock & Algozzine, 2011; Merriam, 1991).

I followed case study methods outlined by Stake (1995) and Merriam (1991), as they emphasized construction of knowledge through interaction (Yazan, 2015). Both Stake and Merriam align with a constructivist approach, where the researcher assumes knowledge develops through social interaction, and, thus, multiple perspectives should be represented. Therefore, the aim of the researcher is not to explain, but rather to provide a rich description of the phenomenon under study (Merriam, 1998). This rich description provides insight into the issue, but the meaning and understanding remains situated in the time and context of the study (Stake, 2005). Both Stake and Merriam relied exclusively on qualitative data sources (i.e., interviews, observations, and document review) and required that data analysis occur simultaneously with data collection (Yazan, 2015). Stake and Merriam's case study approaches align closely with the photovoice process, which I discuss in the next section.

Photovoice

Photovoice is considered a visual research methodology (Budig et al., 2018). Photovoice is also a form of participatory action research that has been used with a wide range of marginalized populations (Agarwal et al., 2015). Three main goals exist when using photovoice: reflecting and recording, promoting critical dialogue, and reaching policymakers (Wang & Burris, 1997). Wang and Burris (1997)

developed the concept for photovoice from three main sources: (1) the theoretical literature on education for critical consciousness, feminist theory, and documentary

photography; (2) the efforts of community photographers and participatory educators to challenge assumptions about representation and documentary authorship; and (3) [their] experience articulating and applying the process in the Ford Foundation-supported Yunnan Woman's Reproductive Health and Development Program. (p. 370)

Among the many advantages, researchers use photovoice to gain access to a rich sampling of settings, which may be unavailable to researchers (Wang & Burris, 1997). Because participants take cameras into different social and behavioral settings, various moments, ideas, and perspectives are captured, providing a powerful means of expression (Wang & Burris, 1997).

In addition, when applied to research with people with disabilities, participants used photovoice to counteract cultural norms that have pathologized the lived experiences of people with disabilities (Berryman et al., 2015). Instead, people with disabilities use photovoice to show how disability exists in the range of human diversity. This method is particularly useful for vulnerable populations, like people with disabilities, as the researcher does not presume the need to read or write and does not exclude people who "have difficulties with direct communication or are hampered on a cognitive and conceptual level" (Overmars-Marx et al., 2018, p. e92).

However, Overmars-Marx et al. (2018) noted this method is challenging to use with people who have difficulty with expressive language because, although they can participate in the photo-taking portion, they may have a difficult time engaging in the reflection and analysis portion.

Aldridge (2007) noted it would not be appropriate for the researcher to analyze the photographs without hearing the story behind the photograph from the participant. Without their input, the researcher cannot accurately interpret the significance of what is depicted. I believe this guideline was important to consider when selecting participants, and thus, became a delimitation.

SHOWeD Method

The earliest introduction of the SHOWeD method is attributed to Shaffer (1983) and his work with the African Medical and Research Foundation. Shaffer (1983) aimed to use community-based healthcare workers “to narrow the widening gap between health needs and the resources needed to meet those needs” (p. 7). The goal of introducing the SHOWeD method was to help the group of community-based healthcare workers focus on a specific part of the problem to ensure the message did not get lost. Although the SHOWeD method was traced to Shaffer (1983), other researchers expanded upon the method and questions to make them more widely applicable (see Table 2). The questions are a starting point to promote discussion focused on bringing about self-awareness, self-reliance, and problem-solving (Shaffer, 1983). Shaffer’s (1983) method stands in juxtaposition to the lecture method, as that method does not stimulate thinking, promote feedback, promote long-term retention, nor encourage follow-through.

Table 2: SHOWeD Method Variation of the Questions

Shaffer (1983)	Hergenrather et al. (2009)	United for Prevention in Passaic County (n.d.)
<ul style="list-style-type: none">▪ What things did you See?▪ What was Happening?▪ Does this happen in Our community?▪ Why does this problem happen?▪ e—the lowercase “e” does not represent a question▪ What are we, here, now going to Do about this problem?	<ul style="list-style-type: none">▪ What do you See here?▪ What is really Happening here?▪ How does this relate to Our lives?▪ Why does this concern, situation, strength exist?▪ How can we become Empowered through our new understanding?▪ What can we Do?	<ul style="list-style-type: none">▪ What do we See here?▪ What is really Happening here?▪ How does this relate to Our lives?▪ Why does this situation, concern, or strength Exist?▪ What can we Do about it?

I used Hergenrather et al.’s (2009) version of the SHOWeD method, as I understood empowerment to be an integrated component of the process of *doing* (e.g., What can we *Do*?).

As Hergenrather et al. (2009) stated, “Photovoice is designed to empower persons to develop and

acquire skills to become advocates for themselves and their community, enabling them to reach out to policy makers and influential advocates” (p. 687). While students captured supports that lead to their college success, they also engaged in a reflective and evaluative process in which they may have built confidence and self-efficacy in their ability to obtain future success.

Together, using photovoice and the SHOWeD method, participants documented and reflected upon multiple aspects of their lives that added to their success. Photographs included things from home or school, things from their past or current situations, and things that may not easily be captured through words alone, like a place. Like other arts-based practices, the use of photos challenges stereotypes by promoting dialogue through the discussion of multiple meanings, which builds communities across differences (Leavy, 2017).

Design of the Study

My purpose for this study was to identify factors that support SWD in attaining success in community college. I used case study and photovoice methodologies to explore the in-depth perspective of a group of community college SWD. Participants considered aspects of home life, college life, or high school preparation that helped them attain success; however, participants had the freedom to capture on camera anything that they believed was important to their success. I used interviews to delve deeply into individualized experiences and focus groups to allow for the creation of a collective voice. When used together, I created different spaces for participants to share their experiences with disabilities. I used the SHOWeD method to guide the photovoice process (Shaffer, 1983). Concurrent with analysis, I ended the data gathering process by asking students to share this new-found information with others. Through this process, SWD had an opportunity to share their voices, develop their sense of agency, and give back to their community.

Delimitations

Delimitations are the limitations put in place by the researcher to control for factors or focus the study (Terrell, 2015). I used qualitative research; thus, as the researcher, I become an instrument with my examinations, choice of interview questions, and interviewing style, which potentially influenced the findings (Creswell & Poth, 2017). The researcher uses these delimitations to create workable boundaries in which an investigation of the research questions can be done (Creswell & Poth, 2017). By making these delimitations clear, the credibility of the research is increased (Creswell & Poth, 2017).

Throughout this study, I attempted to make my assumptions and positionality clear, so others may understand where I potentially influenced the findings. I completed a thorough exploration of my positionality to identify what assumptions I hold. My experience as a special education teacher has greatly influenced my beliefs and, thus, the questions I asked.

I put several parameters in place to ensure I was not seeking confirmation of my beliefs. First, several faculty members at my institution vetted my research and interview questions. I incorporated their suggestions and feedback.

Second, I used question templates from previous studies in the initial interview and focus groups to ensure I minimized my positionality as a researcher. I adapted questions in the initial interview from Milsom and Sackeett's (2018) research. I used the SHOWeD method to inform the data collection process in the focus groups.

Finally, I limited my influence through the incorporation of focus groups. To create a safe environment, we reviewed confidentiality expectations and reintroduced ourselves. Participants sat in a horseshoe facing the board so they could all see each other and the board. To minimize my influence, I sat with the group toward the back. Through the group process, participants

explored and clarified their views as other participants commented, reinforced, or disagreed with shared experiences or perceptions (Coenen et al., 2012). During the focus groups, participants moved the conversation forward with minimal prompting (e.g., Does anyone have a photo that relates? Does anyone have something new to share?). Once the conversation began to flow, participants independently shared when they had a photo that related to a current category on the board. If more than one person had a photo to share, they independently navigated who went first (e.g., I just shared one. You go.). As the focus groups continued, my role became that of the observer and recorder. As our time together continued, I intervened only if a participant had not shared or if the conversation began to stall, and the group appeared ready to add a new category.

Additional delimitations included the type of study and students who participated. I designed this study to better understand the factors that support SWD in achieving success in community college, as many SWD begin college at the community-college level. Furthermore, I designed this study to give students a space to voice their knowledge, meaning that the factors are based on the perception each participant has about their own experience. As such, I made several choices about who could participate in an effort to identify participants who could reflect on the shift from high school to college and who could speak to the aspects of their lives that had supported them in achieving success. I outline the specific decisions and characteristics that I used to select participants in the following section.

Selection Criteria for Participants

In this study, I used purposeful sampling to find 7-10 participants who could provide insight into the research problem (Creswell & Poth, 2017). I limited the type of participant to ensure a group of people who could speak to the research questions.

The explicit criteria for participation in this study included: (1) 18 years or older; (2) currently enrollment in a community college of California; (3) had access to transportation; (4) had completed one year toward a certificate, associate's degree, or transfer-related outcomes; (5) were enrolled with the DSPS center for at least a semester at some point in their community college career; (6) graduated from high school in the past 10 years; and (7) had independent expressive language (verbally or through the use of assistive technology).

Creswell and Poth (2017) noted "sampling can change during a study and that researchers need to be flexible" (p. 158). Although the initial goal was to include participants who were in their final year of college, flexibility proved necessary. Recruitment was difficult, and I expanded this delimitation to include participants who had completed 1 or more years of college successfully.

Potential participants attended a community college in California; however, for convenience purposes, recruitment took place only in Southern California. As all participants had to be in the same room for the focus groups, students had to be willing and able to travel to a central location. One student was willing to drive 1 hour to participate; however, he later withdrew from the study, as he was offered a job that limited his free time.

Initially, my goal was to recruit participants who were in their final four classes. Students with disabilities often take longer to complete degree requirements (Hu et al., 2019). Unfortunately, limiting participants to only those who only had four classes left proved to be a significant barrier to recruitment. I adjusted this delimitation, so eligible participants needed only to have completed 1 year successfully. Of the final six participants, all but two had completed enough requirements to transfer the following year in the fall of 2020.

Another criterion was that participants had been registered at the disability student services office on their college campus for at least a semester. This delimitation was important as disability student services is a support that is often viewed as beneficial for SWD throughout college (Fitchen et al., 2014; Kim & Lee, 2016). Beyond the one semester, there was no need for students to have registered at the beginning of their college career. Their decision to access DSPS later in their college career provided valuable insight into the structures and supports that lead to college success.

By limiting participants to those who graduated high school in the last 10 years, participants were able to reflect and compare that experience to their recent college experience. This requirement proved insightful for students with IEPs and 504 plans in high school, as I confirmed the breakdown in transition supports as identified in the literature (Garrison-Wade, 2012; Hunter et al. 2014).

I made a choice not to limit the type of disability (autism, intellectual disability, etc.) participants had, as students with varying types of disabilities access DSPS. Although participants needed to meet the criteria for disability as required by DSPS, they did not need to identify with having a disability to participate in the study. I made this decision because many students with invisible disabilities do not identify with the label of disability, even though they meet the legal criteria and may access disability services (Stein, 2013). The one delimitation of the participant's disability status was that students needed to have independent expressive language (verbally or through the use of assistive technology). Overmars-Marx et al. (2018) noted the photovoice method is difficult to use with people who have difficulty with expressive language because of the reflection and analysis portion. Specifically, it would not be appropriate for photographs to be analyzed without the story from the participant, as the researcher cannot

accurately interpret the significance of what is depicted (Aldridge, 2007). Therefore, participants needed to have independent expressive language. All participants had independent expressive language.

In the following subsections, I expand upon the recruitment process and demographics of the participants. I provide a general timeline to highlight the extended time period spent on the recruitment process. Identifying enough participants who fit the selection criteria proved to be one of the most challenging aspects of this study.

Recruitment

Recruitment began after Institutional Review Board (IRB) approval in September 2019. I contacted community college directors, added posts to social media, and explored network connections. Although several participants identified as interested, only three responded when I contacted them to explain the study. When asked to verify their time to completion, none of the potential participants were within their final four classes, although they had each completed at least their first year of community college.

In October 2019, I contacted the directors of DSPS at two local community colleges again. I filed the IRB form for each community college in mid-October. The first community college approved IRB at the end of November 2019. I dropped off flyers and emailed eligible students. Only one student was interested. After meeting with the student, they were deemed not to be a fit for this study due to challenges with transportation. No other students were recruited from this community college. Due to lack of success recruiting participants, I expanded the inclusion criteria to participants who had completed 1 or more years of college. I contacted the original three respondents again, and all three identified that they were still interested in participating.

The leadership team at the other community college (i.e., Community College A) approved the IRB submission at the end of January 2020, and I emailed students enrolled in DSPS. Many students replied quickly and indicated they were interested in the study. I attempted to set up an introductory phone or email conversation with each of the interested participants. If the student engaged in the phone or email conversation and indicated they were still interested in the study, I scheduled an initial interview. Six participants recruited from Community College A and three original participants found through network connections took part in the initial interview (see Table 3). These interviews were completed by the first week of February 2020.

Although all nine participants completed the initial interview, three participants withdrew from the study before the first focus group. One of the original three participants, found through network connections, dropped out of the study after getting hired as a flight attendant. He indicated the intensive training required for his job would not allow him the time to participate in the study. Another of the original three explained she did not have time to participate due to her class schedule and her commitment to the theater program at her school. The final participant, recruited from Community College A, indicated she was experiencing a health challenge. She then stopped responding after several attempts were made to identify a time for Focus Group 1. Participant dropout limited the diversity of the final group, as one student attended a different community college, one participant identified as Asian, and one participant identified as Hispanic. The six remaining participants all attended the same community college, and five identified as white.

Table 3: Participant Characteristics

Pseudonym	Age	Gender	Ethnicity	Self-reported Disability	Emphasis	Units Completed	Employment Status
Beri	20	Female	White	Autism, Learning disability in math	Associate's in Elementary Education, then transfer	17	Part-time
Birdie	19	Female	Vietnamese and Persian	Obsessive compulsive disorder	Associate's in Biology, then transfer	70	Not employed; volunteers
E.T.	21	Non-binary	White	Generalized anxiety disorder	Associate's in Chemistry, then transfer	84	Part-time
Jack	20	Male	White	Attention deficit disorder, Mild cerebral palsy	Associate's in Psychology, then transfer	10	Full-time
Jinx	21	Female	White	Dyslexia, Attention deficit disorder	Associate's in Physics and Mathematics, then transfer	57	Not employed
Tommy	27	Male	White	Bipolar disorder	Associate's in Graphic Design, then transfer	62	Not employed
Chris	21	Male	White	Visual Impairment	Associate's in Automotive Technology	4 semesters*	Full-time
Karen	28	Female	Hispanic	Rheumatoid arthritis, Attention deficit disorder	Associate's in Communication	6 semesters*	Not employed
Patti	19	Female	Asian and White	Learning disability in math	Associate's in Theater, then transfer	2 semesters*	Part-time

*Number of units completed was not verified due to participant dropout.

Population

Although the original population included SWD from community colleges in Southern California, the final population included only students attending Community College A due to challenges with recruitment and participant dropout. Community College A is a mid-sized (10,000-25,000 students) suburban community college. Most students identified as white, Asian,

or Hispanic. The majority of students were female. More than half of students were under the age of 24. About half of the students were labeled as economically disadvantaged as they received the Perkins Grant. About 5% of the students accessed DSPS.

Description of Participants

I chose the final group of six participants as they met the explicit criteria for participation and were willing to dedicate the time necessary to see the project through to the end. Participants ranged in age from 19 to 27. Three participants identified as female, two as male, and one as nonbinary. All participants identified as white, except for one who identified as Vietnamese and Persian. Disability labels varied, and some participants disclosed more than one disability. The most common disabilities were attention deficit disorder and specific learning disabilities. Three participants worked full or part-time while attending college. Three participants took a full-time course load, and the other three took a part-time course load. Four participants were in their final year of community college. Each participant was working toward their transfer requirements or associate's degree with intent to transfer. Majors varied, as did the amount of support they used from DSPS. I created short descriptions for each participant based on the information they provided. Participants reviewed their descriptions for accuracy. Each participant picked their own pseudonym, which I used throughout the research process to maintain confidentiality.

Beri

At the time of the study, Beri was 20 years old and identified as female. She used the pronouns she/her/hers. She described her ethnicity as white. At the time of the first focus group, Beri had completed 17 units and had four semesters remaining at Community College A. She was majoring in elementary school education and working toward transferring to a California State University. Beri had an IEP from elementary through high school. She registered for DSPS

prior to entering community college based on the recommendation of her case carrier. Beri identified as having autism and received services for anxiety and difficulties with mathematics (i.e., a specific learning disability). Beri identified the following accommodations as beneficial: preferential scheduling, extended time on tests, testing in a reduced-distraction environment, and the use of a calculator. Beri lived with her parents, was attending school part-time, and worked part-time.

Birdie

At the time of the study, Birdie was 19 years old and identified as female. She used the pronouns she/her/hers. She described her ethnicity as “half Vietnamese and half Persian.” Birdie had completed 70 units and was in her final semester at the time of the first focus group. She was majoring in biology, completing her associate’s degree, and transferring to a university in the fall of 2020. Birdie only attended Community College A and enrolled at age 16 after graduating high school early. Birdie had a 504 Plan in high school. She registered for DSPS prior to entering community college based on the recommendation of her personal therapist. Birdie received services for obsessive compulsive disorder. Birdie identified the following accommodations as beneficial: extended time on tests and testing in a reduced-distraction environment. At the time of the study, Birdie lived with her parents and attended school full-time. She did not work while in school but dedicated much of her time to volunteering at a local hospital.

E.T.

At the time of the study, E.T. was 21 years old and identified as non-binary. They used the pronouns they/them/theirs. They described their ethnicity as white. E.T. had completed 84 units and had two semesters remaining at the time of the first focus group. They primarily attended a different community college in the same district as Community College A, but they

were taking classes at Community College A this semester. They were majoring in chemistry and working toward transferring to a California State University. E.T. did not have a 504 plan or IEP in high school. They registered for DSPS at the end of their second semester after being recommended to do so by a campus-based psychologist. E.T. received services for generalized anxiety disorder and a diagnosis of attention-deficit/hyperactivity disorder (ADHD) from when they were younger. E.T. identified the following accommodations as beneficial: taking notes on their laptop, preferred seating, the ability to leave the room as needed, and grounding tools (e.g., headphones or a fidget). At the time of the study, E.T. lived with their parents, attended school part-time, and worked part-time.

Jack

At the time of the study, Jack was 20 years old and identified as male. He used the pronouns he/him/his. He described his ethnicity as white. Jack completed 10 units and had four semesters remaining. Prior to reenrolling after taking a year off to complete an internship for the Federal Emergency Management Agency, Jack was enrolled in community college for a year. He reported overenrolling in classes at that time, which caused him not to pass several. He has only attended Community College A. He was majoring in psychology and working toward transferring to a California State University. Jack had an IEP from elementary through high school. He registered for DSPS prior to entering community college based on the recommendation of his case carrier. He identified as having attention deficit disorder and mild cerebral palsy. Jack identified the following accommodations as beneficial: the use of a smartpen, the use of a notetaker, extended time on tests, testing in a reduced-distraction environment, and access to digital books. At the time of the study, Jack lived with his parents, attended school full-time, and worked full-time.

Jinx

At the time of the study, Jinx was 21 years old and identified as female. She used the pronouns she/her/hers. She described her ethnicity as white. Jinx completed 57 units and was in her final semester at the time of the first focus group. She was majoring in physics and mathematics, completing her associate's degree, and transferring to a University of California in the fall of 2020. She had plans to continue her education, and she wanted to get a PhD in physics. She only attended Community College A. Jinx had an IEP in elementary and middle school. She transitioned to a 504 plan in high school. She registered for DSPS prior to entering community college. Jinx was not recommended to DSPS by anyone. Instead, she knew she used accommodations in high school and researched how to receive accommodations in college. Jinx received services for difficulties with working memory, diagnosed as dyslexia (i.e., a specific learning disability), and attention deficit disorder. Jinx identified the following accommodations as beneficial: extended time on tests, testing in a reduced-distraction environment (specifically a private room), priority registration, seating at the front of the class, a smartpen, and notes if needed. In addition, due to the medication she took, she was able to bring water into the private testing room and take bathroom breaks as needed. Jinx lived in a lower unit of a multi-family home with her boyfriend. Her younger brother and mother lived in the upper unit. At the time of the study, she was attending school part-time and did not work.

Tommy

At the time of the study, Tommy was 27 years old and identified as male. He used the pronouns he/him/his. He described his ethnicity as white. Tommy completed 62 units and was in his final semester at the time of the first focus group. He attended one of the Universities of California prior to attending a different community college in the same district as Community

College A. After challenges with a professor, Tommy left and then enrolled at Community College A. He was majoring in graphic design and transferring to a California State University in the fall of 2020. Tommy enrolled in DSPS after being in community college for several semesters. He did not have an IEP or a 504 plan in high school. Tommy learned about DSPS through the course syllabi in each of his classes. Eventually, he followed up to see what accommodations DSPS offered. He received accommodations for a diagnosis of bipolar disorder. Tommy identified the following accommodations as beneficial: priority registration and extra time on tests and assignments if needed. At the time of the study, he lived with his parents. Tommy attended school full-time, and he did not work.

Data Collection

Based on the case study methods outlined by Stake (1995) and Merriam (1991), researchers who engage in qualitative case studies use observations, interviews, and document analysis. Researchers use multiple sources of data, known as triangulation, to attempt to balance the strengths and weaknesses of each method of inquiry (Denzin & Lincoln, 2005). This form of validation occurs throughout fieldwork and analysis and is meant “to assure that we have the picture as clear and suitably meaningful as we can get it, relatively free of our own biases, and not likely to mislead the reader greatly” (Stake, 2005, p. 77). To establish the validation that occurs with the use of triangulation, I used data from focus groups, interviews, the photovoice process, and researcher memos. Figure 1 provides an outline of the data collection and analysis process, which I discuss in the following subsections.

Figure 1: Data Collection Process

Interviews

Participants engaged in two individual interviews. Interviews were semi-structured (see Appendix B for interview questions) to “allow the researcher to respond to the situation at hand,

to the emerging worldview of the respondent, and to new ideas on the topic” (Merriam, 1991, p. 74). The semi-structured process allowed space for participants to develop a rapport with me and to share their ideas independently, where they were unlikely to be influenced by group-think mentality (Merriam, 1991). In addition, this format allowed the interview to flow more openly, like a conversation, and to collect data in a natural way, which was co-created with the participant (Hancock & Algozzine, 2011).

Because of the personal nature of the study, interviews were an important aspect of data collection. Namey et al. (2016) described interviews as more appropriate for studies of a sensitive topic or studies that include a more in-depth personal narrative. Participants feel more comfortable talking about issues in their everyday lives without constraints or guidance from others in individual interviews, which could limit potential embarrassment and result in more in-depth discussion and exploration of sensitive topics (Coenen et al., 2012). I asked participants to share about a potentially sensitive topic (e.g., their experiences with a disability) and provide insight into their challenges and successes. Because of the stigma associated with disability (Banks & Hughes, 2013; Garrison-Wade, 2012), I felt it was important to provide a space where participants could share without feeling judged. I shared a little bit about my background as a special education teacher and why I was driven to do this study with each participant. Although disclosing these two issues may have influenced participant responses in some way, I felt it was important to create an open and comfortable environment for conversations with participants as it lessened some of the unequal dynamics inherent in the interview process (Creswell & Poth, 2017).

Individual Interview 1

I completed the initial interview in person, at a time and location convenient to the participant. Prior to the initial interview, I asked participants where and when they would like to meet during a phone or email conversation. Interviews lasted approximately 35 minutes and provided an opportunity to build rapport with each participant. Prior to beginning the interview, I reviewed the consent form and the participant had the opportunity to ask questions about the consent form or project details. I audio-recorded the interview, along with all subsequent interactions, with consent of the participant.

The interview began with short-answer, demographic questions. These questions required little follow-up and allowed for the observation of verbal and non-verbal cues. As the interview continued, I asked questions to provide an opportunity for the participant to tell their story. I used the semi-structured interview process to elicit additional information from the participant to gain a better understanding of their experience. Questions used in the initial individual interview (see Table 4) were informed by Milsom and Sackeett (2018). However, I modified each question to reflect the uniqueness of this current study's purpose and participant population.

Table 4: Individual Interview 1 Questions

Current Study	Milsom & Sackeett (2018)	Alteration
	Tell me about factors that led you to transition from a 2-year to a 4-year institution.	Eliminated to ensure the interview did not begin negatively. Anticipated answers to an adapted question included: (a) I did not do well in high school, and (b) I did not meet the college entrance requirements.
Tell me about your experience as you entered community college.	Tell me about your experiences transitioning from your 2-year to your current 4-year institution.	Adapted to focus on community college.
Tell me about the resources (or people you interacted with) you used prior to, during, and after your transition to community college.	Tell me about the kinds of resources you used and the people you interacted with prior to, during, and after you transition.	Adapted to focus on community college.
Tell me about the things that helped or hindered your transition.	Tell me about the things that helped or hindered your transition.	Sub-questions added to clarify question.
a. What barriers have you encountered? How have you dealt with them?		
b. What support or resources have been most helpful in school, at home, or from other sources?		
Has planning or goal setting contributed to your success? If so, how?		Added, as research indicates goal-setting is an important aspect of success (Jameson, 2007; Virginia, 2005).

Individual Interview 2

I led the final interviews following the three focus groups. I conducted the interview through Zoom, a web-based meeting platform, due to restrictions put in place because of the 2020 COVID-19 pandemic. Final interviews lasted approximately 20 minutes, and I provided participants the opportunity to debrief. I wrote interview questions to provide a follow-up to the final focus group and conclude the study. I designed the questions (see Table 3-4) to be open-

ended, allowing participants to share information that was important and relevant to their experience.

Table 5: Individual Interview 2

Questions
1. Please share any information you believe could be beneficial for faculty, staff, or students to know to help others entering college.
2. What skills do you wish high school educators had focused on that would have been helpful to you as you entered college? What skills were focused on that you have not found beneficial?
3. Where are you now in terms of your experience as a college student with a disability and your feelings of success in your present life?
4. Did the group dynamic influence which photos you decided to share? If so, how?
5. Were there any photos you did not share or did not take but wanted to? If so, why not?
a. Can you tell me about them now?
6. In which format (focus groups or interviews) did you feel the most comfortable sharing? Why?

Participants seemed less engaged in the online interview, potentially because of the meeting platform. Each participant shared their classes had all moved online, and they were spending much more time on the computer. Thus, they may not have wanted to deeply engage in another online conversation. In addition, conducting interviews online resulted in a unique set of challenges, mainly connectivity issues and distractions. In three of the final interviews, there were connectivity issues. Although the interview continued despite these issues, participants may have had the desire to finish the interview before other problems with connectivity occurred.

Distractions varied. In one interview, a family member spoke to the interviewee, causing her to lose her train of thought. In another interview, the interviewee's sister could be heard talking loudly in the background. He continued the interview as he walked outside to find a quieter spot. Pets also proved to be a distraction. In two of the interviews, a pet walked by, and the interviewee took a moment to introduce them, breaking from the interview structure.

While the structure of the online-interview provided unique challenges, participants were still responsive and provided insight into their experiences. All participants shared they had enjoyed taking part in the study, and they found the experience in the focus group beneficial, as it validated their experience as a student and made them more aware of the strategies others used.

Interview Transcripts

After each interview, I wrote general thoughts and impressions in a memo for use during the analysis process. I also recorded the interviews using Otter.ai, a transcription software, and preliminary transcripts were available right after the interview. The preliminary transcripts had many mistakes. I performed a thorough review and edit of each transcript prior to the first focus group meeting, and I wrote memos to highlight commonalities and differences between the interviews. I shared transcripts with participants prior to the first focus group to ensure accuracy and honor participant voice. I provided transcripts from the focus groups and the final interview to participants at the end of the study.

Participants edited transcripts as they deemed necessary. Four participants engaged in the editing process and focused their edits on correcting the wording in their short biography. Jack clarified he was working full-time. Tommy clarified his accommodations of extra time on tests and assignments is as needed. Jinx wanted to highlight that, although she did not live in the same household as her family, she was living below them with her boyfriend. Birdie wanted to highlight that although she did not work, she volunteered in addition to school. Birdie also clarified a portion of her transcript where she discussed accommodations. She has access to preferential seating in the classroom, but had not used it because she was not comfortable doing so. Additionally, she asked for two other comments to be reworded to protect her anonymity. I

analyzed the other few edits, and identified them as unimportant. They included the addition or subtraction of small words to increase readability.

Focus Groups

To establish depth and breadth of knowledge, I held a series of focus groups to find out what could not be observed directly, including participants' thoughts, emotions, and observations from other points in time (Merriam, 1991). I used the group interview to allow for "the sharing and creation of new ideas that sometimes would not occur if the participants were interviewed individually" (Hancock & Algozzine, 2011, p. 44). Although group interviews can provide benefits when discussing disability status, participants may hesitate to share meaningful moments, or they may defer to others, thus, not all viewpoints may be captured (Hancock & Algozzine, 2011). By pairing group interviews with individual interviews, the researcher creates balance, and any negative effects from one type of data collection can be mitigated. Following the structure suggested by Agarwal and colleagues (2015), I brought the group together three times in a focus group format to discuss and analyze factors that led to college success. I used the photovoice method to guide the focus groups.

Focus Group 1

Due to participant time constraints, I ran the first focus group twice on the same day, 2 hours apart. Three participants attended each focus group. I designed the initial focus group to establish rapport with the participants and lay the foundation for follow-up meetings. I began the meeting with each participant sharing about themselves. I explained that each participant attended community college, had registered for DSPS, and consented to participate in the study. I confirmed that I would maintain confidentiality. I explained it was important that what each

person shared during our focus group time was not discussed outside of the context of the study. The participants agreed to keep our conversations confidential.

Next, I asked the participants to write down their definition of success and then share their definitions with the group. Most definitions had some overlap and focused on the success or achievement of personal goals. Reviewing these definitions helped lay the foundation for our continued conversations surrounding success. I then introduced the photovoice process. I used the facilitator's toolkit from United for Prevention in Passaic County (n.d.; see Appendix A) as a guide. We discussed what photovoice is and why it is used. We also talked about guidelines for taking photos (e.g., do not capture people's faces) and the ethics of taking pictures (e.g., Why would we not want to capture identifying characteristics? Should someone take pictures of others without their knowledge?; Wang & Burris, 1997). Additionally, we reviewed photography narrative examples and discussed how we would use the SHOWeD method to guide our conversation in the second focus group. The conversational exchange was limited during this time, as the focus was on the explanation of the photovoice process.

I ended the meeting by asking the participants to capture images that answered the following guiding question: What has (at home, in college, or in high school) contributed to their success in community college? Several participants had questions about this guiding question and wanted more clarification on what they could photograph. I reiterated it was open to their interpretation, they just needed to be able to take a picture of it and share how it related to their success with the group. In each of the focus groups, we talked through several examples provided by the students. While the rest of Focus Group 1 was not coded as there was limited conversation back and forth, I did code these examples. I made the decision to code examples provided by the participants, as they provided instant insight into student thinking. Several

participants brought up examples of which they later took pictures, while others did not take pictures of their examples. If the student did not take pictures of the example they brought up, we discussed these during the final interview. In these instances, participants shared it was too difficult to capture these photos.

Prior to the second focus group, I asked participants to share 3-6 photos with me via text or email. I told participants they would be asked to share at least two photos, and that they would have extras in case they decided not to share a particular photo once they were in the group setting. I then had these photos printed out. One copy was kept for the research project—with the participant's permission—and another copy was given to the participants to keep. One participant was unable to send in their last picture before they were sent to print. As the picture was meaningful to the participant, they printed it out at home and brought a copy to the second focus group.

Focus Group 2

When the second focus group convened, all participants were present. Brief introductions were made, as not all participants had met. We reviewed norms about confidentiality. We discussed the first three guiding questions in the SHOWeD method (i.e., What do you *See* here? What is really *Happening* here? How does this relate to *Our* lives?). E.T. volunteered to go first. They put up a picture of yarn and hands crocheting in a classroom. The others described what they saw. E.T. then explained what was really happening in the photo and how that tool was used as a means to maintain focus. Other participants shared and discussed why tools like that were needed. I asked if anyone had a picture that related. Jinx then shared a photo of her red notebook. The discussion continued as participants added related photos. Every couple of photos, I would pause the conversation to determine if we had a theme emerging. Collaboratively, we agreed on

the theme (e.g., anxiety and stress reducers, DSPS, study spots). When no one had a photo to add to a category, a participant would volunteer to add a new category or place a somewhat related photo.

After the initial two photos, we loosely adhered to the structure of the SHOWeD method. By not asking the questions specifically, the conversation flowed in a more organic way. Participants still discussed the information elicited by the three questions and maintained the goal of the SHOWeD method (Shaffer, 1983). The group remained focused on the specific topic of success until participants shared all of the photos that they were comfortable with sharing. We discussed how we would like to share our findings as part of the “What can we *Do*?” aspect of the SHOWeD method because the director of DSPS at Community College A had asked that I share my findings with her. I asked the group if this was something they would be comfortable doing, and the group consented. I then shared ideas about how this could be done, including writing a letter, creating a video, or developing a presentation. The participants decided they would like to collaborate to write a letter providing their recommendations for improvements that the college could make. Recommendations were provided in Focus Group 3. I gave participants a final opportunity to share any thoughts or feelings before we concluded the meeting. Prior to leaving, I asked participants to write a brief description about each of the photographs they brought to share.

Focus Group 3

I held the final focus group online due to restrictions put in place because of 2020 COVID-19 pandemic. Due to participants’ varying schedules, I ran the focus group twice. I ran Focus Group 3a with three participants, and then I ran Focus Group 3b 1 day later with three participants. Each session lasted approximately 30 minutes. In the third focus group, we explored

the final two questions presented in Hergenrather et al.'s (2009) version of the SHOWed method (i.e., “How can we become *Empowered* through our new understanding?” and “What can we *Do*?”). During the first focus group (i.e., Focus Group 3a), I took notes to create a preliminary draft of our recommendation letter. This portion of the study allowed for the often-missing voice of people with disabilities to be heard (Whitney, 2006) by engaging in “voicing our individual and collective experience [notice the acronym VOICE]” (Wang & Burris, 1997, p. 381). During Focus Group 3b, I asked participants to provide recommendations prior to divulging what the other group had shared. This created an opportunity to capture original thought. I then showed Focus Group 3b what Focus Group 3a had outlined. This allowed Focus Group 3b to expand upon the ideas of the Focus Group 3a. After the conclusion of both focus groups, I drafted the letter based upon the outline created with the participants. This letter will be provided to the Director of DSPS at the completion of the dissertation process.

Focus Group Transcripts

I recorded all focus groups using Otter.ai. The transcriptions were very poor quality—except for Focus Group 1—likely due to the number of voices being captured. I sent audio from Focus Group 2, Focus Group 3a, and Focus Group 3b to a transcription service to be transcribed. Upon receipt, I edited the transcripts for accuracy. I shared the transcripts with the participants before the final interview. None of the participants had suggestions or edits.

Data Analysis

As previously highlighted, I conducted data analysis throughout the study. I completed the preliminary analysis in the form of writing researcher memos after interactions with participants. If participants shared data linked to the literature or other participant's experiences,

I made notes in the researcher's memos. Finally, I completed researcher-driven coding to refine codes and ensure I captured all important data from the interviews and focus groups.

In addition, participants made themselves available via email to answer questions that emerged during the transcription and coding processes. The follow-up email process was twofold. First, I used it as a means to clarify that I had interpreted participant meaning correctly. I sent a few brief emails. Second, during the data analysis process, anxiety emerged as a key factor in student success for every participant. I sent an email to each participant inquiring: *How often do you experience anxiety* (i.e., *Always, Frequently, Sometimes, Seldom, or Never*)?

I also asked students to include a description about how their anxiety impacted them most often at school. Each participant responded quickly, except for Jinx and Beri. I sent a follow-up email to each of them and then received a response. While mental health was not the focus of this study, this information was integral in providing a foundation for interpreting the data. This information also provided information as to why verbal responses were, at times, minimal.

First-Level Coding

In the second focus group, we discussed photos and identified categories in which the photos fit, even if the category only held one photo (e.g., family/spiritual support). We created these categories based on the participant's language, and they evolved naturally out of the discussion. I relied on an inductive approach during this coding, where codes emerged from repeating ideas in the data (Elo & Kyngäs, 2008). The coding process followed an In Vivo-like process, where I created category labels from words or short phrases used by participants (Saldaña, 2016). This In Vivo-like process closely aligned with my goal of honoring participant voice (Saldaña, 2016). However, it is important to note that through the co-analysis process, I allowed multivoiceness (Moss, 2004) to flourish, and interpretation was not limited to one

person (Stake, 1995). True In Vivo coding was not done, due to the group format, and thus, it is important to note some participant voices may have been minimized if they remained quiet or were reluctant to share. In the following example, I highlight how I created codes and how the codes evolved through participant discussion:

Shayne: *Technology. All right. Do we need a new category?*

Tommy: *One of mine is like a place to study. That's like my own place. You're going to need to have like a desk where I can kind . . . Like working on my bed, I just don't enjoy for very long.*

Shayne: *Is that something like on campus? At your house?*

Tommy: *It's mine yeah. It's at my house. It's like technology adjacent. I don't know. Put it over here? [Refers to a spot on the whiteboard near the technology pictures.]*

Shayne: *Put it over here. We'll start a new line.*

Shayne: *What do you want me to label it?*

Tommy: *Personal study place.*

Shayne: *Anyone else have anything related to studying?*

Beri: *Yup. Libraries.*

Shayne: *And you told me you don't use the Community College A library, right?*

Beri: *Nope.*

Shayne: *So, tell us. How come?*

Beri: *I prefer that library because it's closer to my house. And I live just down the street from it. And I have this friend who comes over there too. So, we'll hang out. He'll like relieve my stress because he's really fun to talk to.*

Shayne: *So, this is something close to home, but not at home. Should we expand this to study spots? [nonverbal agreement from several participants]*

Birdie: *Yeah. I have a study spot too. It's the bio building at Community College A.*

Shayne: *Why that building?*

Birdie: *It's a very modernized building. I just really like it. It's all open. As you can see it's floor to ceiling windows. And also faces a certain way where the sun sets and I can see the sunset too. So, I really like it. Also, the people there . . . It's really quiet. The people there are usually studying sciences too. So, I really like that too. It just smells nice. It's very open. I don't feel like I'm in an enclosed area. So, it's kind of similar to nature. I like open spaces. This is as close as it gets to an inside, but also outside.*

While, Tommy's original label, *personal study space*, captured something that was private and just his, the category expanded to include other study spots that were desirable due to their proximity to participants' homes, social connection, and connection to nature (which participants identified as relaxing). By creating and refining categories, this co-analysis analysis served as the initial step in organizing and identifying patterns.

Second-Level Coding

I conducted a second cycle of coding analysis to pull out themes from the interviews and focus groups. When coding, I reviewed previous researcher memos. I pulled coding categories from the literature and co-analysis, which occurred during Focus Group 2. This style of coding most closely aligns with provisional coding, where a provisional list of codes is gathered from preparatory work, like literature reviews, pilot studies, or previous research findings (Saldaña, 2016). While Focus Group 2 was not a previous study, it did provide a set of provisional codes to apply to the interviews and focus groups.

I facilitated the coding process through the use of NVivo software. I used major themes from the literature and categories from Focus Group 2 to label individual nodes. Then, I used these nodes to aggregate and segregate the data into categories. During the coding process, I revised and modified codes. For example, students identified “accommodations” as a category. During coding, I split this category into three codes: (1) beneficial accommodations; (2) challenges using accommodations; and (3) unused accommodations. The division of codes into smaller units facilitated the capture of nuances surrounding faculty interaction. I added new codes to capture data that did not fit into existing codes. I used this analysis to inform the data collection process during the final interviews. I asked targeted questions to follow up on missing or unclear information. Once Focus Group 3 and the final interviews were transcribed, I coded them using the same categories and same code refinement process.

Third-Level Coding

A third cycle of coding allowed for a thematic recoding of data. Throughout this cycle of coding, I pulled quotes from the data and the codes continued to be revised. By theming the data, I grouped conceptually similar codes together, while other codes were dropped if they seemed redundant (Saldaña, 2016). During this cycle, my goal was to identify “thematic statements culled directly from the participants’ own language that succinctly captured and summarized a major idea” (Saldaña, 2016. p. 200). I continued to write memos to identify what relationships existed between themes and how these themes related to the overall topic of success.

Photo Analysis

In total, I analyzed 23 photographs from the six final participants. Participants visually illustrated their experiences with the use of photo participation, which created a more inclusive experience and an opportunity to overcome communicative barriers (Aldridge, 2007).

Experiences of more vulnerable respondents, who did not respond easily through commonly used talk methods, were captured through the use of photographs (Aldridge, 2007). This secondary source of data was an important addition for participants like Beri, who gave short answers throughout the interviews and shared little during the focus groups.

I asked participants to write brief descriptions of each of their photographs. During the photo analysis process, I coded each photo and description using descriptive coding to create a detailed inventory of contents (Saldaña, 2016). This content-based coding provided an important basis for which to identify subtle shifts between interview data and focus group data, which I discuss in greater depth in Chapter 4.

Researcher as an Instrument

Researchers who use the qualitative method become a key part of the data collection process, as their interaction with participants are integral in constructing and interpreting data (Creswell & Poth, 2017). Their observations and examinations become critical to the research, as are the interview questions or selected style of interviewing (Creswell & Poth, 2017). Therefore, the researcher's assumptions and decisions are an important part of how others interpret qualitative research.

My experience leading up to and how I approached this study are detailed in Chapter 1. My decision to use case study and photovoice stem from a belief that these were the best methods to examine aspects related to student success. I assumed photovoice was an important method to include as researchers who use it increase participants engagement, preserve student voice, and help produce knowledge that can be beneficial to participants, researchers, and outside stakeholders.

I assumed the inclusion of both individual interviews and focus groups would provide options for students to share openly and honestly about their experiences. While the focus was on student success, I also assumed students would speak to barriers to their success. These barriers thus would become important aspects for college administrators to address. Throughout the study, I give detailed explanations of my choices and conclusions.

Trustworthiness

In qualitative research, there is no universal standard of acceptability, but rather, each researcher must attempt to show how they created a quality study (Ferguson & Ferguson, 2000). Moss (2004) noted, “Rigor is not a matter of strictly following procedures that have emerged in other researchers’ work but more a matter of building solid structures within the context in which one is working” (p. 362). In this study, I employed a variety of methods to establish trustworthiness. These included multiple methods of data collection (e.g., focus groups, individual interviews, and photos) and the inclusion of multiple perspectives throughout data collection and preliminary analysis (e.g., the participants and researcher’s memos). Use of multiple types of data and multiple perspectives are referred to as triangulation and used help to guard “against viewing events in a simplistic or self-serving way” (Anderson & Herr, 1999, p. 16).

In addition to triangulation, I followed three recommendations to establish trustworthiness as outlined by Saldaña (2016) in *The Coding Manual for Qualitative Researchers*. First, Saldaña (2016) recommended coding as data are being collected. After the initial interviews and again after the first two focus groups, transcripts were created and I completed preliminary coding. Preliminary coding provided an opportunity to identify important elements and identify when there was a need for additional data (Saldaña, 2016). Areas in which

additional data were needed were followed up on in future meetings. Second, Saldaña (2016) recommended increasing credibility by member checking, or checking with the participants themselves to validate findings and honor participant voice. Member checking was done after the initial interview and the final interview by providing transcripts and biographies to the participants for review. Member checking was also done during the individual interviews by asking interviewees if their responses were interpreted correctly (e.g., “From what I understand you said _____. Did I interpret that correctly?”). Finally, Saldaña (2016) recommended creating copious analytic memos. I created these memos after the interview sessions, during the transcription process, and during coding.

These researcher memos allow for contextual descriptions and documentation of shifts in mood during the interview and focus groups (Creswell & Poth, 2017). Furthermore, memos served as a record of emergent themes, thoughts, interpretations, and further directions for data collection (Vaccaro et al., 2015). These researcher memos, paired with prolonged engagement with participants, allowed for the creation of rich, thick descriptions. The abundant, interconnected details found in these descriptions allowed for others to make decisions about transferability (Creswell & Poth, 2017; Stake, 2010). By utilizing rich, thick descriptions of participants and the research process, an opportunity was created for others to transfer information to other settings based on shared characteristics (Creswell & Poth, 2017). Additionally, by including participants in the data-taking and analysis process, they were able to play a major role in the case study by providing “critical observations or interpretations” (Stake, 1995, p. 115), ensuring that the interpretation of the data was not limited to one person. The participants’ involvement in the analysis process also worked as “a participatory democracy, where multiple voices or multivoicedness is allowed to flourish” (Moss, 2004, p. 363).

Fidelity

Positioning participants as co-researchers provided another opportunity for validation. I positioned the participants' voices as valuable in this research process and helped to ensure their stories were told accurately and respectfully. Moss (2004) identified this aspect of trustworthiness as fidelity. Fidelity is established when the researcher acts with integrity and authenticity, preserving the dignity of the participants. Through this co-creation, we arranged the events into a meaningful story. By working together, our engagement had the potential to move beyond research. That is, by working together, we created recommendations for action. These recommendations highlighted the voices of the participants and, through their action, may benefit other SWD who have been a marginalized group.

Ethical Considerations

Chapman University adheres to the protection of human subjects outlined by the Department of Health and Human Services. All research involving human subjects must be reviewed and approved by the IRB prior to beginning the project. Ethical considerations also included protecting participants from coercion or harm.

To protect participants from coercion, I informed them about the nature of the study prior to their first interview. Together, we reviewed the informed consent form, which highlighted the risks and benefits of participating in this study. I informed participants that potential risks included loss of confidentiality; however, I put steps in place to minimize that risk. These steps included storing data on a password-protected computer, use of pseudonyms, destruction of audio recordings 6 months after transcription, keeping personally identifying information confidential, and group conversations about maintaining confidentiality. The consent form noted

participation in this study was voluntary, and participants could decline participation or withdrawal from the study at any point.

Summary

In this study, I used case study and photovoice methodology to explore the success of SWD at the community college level. I designed this study to give students an opportunity to share their voices, reflect on their experience, and give back to their community. I used individual interviews and focus groups to collect data on what aspects of home life, college life, or high school preparation contributed to their success in community college. Participants and I co-analyzed data during the second focus group. The categories formed with the participants provided a foundation for further analysis done by the researcher. Throughout the analysis process, I made an effort to maintain student voice. Finally, I provided a detailed description of the research study to establish trustworthiness.

CHAPTER 4—FINDINGS

In this Chapter, I first provide the research questions, followed by the findings of the study. These findings include the results from the conversation analysis, the results from the photo analysis, and the participants' recommendations. This chapter concludes with a summary.

Research Questions

GQ. What home, college, and/or high school aspects do students with disabilities perceive as contributing to their success in community college? To what extent do these factors contribute to their success?

SQ1. How do students with disabilities experience the transition process from high school to community college?

SQ2. To what extent, if any, do students with disabilities use supports during their years in college?

SQ3. To what extent, if any, did any aspects of self-discovery contribute to college success?

SQ4. What do participants want others to know about supporting students with disabilities at the community college level?

Results from the Analysis of the Interviews and Focus Groups 1 and 3

This chapter captures the expertise of SWD as they identified aspects of their life integral to their success. In this section, I present an analysis of the data collected during the initial individual interviews with all nine participants, combined with the analysis from the final individual interviews with the six participants.

As discussed in the previous chapter, two individual interviews and three focus group sessions were conducted with participants. I conducted the initial interview with nine

participants, three of whom (i.e., Chris, Karen, Patti) dropped out due to challenges with the time commitment. As such, there is limited data from those three participants; thus, their voices are less represented in the findings. The six remaining SWD participated in three focus groups and a final interview. Driven by the photovoice methodology, the six participants photographed aspects of their lives they identified as being important to their success. I analyzed the data from the interviews and focus groups separately from the discussion of the participant photos.

Coding and Analysis Process

Coding occurred after the collection of the initial interview and three focus groups. I derived the codes from the participant photo categories suggested in Focus Group 2, directly from the focus groups and interviews, or from the literature (as suggested by Saldaña, 2016). This coding style most closely aligns with provisional coding, where researchers gather a provisional list of codes from preparatory work, like literature reviews, pilot studies, or previous research findings (Saldaña, 2016). Some of the participants' categories were broad, and thus I broke categories into smaller segments. For example, students identified accommodations as a category. During my coding process, I split this category into three codes: (1) beneficial accommodations; (2) challenges using accommodations; and (3) unused accommodations, to best capture the nuances surrounding accommodations.

The analysis I conducted informed the data collection process during the final interview. I asked targeted questions to clarify gaps in the data. Once I transcribed the final interviews, I coded them using the existing codes and newly created codes. I completed a third and final round of coding to thematically organize the codes into overall themes. Table 6 presents a summary of the different categories identified with the participants, the codes added during the second level of coding, and the thematic organization done during the third level of coding.

Table 6: Overview of Identified Themes for Interviews and Focus Groups 1 and 3

Codes	Enumeration of Appearance	Subthemes	Themes
Academic preparation	13	College Readiness	Engagement with learning
Transition preparation	15		
College as “freedom”	14		
Campus resources not utilized	3	Campus resources	
Lack of knowledge about campus resources	9		
Utilization of campus resources	11		
Mental health as a barrier	5	Mental health	Health and wellness
Mental health supports	2		
Promoting health/wellness	3	Self-care	
Stress Reducer	6		
Organization	6	Self-awareness	Self-reliance
Time management	18		
Disability related needs	5		
Goal setting	7	Self-determination	
Problem-solving	4		
Self-advocacy	10		
Self-reflection	15		
Interaction with DSPS counselors	20	DSPS Counselors	
Interaction with non-DPSP counselors	14		
Unavailability of DSPS counselors	7		
Registering with DSPS	11		
Family support	25	Family and Peers	
Financial support from family	10		
Older sibling leading the way	5		
Study groups	3		
Peer interaction	15		
Lack of peer interaction	2		
Lack of support	10	Faculty	
Faculty mentors	4		
Setting students up for success	9		
Accepting of diverse students	10	Promotion of diversity	Diversity and inclusion
DSPS center	9		
Beneficial accommodations	19		
Lack of understanding about disability	7	Barriers to inclusion	
Students feeling targeted	7		
Difficulty being different	13		
Disability Stigma	13		
Challenges using accommodations	12		
Unused accommodations	5		

I reduced the elements of success into five themes: (1) engagement with learning, (2) health and wellness, (3) self-reliance, (4) trusting relationships, and (5) diversity and inclusion.

Each theme had two or three subthemes, which I discuss below. Following this section, I present the findings that resulted from the photo analysis and analysis of Focus Group 2, followed by the participants' recommendations during Focus Group 3.

Engagement with Learning

In this section, I examine engagement with learning and the two subthemes that arose from the coding process. The first subtheme is college readiness and the second is campus resources. Both of these subthemes will be discussed in the following sections.

College Readiness

Eight participants (i.e., Beri, Beri, Chris, E.T., Jack, Jinx, Karen, and Patti) highlighted that attending college was a shift from high school. The students explained that in college, they had more freedom. They could choose their areas of study, their professors, and times of day they were on campus. The college experience also required students to operate with a certain level of independence. Birdie shared that college was a transition from high school, as *“they don’t hold your hand as much. There’s no homework. You’re very much in charge of your own time, and own studies. It’s really up to you to be on top of things.”* Beri echoed a similar experience, explaining:

You’re on your own. The professors don’t really look to your name twice. And as far as grades go, you get what you get. They’re not gonna email you, ‘turn in your homework, turn in your labs.’ They are not going to remind you to turn in your assignments. You have to depend on the syllabus for all that information.

This level of independence required students to be prepared academically and have systems in place to support their organizational skills and time management. For Tommy and Jinx, writing things down was an important part of their organizational process. Tommy explained, *“I gotta*

set myself up to rely on me. I need to write myself notes,” while Jinx shared she has a planner where *“I can write it down and not have to try to remember that I need to remember it.”* Writing things down ensured they did not forget what was needed to get done and therefore they did not need to rely on others for reminders.

For Beri and E.T., having a consistent time to study each day ensured they did not procrastinate. E.T. shared they specifically organized their class *scheduled “so that I had a couple hours in between classes. That way, I could go to the library and study because I do have a difficult time going home and making myself do a lot.”* While these skills were necessary for student success, students learned these skills over time, through trial and error. Students provided examples of what worked and what did not, showing they used self-reflection to evaluate successes and failures. These examples discussed further in the self-reliance section.

High School Academic Preparation. High school preparation appeared to vary from student to student. Some participants (i.e., Birdie, E.T., and Jinx) shared that the classes they took in high school were as rigorous as their college classes, and thus they felt academically prepared for college. Other students, particularly those with IEPs (i.e., Beri, Chris, Jack, and Patti), indicated that college classes were not as easy as their high school classes. Jack stated that he was not as academically invested in high school, and because of that, his teachers were *“more focused on just having me graduate. They weren’t really too concerned about college. They even said, ‘If he doesn’t graduate on time, that’s okay.’”* Jack felt as though the focus on graduation instead of college was due to his disability. He wished teachers had instead set high standards and treated all students equally, *“even though some of us might have a harder time.”* Access to rigorous classes would have helped ensure Jack was prepared for the content he encountered in college.

Beri shared that she felt college was more challenging because there was no academic support class embedded into her schedule, and now “*you have to do everything on your own.*” Although Jinx did not express that college classes were more challenging, she also found the academic support class she took in high school to be important for her success. She indicated that class was beneficial as it gave her a cushion of extra time embedded into her schedule. In addition, because the support class was English focused, she could start papers a week in advance and get help along the way if she needed it. This targeted support set her up for success in her English classes at community college, as she knew what supports to use to be successful. Tommy also shared:

I took a study skills course when I was in Middle School. If I hadn't taken study skills somewhere in my life, I wouldn't understand what I was doing. I would just be shoving knowledge in, and I wouldn't understand about having a plan and feeling like knowing things is worth doing. So yeah, without a study skills course, I wouldn't know so much.

Thus, a focus on study skills at some point in secondary school appears beneficial for students. It helps them organize their learning and develop the skills needed to be independent learners in college.

Transition Preparation and Support Enrolling in DSPS. All of the final six participants were either only children or the oldest of their siblings, meaning they were the first children in their family to attend community college. They reported filling out college applications mostly independently, although they did get some help from their parents while filling out financial aid forms. Tommy, Jinx, and E.T., who are all the eldest siblings, shared that now they know how to complete the community college enrollment process. They shared, all

with a sense of pride, that they can now provide support to their siblings who enroll in community college.

Beri, Chris, Jack, and Patti, who all had IEPs in high school, reported receiving some support with their applications from their case carriers in high school. Their case carriers also encouraged them to apply for DSPS and helped them acquire the paperwork needed to verify their disabilities. They reported engaging in minimal transition activities in high school, and none of them could provide specific details about any transition activities beyond receiving help with their application. Jack shared that his transition to community college was *“pretty good because I already had the layout of the campus.”* He was familiar with the campus as he took a community college class while in high school. He also went to the DSPS open house night while still in high school, which helped him find the office and provided him with information about applying for services.

E.T. and Birdie were encouraged to apply for DSPS by their therapists, who also provided them with the necessary paperwork. E.T. applied for DSPS several semesters into college. They shared that in high school, they attended a senior day at the career center. At that point, E.T. had not completed any 4-year college applications, so they knew they would attend community college. E.T. received little support from the school; however, they shared they had family support:

I was so petrified of anything that had to do with me taking steps forward. I had no idea how to do it on my own, and my parents were absolutely there helping me, holding my hand, the whole way. But they had no idea how to do any of it either.

Birdie, who also had support from her family, stated that she graduated high school early and enrolled in community college when she was 16. Due to her age, her parents supported her in

enrolling and registering with DSPS. However, she shared that her therapist was integral in helping her during her transition to community college as *“it’s definitely better when there is a professional that knows what she is talking about and knows how to deal with my disability.”*

Overall, students relied on a variety of people for support in their transition to community college. These people included family members, high school staff members, doctors, and therapists.

Campus Resources

Students identified a variety of resources that were important to their success. These resources included campus programs—specifically DSPS, Equal Opportunity Programs and Supports (EOPS), and the student health center.

Identifying DSPS as a Resource. While students identified a variety of beneficial resources, they also shared that resources were hard to find. Birdie explained that she *“learned about the DSPS center from my therapist. Otherwise, I don’t know if I would have reached out to them or known that they were there.”* Birdie also stated that if she found DSPS on her own, she probably would not have gone in due to the name. Birdie explained she believed someone who used disability services would be more significantly impacted by their disability than she is. Jack shared a similar story about a peer with dyslexia. He explained his friend did not seek out DSPS services, as she believed she would not qualify. He identified that when professors review information about disability services, they explain:

‘If you have things that are protected under the ADA please contact DSPS.’ But, they don’t really [identify] somethings that people might not think about like dyslexia or ADHD, or some of those things that people don’t think are as severe.

This confusion about what types of disabilities qualify for services occurred again during discussions with E.T. They acknowledged that more advertising would be helpful to identify “*what the services are [on campus] and who specifically they’re for*” as many of the services “*are more general than most people assume.*” They believed that more explicit details about services would help students identify if they could benefit from those resources. As Jack identified, the way faculty frame conversations about disability services may help students understand who may qualify for support. Instead of reading a generic description, it would be valuable for faculty to detail the types of services offered and disabilities supported by DSPS. While this information is available on the DSPS website, none of the final six participants were aware that DSPS had a website.

Jinx, Tommy, and Karen found DSPS independently and acquired the necessary paperwork on their own. Tommy and Karen learned about DSPS from faculty’s syllabi in their college classes and decided to check out the DSPS center to see what supports were available. Tommy received verification of his disability from his therapist, which was not initially accepted by DSPS, as it was too broad. Karen received verification of disability from her doctor and did not encounter any challenges. Jinx researched how she could continue to get accommodations when at community college. Through her research, Jinx found the DSPS center and collected the necessary paperwork from her IEPs and 504 plans needed to verify her disability. She was told by DSPS staff that she needed to update the testing for her disability, which she could do for free through DSPS. Jinx reported that this was beneficial, as now she has updated testing to take with her to a 4-year university.

Other Campus Programs. As discussed above, all students identified DSPS as beneficial. Five students (i.e., Birdie, Chris, E.T., Jack, Karen) also identified the tutoring center

as useful, even though they did not regularly use it. All students on campus have access to tutoring services; however, the amount of time they can spend in the tutoring center is limited each week (i.e., one hour per class per week). With their accommodations, most of the participants received extended time in the tutoring center to get extra support.

Patti and Karen identified EOPS as beneficial to their success. Qualification for that program is income-based, so not all students have access. Patti stated that EOPS helped her pay for food and books, while Karen explained EOPS helped her pay for books and supplies. Karen also relied on EOPS for academic counseling, as they *“help you choose what classes you need for whatever major.”* She preferred to use EOPS for academic counseling rather than DSPS, likely because she did not enroll in DSPS until later in her college career. EOPS appears to be a beneficial program for students as it can help alleviate some of the financial burden associated with attending college.

Student Health Center. Only E.T. identified the Student Health Center as beneficial. They explained that they did not initially know this support existed, however:

I eventually found it because of the brand new science building, which is my favorite [building]. I was so excited I got to take what I felt like my first real college courses where I was actually doing things pertaining to my major. In this brand new building, they had posters in the bathrooms that had the Student Health Center information that say like, ‘we can help if you don’t have anywhere to sleep at night, if you need food, if you have psychological needs we can write your prescriptions.’ We have this here on campus, and you get it for the \$20 health fee.

After seeing the posters, E.T. went to the Student Health Center, as they were at a low point, where *“I couldn’t make myself happy anymore.”* E.T. began to see a school therapist regularly,

who diagnosed them with Generalized Anxiety Disorder. E.T. shared that through continued therapy and medication, “*things have gotten a lot better. Things have really turned around.*” E.T. credited the Student Health Center with their success and shared that they wished more students knew about it.

Health and Wellness

Health and wellness was a reoccurring theme throughout conversations with the participants; however, participants shared most openly when they presented their photos during Focus Group 2. Information provided during the interviews and Focus Group 3 centered around the impact of mental health and the importance of self-care, which will be discussed in this section.

Mental Health

During the interviews and the focus groups students shared that poor mental health created a barrier to their success. While students saw personal therapists, mental health counselors on campus, or spoke to DSPS staff as they needed support, they also had various techniques they used to reduce anxiety and stress. Each of the six final participants spoke to methods they used to reduce anxiety and stress, which are presented in the analysis of Focus Group 2 following this section. The frequency in which participants discussed anxiety was surprising. As such, a follow up was sent to students to identify how often students experience anxiety (i.e., Always, Frequently, Sometimes, Rarely, Never). The results are shown in Table 7.

Table 7: Frequency and Effect of Anxiety

Participant	Disability	Anxiety Frequency at School	Impact of Anxiety
Beri	Autism, Learning disability in math	Sometimes	<i>"I sometimes have anxiety on campus. However, I always have anxiety when I am required to give a presentation or work in groups. It affects me the most because I freeze up and can't continue. I also get anxiety during math tests, but it isn't as bad as it used to be because I'm not taking math anymore."</i>
Birdie	Obsessive compulsive disorder	Always	<i>"I experience anxiety always, but I use techniques I learned from therapy to manage it. It most often impacts me in-class, such as during discussions or taking notes, and very prominently during exams."</i>
E.T.	Generalized anxiety disorder	Always	<i>"Always, but I have generalized anxiety disorder. I was driven to take the excused withdrawal weeks ago. My brain isn't wired for online learning. In the classroom, my anxiety typically revolves around sound and trying to keep up with what's going on. The ADHD doesn't help with that, and in the end, it's homework that freaks me out more than anything else!"</i>
Jack	Attention deficit disorder, Mild cerebral palsy	Frequently	<i>"I am anxious about what others think about me, so I won't talk in class usually. It is hard to share because I think about what if they don't like me for what I say. Once I get more comfortable and have some time to shared one on one with people it gets easier."</i>
Jinx	Dyslexia, Attention deficit disorder	Always	<i>"Anxiety decreases my confidence. A lower self-confidence negatively affects my academic ability to achieve things that I would normally be able to achieve. For example, anxiety makes me second-guess myself during quizzes and exams thus causing me to waste time and subsequently receiving a lower grade. Anxiety causes me to not believe in my ability to do the work that is assigned to me, thus, leading to procrastination of the work. Once I get over the anxiety I do not have enough time to do the work properly."</i>
Tommy	Bipolar disorder	Always	<i>"I frequently have anxiety at home, and always have anxiety in class. My anxiety is a huge challenge for me because it makes it really hard to participate in class, as anxiety causes me to say what I'm thinking out of order, too quickly, or keeps me from participating altogether. Often times I will even write down what I want to say, and when I try to read it, I still fumble around with the words. It also makes it incredibly hard to have conversations with other students in the classroom, which makes me feel secluded and furthers the severity of my anxiety."</i>

Four of the students mentioned that they always have anxiety, one had anxiety frequently, and one had anxiety sometimes while on campus. Anxiety impacted each student uniquely; however, there was some overlap. Five students (i.e., Beri, Birdie, Jack, Jinx, and Tommy) explained they had anxiety during discussions, which impacted their ability to interact with others. Tommy expressed that his anxiety causes him to “*fumble around with the words,*” while Beri revealed that anxiety causes her to “*freeze up.*” Three of the students (i.e., Beri, Birdie, and Jinx) had anxiety during test-taking. Jinx explained that it caused her to second-guess herself and waste time, highlighting the importance of extended time during testing. Two students (i.e., E.T. and Jinx) shared that anxiety impacted their ability to do homework. For E.T., the format of classes was also impactful, and the shift to online learning required because of COVID-19 resulted in them taking an excused withdrawal in their classes, which set them back an entire semester.

Self-care

The participants also shared self-care techniques that they regularly used to reduce stress. These techniques included things like exercise, eating regular meals, taking baths, and being in nature. Students also engaged in hobbies like playing video games or watching favorite television shows. While these hobbies were fun for students, both Jinx and Birdie revealed that playing video games was also a procrastination tool. Specifically, Birdie shared:

I would use games as a way to escape. If I had a lot of homework, I'd be like, 'oh, let me just play games.' I would tell myself, 'oh, I'm reducing my stress.' But it's really not reducing your stress. So, it's easy to mix up what's a stress reducer and what's a, let's say, a distraction from life, is.

She explained that now, she requires herself to engage in a certain amount of study time before playing games.

Overall, feelings of anxiety impacted each of the six participants, regardless of their disability label. This anxiety led to class challenges, particularly when having class discussions or taking tests, and challenges outside of class when trying to do homework. Each participant identified activities in their life that contributed to self-care and helped reduce their stress and anxiety.

Self-Reliance

Students shared their need to be more independent in college. Self-awareness and self-determination skills were essential factors that contributed to their success.

Self-awareness

Participants (Birdie, Chris, E.T., Jack, Jinx, Karen, and Tommy) provided examples of how self-awareness contributed to their success. Specifically, participants revealed their areas of need and how they support themselves. Chris spoke about his learning style. He shared, “*making sure a professor’s teaching style matches your learning style is really important. There was one class where I didn’t listen [to the reviews on] Rate My Professor. And that was by far the worst class I’ve had.*” By choosing professors whose teaching style aligned with his learning style, he set himself up for success. Similarly, Karen identified her areas of need and used campus resources (i.e., tutoring) to help herself. She explained that school is challenging because:

Even to process certain items from the syllabus, or if we have a writing assignment or something, I need help. I need someone to be next to me and tell me, ‘this is what it means,’ ‘you need to do this’ so I can understand what’s going on.

While Chris and Karen highlighted awareness about specific areas of need, Jinx and Jack spoke about disability and the impact of a disability label. Jinx openly discussed her disability and the

supports she needed to be successful. She also spoke to an awareness about disability in general. She shared:

Being successful, what it looks like for one person, is not going to be the same as it looks like for somebody else, and you shouldn't feel bad or weird just because you learn different. [...] You have to accept that everyone learns a little bit differently, and figuring out what like, helps you learn... accepting that and then integrating those tools into your planning, I think, is, I think, is obviously really important for everyone's success.

Similar to Jinx, Jack spoke openly about how his disability impacts him and what supports and processes he has in place to mitigate the impact. While Jack was aware of his needs, he also experienced limiting beliefs from others due to his disabilities. He explained, “*having a disability no matter how small or how big, is not the definition of who you are.*” He saw himself as more than just someone with a disability and wanted others to see him that way as well.

Self-advocacy. The participants identified that self-advocacy was important to their success. For all nine students, an important part of self-advocacy included recognizing they needed DSPS support and then following through to get that support. While most of the students were referred to DSPS by high school staff or therapists, enrollment in DSPS still required students to follow through and provide the necessary documentation. Once enrolled, students were required to advocate for themselves with faculty to use their accommodations. This required students to give faculty a paper with their accommodations and typically have a conversation about how the accommodations would work for that particular class. Jinx discussed her typical interaction with faculty:

I tell them who I am and that I'll be recording the lectures, and I may need additional notes, I might take pictures of the board, and I have to find out what they're okay with.

Most of the time, if you can identify what your needs and wants are, they'll meet you either halfway or they'll try to accommodate you the best that they can within the law.

She highlighted making a connection with the professors and advocating for herself is beneficial, as she can access the accommodations she needs. E.T. echoed that statement when they discussed how professors have allowed them to use accommodations, like wearing headphones in class, even though DSPS staff at Community College A did not approve those accommodations. E.T. shared, *"I've been able to talk to all of my professors, and all of them have been cool about it [wearing headphones in class]. They're like 'yeah, you can, just don't have both headphones in. You know, I want you to pay attention during class.'"* By advocating for themselves, both Jinx and E.T. were able to help faculty understand their needs, ensuring they had access to the supports they needed to be successful.

Self-Determination

Self-determination encompasses a wide range of skills that support students in regulating and reflecting on their behavior. These skills include goal setting and self-reflecting. Students frequently described goal setting and reflection together; thus, I discuss those topics together.

Goal Setting and Reflection. All of the final six participants had plans to complete their Associate's degree and then transfer to a 4-year college or university. Birdie, Jinx, and Tommy had applied and been accepted to a 4-year university for the following school year, and E.T. had an additional semester to complete before applying. Thus, they were very close to achieving their community college goals. All participants offered they had feelings of success. Those near the end of their program (i.e., Birdie, E.T., Jinx, and Tommy) explained that feelings of success stemmed from reaching or nearly reaching their final college goals. All four identified that it had taken them a long time to reach their goal; however, this extra time allowed them to learn about

themselves. Jinx shared that moving at a slower pace has helped her absorb information better and identify tools to help her succeed, which is crucial as she wanted to continue in school until she earned a Ph.D. E.T. reported that going slower has given them the time they needed to find out what makes them happy and reduced the anxiety associated with attending a 4-year university. Birdie reflected on how taking her time in community college has helped her accept the differences that result from her disability:

My brain does work differently than other people's, and I shouldn't expect myself...Or others shouldn't expect themselves, to be able to go into community college to do what other people do. There are a lot of bumps in the road that other students will not understand that you have to go through. We all have our own challenges. Each person is different and I just, you shouldn't feel pressured to just to go at the same pace as everyone else.

This acceptance appeared to be an essential step for Birdie, as she provided several examples of how the disability stigma prevented her from using the tools she needed to be successful.

Jack and Beri, who both identified they have about 4 semesters remaining, also shared that they feel successful. Their goals focused on short term accomplishments, like passing their classes each semester and identifying strategies that contribute to their success. Beri disclosed she has been managing her time well and getting her labs and homework done, resulting in good grades. She reflected that the library is an important aspect of her success, as it cuts down on distractions and helps her focus. The final semester of this study was more challenging for Beri, as the library is closed due to COVID-19. Jack stated that his biggest challenge was that he feels burnt out halfway through the school year. He reflected that it is likely because he is working and attending school full-time. He shared, *"I'm looking at switching to part-time in school. Not so*

much full-time school and full-time work. My position at work requires pretty much full-time because I'm a department manager. So, I'm looking at not trying to do both full-time." He hoped by making this change and reducing the number of classes he took in future semesters he would remain engaged and do well in his classes.

Each of the six final participants identified they were currently feeling successful. This success resulted from the completion of short and long term goals. Each participant also provided examples of engagement in the reflection process, which helped them identify what worked and in which areas they needed to make changes. Birdie divulged, *"I did take three years instead of two. But that's okay. But I feel like I accomplished a lot, and I learned a lot about myself and what I want to do with my life."* Specifically, she recognized a shift in her thinking surrounding the DSPS testing center. Initially, she was uncomfortable using the testing center due to her peers' questions when she was absent from class on test days. However, she identified she did much better when she used the testing center. During the last interview, she explained that students should not:

...be scared away from the disability center because you're trying to be like everyone else because that's what kind of happened to me at one point where I tried to do it without the accommodations. But I realized that this is just who I am; my brain works differently than everyone else's. I need the center, and there's no shame in that, because it's not, you're not getting extra help. It's just to level the playing field.

Birdie planned to use the DSPS center in the fall when she transferred to a 4-year university.

This reflection process is vital as students transfer to 4-year schools, as that transition comes with a new set of challenges, and students need to know what activities help promote success.

Trusting Relationships

As students shared about social support, it became clear that DSPS counselors' support was necessary throughout their college careers. Other types of social support varied depending on where they were in their college career. As they transitioned to college, family members were important to their success. As they became integrated into the college campus, peers and faculty became more important.

Disabled Students Programs and Services Counselors

Participants stated that the counseling staff at DSPS was essential to their success at community college. Students much preferred interactions with DSPS counselors to interactions with the general school counselors (i.e., non-DSPS counselors). Students indicated that they rarely went to see non-DSPS counselors and only did so if DSPS counselors were unavailable.

The majority of participants (i.e., Beri, Birdie, Chris, E.T., Jinx, Tommy) shared that interactions with the DSPS counselors were helpful and that staff was kind. Chris explained when he saw the DSPS counselors, *"they made sure I had everything I needed. They helped schedule all of my classes and made sure I had my accommodations all set up. So yeah, that was a big help."* On the other hand, Birdie revealed that her first impression of the DSPS counselors made:

...a huge difference because when you're kind of nervous already, and you're going in, and they're super nice and super welcoming. It makes you feel like, "okay, I don't regret coming in here, and I'd be okay with coming back." I think the biggest thing is making that first step, so the first impression they give on you is really good. You may not get anything done on that first [meeting], but the fact that you go in there and get an amazing first impression makes you want to come back.

Although students are required to meet with DSPS counselors every semester to review their accommodations forms, students expressed that the DSPS counselors did more than simply review their accommodations. Counselors also helped with class scheduling, suggested faculty they thought would be a good fit for the students, supported students with organizational skills, and provided workshops on various topics. Three of the participants (i.e., Beri, E.T., and Jinx) spoke about personal relationships with DSPS staff. Beri indicated that she *“made friends with one of the counselors”* and that together they *“bond over the fact that tests are stressful.”* On the other hand, E.T. divulged around the time they were diagnosed with anxiety and began going to the DSPS office, *“I had just suffered a big personal loss, and they were so kind. And it just, it made a world of difference, and that meant a lot.”*

The six final participants highlighted the stark contrast of DPSP counselors and non-DSPS counselors. Due to the frequency students saw DSPS counselors, they felt like counselors got to know them and could provide personalized recommendations. For example, Jinx shared that she has *“made personal connections with almost all of them,”* and the counselors have *“been nothing but supportive and helpful.”* While Beri indicated, the counselor she frequently sees *“referred me to like good professors, and they will like accommodate you and stuff. I got all the good ones this semester because of her.”*

When students did access general campus counselors, they felt like the counselors did not understand the impact of disability or did not know what to do with a student with a disability.

Jack explained:

When I go to the counselor’s office, not DSPS, and I’d try to get my academic plan, a lot of times they, they wouldn’t...I didn’t feel like they really could help me. And then they would like always refer me to DSPS.

When students met with non-DSPS counselors, they often found the interactions unhelpful. Tommy revealed that in his experience seeing non-DPSP counselors *“could be a waste of time altogether. You could show up two days later, and you get a whole different set of answers from someone [else].”* Tommy accessed DSPS services later in community college and thus needed to see the non-DSPS counselors before his enrollment in DSPS. However, he explained, *“I actually would have been going through DSPS probably the whole time, had I been able to get in there, or qualified or whatever more quickly. I had so much trouble with it for five years.”* All student shared their preference for DSPS counselors unless they had very specific questions that could not be answered by DPSP staff (e.g., questions specific to their major or transfer requirements).

Two of the students (i.e., Jack and Jinx) highlighted the need for additional DSPS staff. They believed that an increase in staffing would create more opportunities for the testing center to be open and allow for more access to the counselors. Jack explained that it is necessary to make an appointment to see the DSPS counselors, as if you just walk in, it is rare that you will get to meet with a counselor. Jack stated, even with an appointment, *“generally you gotta wait a couple of weeks. And generally, they only have a certain amount of them that they have with you. It’d be great if it could be a shorter time to have to wait.”* Jinx agreed, explaining that a drop in counselor would be helpful for students who had immediate concerns.

Overall, the participants identified the DSPS counselors as an integral aspect of their success. Participants described DPSP counselors as kind, and they felt as though they provide support on a much more personal level. The DSPS counselors provided personalized support related to disability and academic needs, whereas the non-DSPS counselors only provided general academic support. Participants further highlighted that information they received from

non-DSPS counselors seemed to change frequently, and thus, it was not helpful to go and see them. Participants identified additional DSPS counselors as something that would be beneficial.

Family and Peers

Students made clear that both family and peer support were important to their success in college. Family members primarily provided support in the transition to community college. Once students became integrated into the college campus, they relied more heavily on peer support than family support.

Family. Family played an important role for many students in the transition to college. At the time of this study, students had enrolled in community college for a year or more. During interviews, students expressed little information about the support they received from family. However, when I probed students about their family involvement, they readily were able to identify ways in which their families provided support.

When discussing family support, it is essential to note that participants most often referred to parents. All participants, except for Karen and Jinx, were living with their parents at the time of the study. Jinx was living in a duplex with her boyfriend right below her mother and brother. Karen was living on her own with her significant other and two children. E.T., Patti, and Tommy highlighted that their parents provided financial support by paying for classes and giving them a place to live. They all acknowledged that not having to worry about money was hugely beneficial and helped reduce their stress as they attended college. Jinx shared that her mom has been financially supportive throughout her life and was able to pay for specialized tutors when she was younger, which helped her learn how to read. While families provided financial support, they also provided emotional support and encouragement.

E.T. illuminated *“my parents and my sisters are so supportive. We’re all just really there for each other.”* They explained this was beneficial when a family member was going through a tough time, as other family members could take on more responsibilities to help out. Jack shared that his adoptive parents were supportive and that they allow him to *“take it easy and slow.”* They also directly supported him in math and writing, and they helped him make decisions about his future goals. He revealed his parents were integral to his success as:

They’re the ones that adopted me and helped me with a lot of the medical stuff that I had going on when I was adopted. If I wasn’t adopted there’d be no way that I would be in college. I’d be in a war zone right now.

While families helped support students and set them up for success, they also encouraged them to go to and stay in college.

Tommy described that his family’s expectation was *“you’re supposed to go to school. I just didn’t have any other option, and it wouldn’t have made sense to anyone in my life if I had stopped going to school. And that’s why I’m here.”* While Tommy’s desire drove him to learn, his parents also expected that he would go to school and work towards a job and eventually a career. Karen did not talk about her parents but indicated that her children were one reason she went to and stayed in school. When her children started to attend school, she stated that she did not want to be home alone, so she decided to take college classes for the first time. She explained college has been difficult for her since she has been out of school for so long. But, her daughter has pushed her to keep going. Also, it was through taking her son to get diagnosed with ADHD, *“when his doctor told me ‘I think you have it too.’”* Through that process, she was able to identify why school has always been difficult and get the accommodations and support she

needed to be successful. Karen explained she was driven to stay in school to set a positive example for her son.

Peer Support. Two of the participants (i.e., E.T. and Jack) mentioned that it is challenging to develop relationships with college peers, as there are minimal opportunities for social interactions on campus. Four of the participants (i.e., Beri, Jinx, Karen, and Tommy) explained that they most frequently met others in their classes and primarily interacted with them to discuss the course or study a particular topic. All of the participants who recently graduated high school (i.e., Beri, Chris, E.T., Jack, Jinx, and Patti) identified that they knew others on campus from high school. High school peers provided class recommendations and opportunities to take a class with someone with whom participants were familiar. Once students were primarily taking classes in their major, they no longer utilized this kind of peer support unless their peers majored in the same topic.

While peers provided opportunities for social interaction and academic support, they were also a source of discomfort. Participants (i.e., Birdie, Jack, Karen, and Tommy) highlighted that they were uncomfortable with peers knowing they had a disability. Birdie disclosed her experience:

I've definitely tried doing it [testing] without the DSPS just because it's really awkward when you're not there with everyone else. And then you come back the next class, and they're like, 'You missed the test.' And I don't really want to say I'm in DSPS. So, I just try and dodge the question. There's nothing much you can really do, unless you're comfortable with saying I have a disability, which I don't think people are.

The desire not to be different was so impactful that she was willing not to use accommodations for some time. During the study, Birdie identified that through reflecting, she realized she did

much better when she used testing accommodations. Subsequently, Birdie began using them again despite the discomfort she felt when questioned by her peers.

While participants were uncomfortable with peers knowing about their disability, knowing about others with disabilities seemed beneficial. Three students (i.e., Beri, Jack, and Jinx) identified they knew others on campus who used DSPS services. Jack and Jinx explained they offered guidance and helped their peers get access to needed services. Both reflected positively of this, identifying that it felt good to help others. Others (i.e., E.T. and Tommy) identified that participating in this study was beneficial, as it introduced them to others who had disabilities. E.T. indicated that seeing *“so many people who do a lot of the same things I do in order to help themselves succeed was nice,”* while Tommy reflected that *“realizing that we’re not the only ones”* with disabilities was important. Having access to peers with disabilities allowed students to learn from the experience of others and helped them understand that they were not alone in their experiences.

Faculty

Faculty interactions proved to be an essential factor for students. While only one student took a photo representing a faculty member, participants frequently talked about faculty interactions in the individual interviews.

Students reflected on the importance of having supportive and welcoming faculty members. Five of the students (i.e., Beri, E.T., Jinx, Patti, and Tommy) shared that having good professors was helpful and made school easier. Participants identified good professors by their acceptance of diverse students and their desire to set students up for success.

E.T. reflected upon the importance of having accepting faculty. They shared that as a transperson, it has made everything easier to have accommodating and supportive professors.

Tommy echoed this importance. He explained he had one professor that asked the class to share their preferred pronoun. In his experience, most of the professors at the community colleges he has attended in Southern California did not ask students to share their preferred pronouns.

However, *“If I was still in [Northern California], it would be asked in every class. That’s just what I’m looking for, just someone that wants to be nice.”* For Tommy, attending a school with *nice* professors created the environment he needed to continue to attend school and complete the requirements to transfer to a 4-year university.

Both E.T. and Jinx stated the importance of having professors who wanted to set students up for success. For E.T., this included professors who focused on understanding rather than memorization and created opportunities to build communities within the classroom. E.T. explained:

I had an incredible biology teacher last professor last semester, who was just super lively super funny actually had us talking to each other. I got really close with my lab group. You know, we actually became friends that had never happened before.

For Jinx, this included a professor who reached out to her to let her know there was an online submission issue and another professor who referred her to a summer internship opportunity. Participants described these professors as cultivating relationships with their students and aligning their teaching methods to create student growth. Beri also indicated that it was important for faculty to identify struggling students and offer them support. She suggested referring students to DSPS; however, a check-in and review of class expectations before a DSPS referral may be beneficial as well.

Throughout the conversations surrounding faculty, participants highlighted the importance of building rapport with students. E.T. indicated:

Most of the teachers I feel like have been really personable, and if you talk to them one on one, they'll usually get a lot more in-depth about it [student support and accommodations needs]. So, there's like the quality of professors is fantastic at both schools. That's made everything a lot easier.

Jinx also shared the importance of building relationships with faculty:

I would say some [faculty] definitely tried to cultivate relationships more than others, but because of my learning disability, I had to have a good relationship with all my teachers and professors, and that's the way I've been able to succeed. So, just having that ingrained in me...knowing that I need to have a working relationship with them, like they need to be able to trust me and I can trust them. And like that has turned out to be so beneficial.

Both students felt that by building rapport with professors, the professors had more insight into students' needs and experiences and provided the support necessary for student success.

Similarly, Tommy spoke to the importance of positive faculty interactions, explaining that he wished there was a way to identify a professor's "*willingness to accommodate, or even how approachable they are, or anything like that.*" When students had positive faculty interactions, they described learning as easier as they could get the supports they needed to be successful.

Negative Faculty Interactions. Students described negative faculty interactions as interactions where they felt faculty did not provide the necessary support, thus not fulfilling their role as faculty members. I categorized these interactions separately from negative disability-related interactions to capture the nuances in each type of interaction. Five of the participants (i.e., Beri, Chris, E.T., Jinx, and Tommy) described experiences when they had bad professors (e.g., professors that did not engage with students, professors who treated students poorly). In

each scenario, the students described a desire to learn; however, the professor created a barrier to this learning. Beri described a scenario where a math professor “*called the entire class stupid,*” which she felt like discouraged her for the rest of the semester. She also had a psychology professor who she described as “*horrible*” as:

He literally called everyone out. If you were one of the smart kids who had an A, you didn't have to stay much. But, if you were failing the class, you had to stay and study more. He literally looked at everyone that was failing and everyone that was passing.

E.T. provided an example of a professor described as not personable or passionate about his subject area. E.T. shared:

He was a really bad professor. He basically gave us a bunch of work. I thought we were finally going to learn together, and he said, okay, just work on it quietly by yourselves. And he hadn't been doing anything to help us all semester. At that point, I couldn't even take a [withdrawal]. But I was so fed up with it. I walked out of the class and went home.

Jinx described a similar experience, with a professor. She shared that she was doing all the homework, “*paying attention and asking questions during the lecture.*” She described a disconnect between what they were doing in class and what was appearing on the tests. She went to see the professor outside of class for support since she was not doing well on the test, and instead of providing support, “*he was just stone-faced, and said ‘I don't know what to tell you.’*” Interactions with unsupportive faculty impacted students’ progress in their classes and created an added layer of stress.

Overall, there was a desire to get away from professors that fostered negative experiences. Beri indicated she dropped a class because of a professor who identified the smart, passing students and the failing students. Both E.T. and Tommy stopped attending classes in

which they felt the professor was creating a negative experience. E.T. and Tommy also expressed frustration because they were paying money to faculty who created a hostile environment. One way students avoided negative faculty members was to use their priority registration to select professors that they liked or that came recommended from peers or DSPS staff. Participants noted that professors who were accepting and supportive were important to student success.

Diversity and Inclusion

The final theme that emerged from the focus groups and interviews was diversity and inclusion. Students spoke to two aspects of diversity and inclusion: the promotion of diversity and barriers to inclusion.

Promotion of Diversity

As I focused on the experience of students with disabilities, students spoke primarily to the diversity on campus in relation to disability.

DSPS Center. Four participants (i.e., Birdie, E.T., Jinx, Patti) stated that the physical DSPS center was hard to find when they first registered with DSPS. Jack could find it quickly because he attended the DSPS open house night while still in high school. Tommy said it was easy to find, as it was close to where he parked, and therefore, he had frequently walked by it. Jinx shared the DSPS office is *"in this tiny little office, in a corner, right next to some stairs."* She had difficulty finding it when she first registered and reported that asking people on campus was not helpful, as they did not know what DPSP was.

All but one of the participants shared that once they found the DSPS office, registering for DSPS was not complicated. Six participants (i.e., Beri, Birdie, Chris, Jack, Jinx, and Patti) had paperwork from IEPs or 504 plans in high school. E.T. was referred to DSPS by the on-

campus mental health service providers. Karen requested a note from her doctor. Only Tommy indicated that he had difficulty completing the registration process. He described that it took:

... a long time just to give my doctor the correct criteria, so she could write something up. So, she wrote something up for [University of California], that Community College A didn't like. So, one was too generic, and I had to get a second, at whatever the 200 bucks it cost to see this person. So, it was hard to do just that.

Thus, the disability verification process proved to be a barrier for Tommy, as the off-campus service provider he worked with did not know what elements to include. Students who transition from high school with an IEP or 504 plan have access to staff members familiar with the process, as do students who are seeing mental health providers on their college campuses. As Tommy shared, a clear outline of what providers need to include in the verification of disability would be helpful.

Accommodations. I asked participants about the resources they used during their transition to college and in college that helped them obtain success. All participants spoke of the accommodations they used and expressed that accommodations were integral to their success. While many SWD use accommodations, the accommodations differ from student to student and are based on a student's individual needs. Table 4-3 indicates which accommodations the students used. Students (i.e., Beri, Birdie, Jack) reported they were approved to use additional accommodations but chose not to use those. Accommodations offered but not used are not included in Table 8, but are discussed in the following subsection.

Table 8: Participant Accommodations

Pseudonym	Accommodations Students Used in Community College
Beri	Preferential scheduling, extended time on tests, testing in a reduced distraction environment, the use of a calculator
Birdie	Extended time on tests, testing in a reduced distraction environment
E.T.	Taking notes on their laptop, preferred seating, the ability to leave the room as needed, grounding tools (e.g., headphones or a fidget)
Jack	The use of a smartpen, the use of a notetaker, extended time on tests, testing in a reduced distraction environment, access to digital books
Jinx	Extended time on tests, testing in a reduced distraction environment--specifically a private room, priority registration, seating at the front of the class, a smartpen, copy of class notes if needed
Tommy	Priority registration, extended time on tests and assignments if needed
Chris	Priority registration, extended tutoring time
Karen	Priority registration, extended tutoring time, extra time during class breaks, recording lectures, copies of class notes
Patti	Recording lectures, copies of class notes

Students who used accommodations in high school (i.e., Beri, Birdie, Chris, Jack, Jinx, Patti) had an idea of what would help the college level. They reported that DPSP counselors approved their high school accommodations and suggested additional accommodations they believed would help the college setting. Students that did not use accommodation in high school (E.T., Karen, and Tommy) relied on DSPS counselors to make recommendations. E.T. described when they first registered for accommodations:

They gave me permissions to be able to leave the room at any point, which is never something I felt like I needed to do. But knowing that I had that option, that the teacher would know if I left the room at any point, it was because I was leaving to calm myself down, because I was, overwhelmed, that you know, I had a good reason for it. That was really kind of eye-opening to me. I didn't think that was something I would ever need, but knowing that I have that option is a real load off.

Other students (i.e., Jack and Jinx) had similar experiences, sharing DPSP counselors suggested additional accommodations they believed would help the college setting. These included accommodations not typically provided in the high school setting, like smartpens to record lectures or extended hours in the tutoring center.

Students (i.e., Beri, Jack, Jinx) reported that they had access to a study class (e.g., Directed Studies) in high school. Beri shared that in Directed Studies, she *“took tests there to help with my anxiety or if I needed extra time, did my homework, and got help if I needed it.”* At the college level, college administrators do not offer this type of class, and thus the extended tutoring time is a way for a college to offer additional support.

One of the most frequently used accommodations was extended time, which participants reported was very helpful. Six participants (i.e., Beri, Birdie, Jack, Jinx, Karen, Patti) identified that they used extended time. Students used extra time for various reasons, and thus the extended time they received varied, although typically, students used 50% or 100% more time. Beri used *“extra time to really type stuff in [to the calculator] correctly,”* which helped mitigate the impact of her specific learning disability in math. For other students (i.e., Birdie, Jack, Jinx, and Tommy), the extended time allowed them time to double-check work or included a buffer if they got distracted or anxious during the test, thus alleviating some of the stress associated with test-taking.

Barriers to Inclusion

The participants reported several barriers to inclusion. The barriers included experiencing disability stigma, feeling discriminated against due to their disabilities, and challenges using accommodations.

Disability Stigma. Participants revealed a sense of discomfort stemming from the stigma associated with disability. Many participants (i.e., Beri, Birdie, E.T., Jack, Karen, and Tommy) reported that the stigma associated with having a disability label was impactful. Jinx articulated this when she said the term disability could be anxiety-inducing because *“it [the term disability] obviously has a lot of weight to it because there is so much negative stigma.”* Jack explained:

There’s still a lot of stigma around it [the term disability] and all that. When they say it as like ‘this is a program [DSPS], tell people that have any type of disability’ or whatever, that’s fine. But when I feel like they’re so much nicer... where they’re like, ‘oh, you’re disabled, there’s nothing you can really do in life’ kind of thing, that’s not okay. I felt bad in high school when they used it. I guess that’s why I don’t always like hearing the word disabled.

While not every participant articulated the impact of disability stigma, they did acknowledge their discomfort with the term disability. For example, Tommy said that he does not like going to the DSPS center *“just because I’m embarrassed to walk in.”* Birdie voiced that she does not like the DSPS center’s name, as the term disability makes people just think of autism. She explained, *“that’s not what it is. It’s [DSPS] is for more people, and more people that need help should go there without feeling like they’re...stigmatized or like lesser.”* The association with disability being something negative occurred again in conversations with Beri. Beri was *“told I have a disability, and I took offense to that. I’m like, I’m not disabled.”* Even though Beri was comfortable using disability services, she did not identify with having a disability and did not like others implying she was disabled.

Discrimination. While students felt impacted by the stigma surrounding their disability labels, they experienced stress due to disability discrimination. This stress was magnified when

students felt targeted because of their disability or saw other students targeted. Tommy detailed the impact of watching a professor bully another student:

So, trying to talk to him outside the class and all that stuff, the professor didn't care. He was negatively impacting someone who I believe was on the autism spectrum. Just watching that, my heart rate would go up, and I'd have to take Ativan before class because I had to get ready to watch a bully and make money bullying. And that hurts me. As much as I'd benefit from not letting it hurt me, someone's gonna say something. And that's kind of why I'm here. It's not the lack of materials or resources or anything that kept me out of school. It's the professors.

Tommy linked this experience of watching another student get bullied to his own experience where he felt targeted by a faculty member. In that scenario, he stopped attending class and did not re-enroll at that community college. He believed the school culture contributed to the faculty member's behavior and decided to attend Community College A instead, even though it was further from his home.

Karen indicated that college has been difficult for her, in part because she feels embarrassed because she is older than the other student. She explained, *"there was a point where I didn't want to, you know, where I wanted to stop,"* because of a negative experience with a faculty member. She shared that one professor announced to the class that someone with a disability needed a note-taker. During subsequent class periods, he would loudly let her know, *"here's your notes from last time."* She felt like the professor was letting the students around her know that she was the student with the disability, which made her feel uncomfortable and embarrassed.

While Tommy and Karen were the only students who experienced disability discrimination in college, Jack and Jinx shared experiences of discrimination from their time in K-12 education. Jack revealed that he went through a depressive episode in high school, where he lost interest in school. He described his case carrier as unsupportive, explaining, *“I felt like she [his case carrier] was like, ‘Hey, you know because you have a disability, don’t worry about trying, don’t worry about graduating on time.’”* She even *“told my parents that she didn’t think I could succeed in college and all that.”* Jinx had a similar experience in elementary school, where a school psychologist explained to her and her mom that the gap between her ability to decode words and her I.Q. *“was so great, my working memory so bad, that there was no way for me to ever get it up. And basically, I just wouldn’t have a working memory.”* While Jinx described that experience negatively, she also explained that being told she could not do something motivated her:

So, I basically said, watch me. Watch me succeed. I’m not what you define me to be. I’m so much more than that. I’m more than whatever test score I got on a stupid test that some dude made, however long ago, to quantify your intelligence based on three little games you play. That doesn’t encompass me and all of my strengths. And all of my abilities.

While feeling discriminated against proved to be a barrier for most students in the study, for one student, it fueled a desire to succeed to prove people wrong.

Challenges Using Accommodations. While participants highlighted accommodations as beneficial, students also encountered challenges using accommodations. Participants explained these challenges were most often related to the DSPS center or interactions with faculty. E.T., who used headphones as a grounding tool to help with their anxiety, shared that accommodation

can vary from college to college. E.T. originally attended one of the colleges within the same district as Community College A, where they were registered with DSPS. They shared:

I was allowed to have headphones on in class. When I went to the Community College A DSPS, just thinking you know I need to get the paperwork put through here too, and it would be like really quick, they said we can't allow you to have headphones in during class. We can't allow you to have something that would be potentially distracting to other students.

At Community College A, DSPS staff did not approve E.T. to use headphones in class as an accommodation. Birdie and Jinx encouraged E.T. to go back to DSPS and try to get this approved again. They suggested that meeting with a different DSPS counselor may provide a different result. This belief suggests that accommodation use may vary not only from college to college but also within a single college. In E.T.'s case, they did not need to return to DSPS, as they were able to use headphones in all of their classes by seeking direct approval from the professors.

Two students (i.e., Jack and Jinx) reported challenges with using their testing accommodations. Jinx stated that DSPS staff cut the hours they were open for test proctoring, meaning students could not always take tests during their class times. Jinx reported, *"you have to rearrange your whole schedule to make sure that you're within, that you're testing, within your allotted testing times."* The limited testing window proved to be challenging for students who had other classes on the same day. They needed to ensure their delayed (and usually extended) testing time did not overlap with their other courses.

Faculty also proved to be a barrier to using accommodations. None of the nine participants experienced a time when faculty denied them their accommodations; however, other

challenges occurred. Jack reported that to get a note-taker in his class, he needed to share his accommodation with the professor, and then the professor would send out a notification to the students in the class to see if anyone wanted to be a note-taker. During one semester, Jack did not get a note-taker until a month into the semester. He thought his request “*didn’t get sent out*” right away because it had never taken that long to get a note-taker before. Jack noted this was not the first time a professor forgot that he had accommodations and that in the past, he has had to remind his professors.

Birdie found faculty pedagogy to be a barrier to her accommodation use. Specifically, she had a professor who would give pop quizzes, but because Birdie received double time on all assessments, she could not take the pop quiz with the class. While the professor allowed Birdie access to her accommodation, she found it “*very inconvenient*,” as the professor asked Birdie to always “*be on campus early in case there was a pop quiz. [The professor] would say, meet me in this room in 5 minutes. So, she gave me very short notice.*” Birdie shared that luckily, she did not have a class beforehand, otherwise this method of allowing Birdie access to her extra time accommodation would not have worked.

Accommodations Offered but Not Used. Students also indicated how they were given accommodations but did not use them. They did not use them typically because they did not know how to use that accommodation or because they believed using the accommodation would make them uncomfortable. For example, extended time in the tutoring center is an accommodation to which many participants had access. Jack, Birdie, and Beri all expressed they did not use this accommodation. Jack had not yet used the tutoring support, as he was unsure how to identify that he received extended tutoring time. He shared, “I know to go to the tutoring center, but I don’t know if I have to show the form that says I get extended tutoring time.” He

was planning on using the tutoring center in the future but had not yet done so because he was unsure how it worked. On the other hand, Birdie and Beri did not want to use the tutoring center because of their own discomfort.

Birdie noted that she received an extra hour at the tutoring center as part of her accommodations, which was helpful, but she only used it one time. She had not utilized this resource more, as:

There's a lot of anxiety with going to tutoring. And then plus like the fact that you get an hour and a half and then there's the tutor who is a student too. So now they know that you get [extra time]. I guess my only issue is that other people know.

While Birdie was uncomfortable going to tutoring because others may have identified her as different, Beri was uncomfortable going because she was “*afraid the tutors are going to be mean.*” This perception of the tutors as mean may have stemmed from the tutoring support she received in high school, as Beri revealed staff would get annoyed with her and “*take my phone from me.*”

Overall, participants used accommodations to create access to the curriculum and give themselves the best opportunity to show their knowledge. As Birdie shared, “*if you are using the accommodations, it is just a way to help yourself and help yourself choose success. So just use the resources that are provided for you, and you can get where you want to go.*”

Results from Photo Analysis and Focus Group 2

As part of the photovoice process, I asked students to take pictures of factors contributing to their success. During Focus Group 2, the six participants shared their photos with the group. The group discussed the images, and together, we identified categories in which the images fit (see Figure 2). Categories included nature, anxiety or stress reducers, grounding, pets,

study spots, maintain focus or engagement, spiritual or family support, technology, transportation, and DSPS. Some photographs overlapped categories. For example, Jinx captured a photo of a bathtub with black and white tile in the background. In this photo, a green glass bottle, a bowl of goldfish crackers, and a tablet can be seen. Jinx wrote about the importance of her tablet, as she could take it anywhere, and the importance of the environment she had cultivated, as it was stress-reducing and helped her stay focused for long periods when studying. Thus, this photo was placed near the categories of technology, maintain focus or engagement, and anxiety or stress reducers.

The group discussed 21 photos within the setting of Focus Group 2. Appendix B presents each photo taken by the participants and their corresponding written description. Two additional photos, which participants chose not to discuss during Focus Group 2, were analyzed as part of the photo analysis. I provide these photos and the participant explanations as to why they did not present them in Appendix B.

During Focus Groups 2, categories for the photos were co-created with participants to honor the participants' voices. Therefore, the co-analysis occurring in Focus Group 2 served as the first round of coding for the discussion in Focus Group 2. The second round of coding happened after the initial interview and three focus groups, as detailed above. I used the same process to determine codes; however, different codes arose out of the data. I completed a third and final round of coding to thematically organize the codes into overall themes. Table 9 presents a summary of the different categories identified with the participants, the codes added during the second level of coding, and the thematic organization done during the third level of coding.

Table 9: Overview of Identified Themes for Photo Analysis and Focus Groups 2

Codes	Enumeration of Appearance	Subthemes	Themes
Accommodations	3	Tools and spaces	Engagement with learning
Technology	9		
On campus study spot	4		
Off campus study spot	5		
Skills necessary for success	3	Metacognitive practices	
Learner Style	2		
Motivation	4		
Provides comfort	7	Stress or anxiety reducer	Health and wellness
Maintains engagement	6		
Relaxation space	8		
Grounding	4		
Transportation	12		
DSPS staff	1	On campus support	Trusting relationships
Faculty support	1		
Family	1	Home Support	

I reduced the elements of success that emerged from this analysis into three themes: (1) engagement with learning; (2) health and wellness; and (3) trusting relationships. These themes matched three of the five themes that arose out of the analysis of the interviews and Focus

Groups 1 and 3. However, the subthemes differed. Each theme had one or two subthemes. These subthemes were similar to the subthemes found in the analysis of the interviews and Focus Groups 1 and 3. Following this discussion of the findings from the photo analysis and Focus Group 2, I present the participants' recommendations generated during Focus Group 3.

Engagement with Learning

This section examines how students engaged with their learning. Within this theme were two subthemes: tools and spaces, and meta-cognitive practices.

Tools and Spaces

During Focus Group 2, students identified various tools and spaces that were important to their success. The most important tools were related to technology, while essential spaces included study spots and the DSPS center.

Tools. Jinx and Jack identified the use of a smartpen to record lectures as important. Jinx relied on it to support herself with difficulties with short term memory. Jack relied on the smartpen to fill in the gaps in case he got distracted in class, and *“if I forget something important, I can listen to it and write it down.”* Jack explained that he also uses the smartpen and corresponding notebook almost exclusively to take notes and write in class. He described his handwriting as *“illegible,”* however, he was able to:

Hook it [the smartpen] up to the computer and translate all the recordings into a Word doc. It gets most of the words right. So, it can dictate my writing in a way, even though most people can't read my writing.

Tommy, who did not use a smartpen at the time of the study, identified that *“learning about the smartpen was valuable. I didn't know anything about it.”* He planned on requesting

this accommodation at the California State University he was attending in the fall, as Tommy believed it would be helpful *“when things are bad,”* and he has trouble paying attention.

Birdie and E.T. highlighted the importance of their computers, while Jinx shared the significance of her iPad. All three participants relied on their devices to take notes and access homework. Birdie explained she uses her computer *“for everything, from school work to games.”* Both E.T. and Jinx described specific notetaking programs they use to organize and support their learning. Jinx reported that the portability of her iPad was essential to her, as with it, she was able to move around, getting her *“out of the traditional studying environment where you sit at a desk and a chair and are isolated.”* E.T. echoed the importance of their laptop’s portability and indicated that they use multiple screens when at home.

E.T. and Jack shared their preference for online textbooks, as they are cheaper. Jack stated that he also prefers online books, as *“I’m not going to damage the book or lose it. I have a habit of misplacing things.”* As this was related to his disability area, he could access digital copies of textbooks through his accommodations.

As students talked about the technology they used, it became clear that they each found tools and techniques that complemented their organizational structure and learning style.

Spaces. While specific tools were essential to students, they also identified particular study spaces were important as well. Students tailored their study spaces to match their particular needs. Both Birdie and Tommy preferred spaces that were quiet and had minimal interaction with others. For Tommy, his study space was in his room, as he experienced less anxiety when he was at home versus when he was on campus. Birdie preferred to study on campus, as she felt *“suffocated”* when she was at home for long periods. The building she chose to study in is

“really quiet. It’s very open and faces the way the sun sets. So, it’s kind of similar to nature. This is as close as it gets to an inside, but also outside.”

Both Beri and Jinx preferred study spots where others were present. Beri frequently studied at the public library near her house, as it was close to her home *and “because it’s a quiet place to work without too many distractions.”* She also had a friend that she frequently saw there. Jinx preferred to work in the math lab to have access to a specific mathematics computer program. Her professor gives her the keys and allows her to open the room before the beginning of class. Jinx uses this time to study and also to offer support to other students. She shared that her and several of her friends are *“the ones up front normally answering questions. It’s just nice being able to help those with a subject that’s not easy.”* Studying in the math lab allowed Jinx access to her friends and also provided her an opportunity to support other students that needed help.

Although several participants (e.g., Beri, Birdie, Jinx, and Tommy) captured study spaces in their photos, Birdie was the only participant to capture DSPS. She explained, the testing center specifically for students in DSPS, *“allowed me to have a quiet testing environment with my other accommodations, which greatly contributed to my success.”* When Birdie explained the importance of the DSPS testing center, other students shared that the testing center was beneficial for them as well. Jinx explained that she frequently uses one of the few private rooms to think out loud when taking a test. Beri mentioned that she often uses the testing center, as *“I have the worst time with taking tests.”* The students also reported that the staff provides sanitizing wipes, calculators, pencils, and stress balls for students taking tests, which helps create a welcoming environment.

Participants identified tools and spaces that were important to their success. Preferred tools and spaces were unique to the students and depended on their needs and preferred learning methods.

Metacognitive Practices

Students shared metacognitive practices that contributed to their success. Metacognition is simply defined as thinking about one's thinking. Metacognitive practices, therefore, plan, monitor, and assess one's thinking and learning (Chick, 2013). While students did not use the term metacognitive practices, they spoke to their learning style and their ability to motivate themselves to engage in their learning.

Learner Style. The participants indicated how they learn best. Their explanations underscored an understanding of what worked for them as learners and steps they took to ensure they met their own learning needs.

Three of the participants (e.g., E.T., Jinx, and Tommy) provided specific examples of their learner style. E.T identified themselves as *“someone who takes a lot of comfort in tactile stimulation.”* They explained that using models (or even just keeping their hands busy through a tactile activity like crocheting) as *“a great source of comfort and help me to better commit things to memory.”* They found tactile tools to be grounding, which *“keeps me focused on my immediate surroundings and helps me stay calm and listen.”* Much of what E.T. shared related to minimizing anxiety or a sense of being overwhelmed.

Similarly, Tommy and Jinx identified the importance of a calming workspace. For Tommy, who described himself as needing breaks from other people, a quiet and organized space was essential. He explained, *“If I am going to be efficient in achieving my success, I can't have a cluttered space that I share with others for a workspace.”* Jinx shared that she often likes

to study and do homework when in the tub. She further explained, *“having my bath and snacks gets me in a different headspace and helps me study. There is different scenery and smells. A new location helps me look at things in a new way and gives me a fresh perspective.”* That fresh perspective was necessary when she became stuck when doing physics homework. Moving to a new environment helped her think about her homework problems in a new way.

By understanding how they learned best, these students could cultivate experiences that aligned with their learner style. E.T, Tommy, and Jinx explained how these experiences lead to their success.

Motivation. Participants also talked about ways in which they motivated themselves to learn. Motivations stemmed from specific rewards and from finding subjects in which they were interested.

Birdie was the only participant who indicated that she had a specific reward system in place. She explained that she enjoys playing computer games and found that she was using computer games as a procrastination tool. Once she recognized that computer games were negatively impacting the time she dedicated to school, she decided to use them as a reward system. She shared, *“I used games as a reward system for getting work done or being productive. Games motivated me to do my work, which helped me develop study habits and stay focused.”*

While Jinx did not have a specific reward system, she found this to be an important take away from the study. She explained:

I like just hearing how other people use different tools to, you know, motivate themselves and get themselves on track. I actually took a lot from using games as a reward. I have like the tendency to play games like early in the morning, just like, oh, you know, ‘I

haven't done anything, and it's fine'. And then time passes, and I'm like, 'I should have been doing homework. I can play games later.'

Students shared that something like a reward system to help motivate them and make sure they did their schoolwork before they engaged in leisure activities, was beneficial; however, as E.T. noted, a reward system like that *"takes a lot of self-discipline."*

Participants also reported that finding a subject matter that they were interested in was also motivational. Birdie clarified that one of the pictures she took captured the science building where she likes to study; however, in addition to the building being a study spot, *"it's also where I take my bio classes. It's where I found the subject that I really want to follow for my life."*

Similarly, Jinx shared that she enjoys math so much she goes to school before her 8:00 am class to provide tutoring support to other students, as *"it's just nice being able to help those with a subject that's not easy, and that I enjoy"*. She also explained, *"Me teaching others helps me better understand the material and tests my knowledge and understanding. They can get the help they need, and I am also benefiting from it."* E.T. identified with Jinx's passion for her major, adding:

It's amazing to think that people would... All of my classes start after noon. But to go in before 8:00 am, to just care about a subject that much. That's something that I've been so excited with chemistry. To get to a level where everybody likes it.

For these three participants, pursuing a subject that they enjoyed provided motivation to engage with their subject and take steps (e.g., studying, teaching others to understand the material better) that lead them to be successful.

Health and Wellness

During the individual interviews and Focus Groups 1 and 3, the participants discussed the importance of maintaining health and wellness. However, during Focus Group 2, students concentrated on health and wellness much more. They provided a variety of strategies that they used as stress or anxiety reducers. Students explained that these tactics were an integral part of their ability to achieve and maintain success.

Stress or Anxiety Reducer

Stress or anxiety reducers were a primary focus of participant photographs. Five students (i.e., Beri, Birdie, E.T., Jinx, and Tommy) captured photos that reduced stress or anxiety by providing comfort or maintaining engagement with their school work.

During Focus Group 2, participants shared a variety of techniques they used to reduce anxiety and stress. Two students shared that dealing with unpredictability created a challenge. Beri compared school to her part-time job, sharing that work was easier, as *“I know what to do and how to do it right, versus learning a completely new task.”* For her, the beginning of each new semester was anxiety-producing, as she had new professors and had to learn what they expected. E.T. explained that unpredictability was a challenge, even when they knew what to expect. To minimize the stress of unpredictability, E.T. relied on their laptop, indicating:

If there's a fire on the freeway and I can't go home, at least I have my laptop. I can do a video call. I can be stuck in the library and working on something. It's just nice to always have it and know that I have everything on it. All my books, all my notes, all my homework.

For E.T., their laptop created a safety net. It provided access to all of their school resources, ensuring time would not be wasted if life did not go according to plan.

Four of the participants (i.e., Birdie, E.T., Jinx, and Tommy) revealed strategies (including medication use) that they use to actively reduce anxiety in class. These strategies were unique to the individual and provided the student with an opportunity to remain engaged in the lesson. Jinx highlighted the importance of anxiety reducers:

I try not to doodle as much in class, but it's definitely a way for me to ground myself. And not get too lost in literally space. I just, because you know when you go to higher levels of whatever you're doing... Sometimes if you miss out on one thing, you're already 10 steps behind. And it's hard to get back to it. So instead of me just hyper-focusing on like, 'oh I missed this. I'm done for the entire lesson. I'm going to miss out on everything'. I just wait until that example's over by doodling, and then I'm not spiraling.

By providing herself with a mental break by doodling, Jinx remained calm in the classroom. Remaining calm allowed her to re-engage to continue learning despite the anxiety she experienced after missing a step. Her strategy is similar to E.T.'s accommodations, which allowed them to take physical breaks from the classroom if they felt overwhelmed.

Provides Comfort. Participants captured photos and engaged in discussions of things in their lives that provided them with comfort. The participants identified pets as a source of comfort, as well as leisure activities.

Pets were acknowledged by several participants (i.e., Beri, E.T., Jack, and Jinx) as stress-reducing, as they provided unconditional love. As Jinx shared:

I have had her [my dog] since I was eight. She has been with me since I was diagnosed with a learning disability. Her unconditional love and support has been with me through my whole learning process. She sees me for who I am, regardless of my struggles. She gives me unconditional love regardless of what I am going through. All she ever does is

provide me with love, and she reminds me that my problems are just mine. I don't need to feel the weight of the world. Problems are subjective, and they are just obstacles that I can get over.

E.T. further highlighted that pets do not care what else is going on in your life. They still want to be near you, which makes you feel *"like you're always still doing right by them."* Jack and Beri also shared that they enjoy being around their animals. Pets provided positive interactions and breaks from negative thoughts, which helped promote positive mental health and wellness.

Participants also discussed other activities they engaged in that provided comfort. Beri shared she enjoys eating baked goods she gets from work, as *"I eat them to make myself feel better after a hard day at school."* Jinx echoed the idea of snacks as a source of comfort, as she shared, *"I'm a huge snacker. I like to snack a lot."* Snacks were an important part of Jinx's bathtub study set up, which helped *"ground"* her and get her focused outside of a traditional study environment. Beri also enjoyed watching the television show *Friends* *"because it's very relatable to what I'm going through in school and life in general. If they can get through stressful situations, so can I."* She explained that watching the characters overcome tough situations or work through things they disliked made her feel like she too could move through challenging situations.

Relaxation Space. Participants also captured various relaxation spaces in their photos. These spaces differed from person to person but provided an opportunity for students to recharge. For example, Tommy shared that he often works in his room; however, he starts to feel cooped up after a few hours. He explained:

It's really helpful for me to be able to only walk like 20 feet to this place [the picture of table and chairs outside]. And it's just the change of aesthetic and the vibe that it's outside. I guess nature is what calms me down more than anything.

By leaving his room and going outside, he can take a break and recharge himself. Tommy also reflected that while nature is important, he also needs time alone to recharge. When on campus for a few hours, *"I need to be alone to reset, and if I didn't have a car, I'd have to hide in a bathroom or something just to stay calm."* Thus, having a private space where he would not be interrupted was an important tool that Tommy used to stay calm and reduce anxiety.

E.T. reported that one of the most fulfilling classes they took was a horticulture class. During the lab portion of the course, they went out into the gardens. E.T. explained, *"We just spent three hours digging out every spot and planting all of these different cabbages that somebody else in the class had sprouted."* E.T. found the class to be soothing, sharing *"For someone who takes a lot of comfort in tactile stimulation, it's extremely satisfying and more peaceful than I ever thought possible."* They attributed the sense of peace to being outside and to doing physical labor which made E.T. feel *"like I really earned my serotonin."* Jack also found being outdoors and engaging in physical activity to be relaxing. He indicated that he sometimes drives to the beach after class to *"look at and listen to the waves. Sometimes I walk on the rocks."* He found being at the beach to be relaxing.

Jinx also talked about a relaxation space as she shared a picture of her bathtub and explained that being in the tub helps ground and relax her. She creates a small study set up where:

I have my Goldfish [crackers]. I have water. That's my iPad on it with my physics on it. And I'll just sit, and I'll listen to classical... Just music. And then just sit in my bathtub

with my really sparkly, pretty water. And just relax and just talk to myself. And just work on my iPad because that's where I do my homework for physics while eating my Goldfish. That helps me ground me, and it smells really good.

Jinx further reflected that this relaxation space *“has been calming for me and gets me out of the traditional studying environment where you sit at a desk and a chair and are isolated.”* Being in a different environment helped put her in a different headspace to look at homework problems with a fresh perspective.

Transportation. Three of the students (i.e., Birdie, Jack, and Tommy) brought pictures of their cars to highlight that their vehicles were integral to their success. Jack indicated that his vehicle is important because with it, *“I don't feel like I'm stuck in one place. If I feel I'm stuck in a situation or stuck with school, or in like with a problem or something...Literally, I can get away.”* He shared that he uses his car to frequently drive to the beach, which he explained was a stress-reducing activity for him. E.T. echoed Jack's beliefs and added *that “sometimes knowing that you could leave, is enough to keep you somewhere.”* The idea of having a choice to be present, rather than being forced to be in a situation was important for students. Birdie agreed, explaining that *“you can go wherever you want on your own time.”* She also reflected that having your own car helps create flexibility within your day and gives you a place to be alone and study or relax. Tommy highlighted that for him, his car is a personal and private space. He uses his car to remove himself from situations and reduce his anxiety. Once in his car, he can take time to be alone and do whatever he wants, like eat, sing, or sleep. By having access to transportation, the students no longer felt stuck in one place, and they had access to a personal space, which helped reduce their stress and anxiety. This anxiety-reducing component was

significant for some students, as it helped them remain present on campus, whereas otherwise, they may have left.

Trusting Relationships

Participants shared the least number of photographs and descriptions regarding trusting relationships. Only two participants (i.e., Birdie and Jinx) provided photographic data related to trusting relationships. When they shared their pictures in Focus Group 2, other participants did not add additional information about their own experience. However, other participants discussed their importance of trusting relationships in the individual interviews.

On-Campus Support

Birdie was the only participant who captured a picture of the DSPS. She shared, *“I am extremely grateful for the DSPS staff and the resources DSPS provided for me.”* She immensely benefited from the testing center, explaining *“the DSPS testing center is one the biggest things that’s probably gotten me through community college.”* She shared the extended time she receives helps to reduce her test anxiety. When she has tried not to use the center:

I don’t finish [the test]. I don’t even get through half of it. Like the majority of the time, I’m freaking out about not having accommodations. It’s weird. But yeah, that’s basically what it is. So, DSPS center is what’s really made me successful. Because it really helps a lot. I would not have been able to pass the majority of my classes without the DSPS center.

Jinx indicated that she too benefits from using the testing center and appreciates the staff’s hard work. Participants only briefly mentioned the DSPS staff during the photo discussion; however, they shared much more about the DSPS counselors’ importance during the other focus groups and individual interviews.

While Birdie felt supported by DSPS staff and Jinx shared that she felt supported by her math professor, Jinx explained that her professor is her mentor. Over the past two and a half years, they have developed a close relationship. Jinx explained:

My math professor major double-majored in physics. So, she gets it too. I can make physics jokes. Because she needs boundaries. When I go to her class early, I draw boundaries on the whiteboard; otherwise, she'll write in it, and students can't see.

Jinx further reflected that “it’s nice knowing that she [her professor] trusts me with her keys to open up all the things.” Jinx was the only participant during Focus Group 2 who spoke about a specific professor who contributed to their success.

Home Support

During Focus Group 2, only Jinx provided a photo representing the support she received from her family. Jinx described the photo she took:

This is my mom’s shrine. This represents my mom and her dedication to me and her support throughout my entire life. She not only supported me but gave me access to whatever help I needed (tutors, programs). She never gave up on me regardless of what others said. Always having someone in my corner helped me be successful because she encouraged me to keep trying.

While family was not highlighted in the study’s photovoice portion by other participants, they did discuss it in interviews.

Even though some category labels only had one photo, the discussion of these photos spurred additional sharing from other participants. Participants identified these aspects of their lives were meaningful. However, they may not have chosen to capture these in photos due to the restriction placed on the number of images (i.e., capture 3-6 photos).

Supporting Students with Disabilities at Community College:

Recommendations from the Participants

The following recommendations were gathered from a series of individual participant interviews and focus groups discussing what supported students with disabilities in obtaining community college success. While the individual interviews allowed space for the students to share personal information, the group setting allowed for social connection.

As part of the final focus group, I asked students about their thoughts on this study. They shared their suggestions for how community colleges could better support students with disabilities in obtaining success. The final focus group conversation centered around three main questions: (1) What did you take away from this study? (2) In what ways could community colleges improve to better support students with disabilities? and (3) What are community colleges currently doing well to support students with disabilities? Each of these questions will be addressed in the following sections.

What did you take away from this study?

All six of the final participants indicated their excitement about participating in the project and their belief that this project was important. While the individual interviews allowed space for the students to share personal information, the group setting allowed for social connection among the participants. All of the participants shared that they had enjoyed taking part in the study. They found the experience in the focus groups beneficial, as it validated their experience as a student and made them more aware of the strategies others use.

Four of the students shared that they found it beneficial to listen to others, as they could learn from and relate to others' experiences. Listening to others' stories reinforced that they were

not alone in their experiences, validated their experiences as a student, and gave them a feeling of connectedness to others on their campus. E.T and Beri responded:

I was excited to see how everybody else would relate to it [their photo], what they would have to say about it, and whether they had any similar experiences or coping mechanisms. I just, it was the first time I've ever been in a group specifically to talk about that. At the very least, and it kind of makes me want to reach out more, and I don't know, try to get in contact with other people and maybe study. Do something more than I've been doing so far (E.T.).

I like that I could see what other kids are doing and what helped them achieve their success, so I could learn from that (Beri).

The exchange of ideas also helped participants identify specific strategies that worked for others that may also work for them (e.g., using a smartpen, using video games as a reward after dedicating time to study). Four participants identified strategies they would like to implement in the future to help them be more successful during their time at community college or when they transferred to a four-year university. One participant also highlighted that his idea of what contributed to his success had shifted from easily recognizable items (e.g., accommodations) to other aspects that may not be directly related to school (e.g., spending time in nature, making time for exercise, etc.). Jack and Beri shared:

Finding out the different things that I didn't really...I knew the smartpen was important for success, but I didn't realize some other things that we talked about are also contributing to success (Jack).

I like the study spots. Because like, the one girl had the bathtub setup. I thought that'd be very helpful because, like, she's in a relaxed place to study. You just focus (Beri).

Participants also noted that the general process of reflecting on what contributed to their success was helpful. It provided an opportunity to reflect on what has worked for the students and what has not. This evaluative process allowed students to think about what they should continue to do and what needs to change moving forward. Three of the participants close to transferring noted that the reflection process was particularly helpful as they would need to adjust to attending a four-year university. Birdie shared:

I liked reflecting on it [success]. It did help a lot to identify what worked and what didn't. I don't think I would have really stopped to think about it if you hadn't brought it up through this study. I think one of the things that I found really helpful in realizing how helpful the DSPS testing center is because I know in the past I've been kind of stubborn about it. Like, I don't really want to leave the class and be the odd one out, and then come back and have people ask me [where she was]. But I realized that I do a lot better when I'm using the [DSPS] testing center. So, that's something that, looking back upon it, it's a pretty clear correlation between my success and the DSPS center.

Participants also indicated they were positively impacted by this study as (1) students expressed fulfillment from giving back to their communities; (2) students met others with disabilities, which validated their school experiences; (3) students identified strategies that others use that they would like to implement; and (4) students reflected on their success, which helped them determine what was working well and what was not.

In What Ways Could Community Colleges Improve to Better Support Students with Disabilities?

The participants spoke about how the DSPS center was an essential factor in their success. The students utilized the services at different frequencies; however, all participants shared that they preferred to see the DSPS counselors rather than the general academic counselors. DSPS counselors provided both academic and disability-specific support, and thus, participants suggested that more counselors be available. Jinx stated:

They're [the DSPS center] just so severely understaffed with just personnel and counselors too. They don't have like a designated drop-in counselor, which I feel like would be really, really, really helpful for people just like who on the spot have anxiety whatever a panic attack whatever and need somebody to talk to. DSPS counselors are definitely, in my opinion, a lot different than just your regular counselors at the school, because they know you, they know you have ... there's a different anxiety that comes with a learning disability.

Jack and Jinx also acknowledged that the limited testing time has been impactful. They would like testing hours to run on the same schedule as classes to begin tests when classes start. They expressed concerns from faculty regarding cheating if they begin tests later in the day. In addition, students who had more than one class a day had to carefully plan so that any extended time they used did not run into their later class.

Students also highlighted the stigma associated with having a disability. The term disability created challenges, particularly for students who identified themselves as *high functioning*. Birdie said that she believed people think disability services are related to autism or more impactful disabilities. Five students found DSPS services because someone told them they

would qualify and benefit from services. Several participants provided examples about how they, or friends with disabilities, did not believe that those services were for them. The term disability was a concern for some students because of the stigma attached to it, although the participants did not offer any specific suggestions for how to reduce disability stigma.

They expressed that there is a need to get the word out about DSPS services. While it is in all faculty syllabi, not all professors discuss it as a resource. When professors discuss disability services, it is in broad and general terms, making students believe they would not qualify for services. Students shared:

I think just getting the word out there. Advertising, in like, really any way at all. I only heard about it after I was in a really tough place struggling with my classes. It would have been nice to know beforehand that I had those tools available (E.T.).

Maybe when they're advertising or maybe in their description they put examples. I have OCD. So, they can be like OCD or ADHD or autism, and all the other ones as well. So at least people know that it's a spectrum [of disabilities], and support is not just if you're really impacted (Birdie).

Participants also highlighted professors as integral to their success. Three participants disclosed they had negative interactions with professors that caused them to drop or stop attending the class. Negative interactions occurred when professors were dismissive of student needs or when they did not accept student diversity. On the other hand, positive faculty interactions promoted student engagement and attachment to campus. Students described learning as easier, and they felt more supported when they had positive relationships with faculty. Due to a professor's impact, one student suggested a way to rate and identify disability-friendly professors (similar to RateMyProfessor.com). While students spoke to the beneficial

aspects of RateMyProfessors.com, the website does not identify a professor's approachability or willingness to accommodate. Beri shared that one DSPS counselor has provided faculty recommendations and that those recommendations have been helpful:

She's [the counselor] really helpful with helping me with scheduling. She'll help me find out which professors are the best when it comes to DSPS--like she'll tell me all these teachers are really nice and work with students in the DSPS office. She's referred me to get professors that will accommodate you and stuff. I got all the good ones [professors] this semester because of her.

Students also wanted professors to have more information about disabilities, particularly about mental health-related disabilities. Although three participants had mental health disabilities, all participants experienced high anxiety levels in the classroom, particularly when the professor asked them to share out or engage in group discussions. Tommy, a student with a mental health disability, shared:

Not all disabilities are going to look the same throughout the semester. Sometimes the symptoms that you see are going to fluctuate in the severity. So, you can't really make any conclusions about someone's disability because it could be changing week to week. If I'm participating less, I'm not being a bad student. I'm having a bad day, and that's a big difference. Sometimes I think it looks like I'm not paying attention, and I always pay attention. Sometimes teachers want to make you an example, and sometimes it's just not appropriate.

What are Community Colleges Currently Doing Well to Support Students with Disabilities?

Students indicated the services offered through DSPS were working well for them. Students felt like they had access to the accommodations they needed to be successful and that sharing their accommodations with their professors was generally an easy process, as the form DSPS counselors used was clear, easily provided to, and interpreted by professors. Several students highlighted the testing center as a valuable component of their success. Jinx shared:

I really like how you go in. There's lockers there for you. There's partitions, and then it's quiet. They have so many resources. They have pens, pencils, calculators...everything you need. And it's just so nice, and I'm so happy that I have it.

While the DSPS center's physical resources were valuable, what students highlighted most was the DSPS staff. Students shared that the staff was kind, welcoming, and committed to giving students the support they needed. Birdie and E.T. reported:

I think the second thing that they do really well is their staff is just amazing. They're so nice. I love them so much (Birdie).

I was gonna say that, like, the thing that really struck me the most. The first time I went into the DSPS office, I just, like right when I was getting my diagnosis and I had just suffered a big personal loss, and they were so kind. And it just, it made a world of difference, and that meant a lot (E.T.).

Students identified the staff is supportive and kind, particularly when students are nervous, like when they initially enrolled. Birdie stated:

Their first impression they give on you is really good. So, it may not get anything done on that first time, but like the fact that you go in there and to get an amazing first impression like it makes you want to come back.

The group also shared that they appreciated that DSPS provided workshops, as it offered a space to socialize and learn about a particular topic. However, only two of the six participants had attended a workshop. During one workshop, participants planted succulents. The other workshop focused on maintaining mental wellness. The interaction below highlights Jack's experience and includes his suggestions for future workshops:

Jack: *That one was interesting. They taught us chair yoga and then things to do to relieve stress. I just wish that they had more workshops for various different things like, maybe more life skills kind of thing. Not so much, just like stress management or mental health management. That's mostly what their workshops are on.*

Shayne: Can you be more specific about what kind of life skills you would want them to work on?

Jack: *Like, transitioning from living with your parents or living with friends while at college. How to budget, or do taxes, or how to do more things on your own, besides stress and school. Because a lot of people coming to college still live with their parents, and at least for me, I feel like I'm ready to start transitioning out of that, kind of...situation. I think a lot of people feel that way. I mean, I know when my parents were younger and all that they actually had like life development classes in high school that helped prepare them to transition out of being with their parents or whatnot. And they kind of took that all away.*

Jinx voiced that the DSPS office was continuing to offer workshops after the shift to distance learning due to COVID-19:

I got the email about their offering counseling, like through Zoom. And then I think they're offering a conference call like this, with people who have disabilities so we can talk about how it's going and stuff. Because that was something that gave me a lot of anxiety, like making sure I get my accommodations and everything.

Jinx shared that these conferences provided a space for students with disabilities to talk about how the shift to distance learning has impacted students, particularly with accommodation use. She was interested in attending to find out how she would get extended time for her physics class. While none of the participants had, at that point, taken advantage of this service, they found it beneficial that counseling support was still available.

At the time of writing this dissertation, the impact of the letter the participants crafted is unknown as it was not yet delivered to the DSPS Director. However, most of the participants (i.e., Birdie, E.T., Jinx, and Tommy) indicated they hoped their insight could provide positive changes that would support other SWD.

Summary

Participants shared that engagement with learning, health and wellness, self-reliance, trusting relationships, and diversity and inclusions were essential themes contributing to their success in community college. The themes that emerged in the photo analysis and Focus Group 2 also emerged in the individual interviews and Focus Groups 1 and 3. The themes of self-reliance and diversity and inclusion only occurred in the individual interviews and Focus Groups 1 and 3. What participants shared may have been limited by their comfort within the group setting or by the limit in the number of pictures I asked participants to take.

Participants indicated that they had little transition preparation to support their success in community college. Students mentioned minimal support from case carrier and high school counselors. Only one participant, Jack, attended the transition night for DSPS, which he found helpful. Overall, students felt like they needed to be more independent in college; however, they all acknowledged that the DSPS center was integral to their community college support. All of the participants in the study had plans to complete their Associate's degree and then transfer to a 4-year college or university. Three participants (i.e., Birdie, Jinx, and Tommy) had applied and been accepted to a 4-year university for the following school year. All three participants revealed they planned to continue to use DSPS support at their 4-year university.

Overall, all participants shared that they had feelings of success. Participants near the end of their community college experience reflected on how much they had learned about themselves. They measured success as reaching or nearly reaching their end of community college goals. Students who had only completed one year of community college measured their success in short-term goals, such as successfully completing their current semester courses.

Lastly, participants identified recommendations for ways staff and administrators at community college could provide better support. While DSPS was an essential factor in their success, they felt like, at times, counselors were hard to access, and the use of testing accommodations was limited. They suggested additional staff be added. They also highlighted the stigma surrounding disability, implying that the term disability prevents some students from accessing services. Students wanted extended conversations in classrooms so faculty could more fully discuss disability services and the types of students that may benefit from DSPS supports. Finally, participants highlighted the importance of positive faculty attitudes on student success.

They suggested adding additional training for faculty, so they had more information about disabilities, particularly students with mental health needs.

CHAPTER 5—DISCUSSION

During this study, I explored the factors that contributed to the success of SWD in community college. This Chapter lays out the research questions again, links the findings back to the study's theoretical framework and the literature base on this topic, and discusses the factors that emerged through the participant interviews and photo analysis. Following the discussion of findings are the recommendations provided by the students during Focus Group 3. These findings are specific to ways community colleges can better support students. I also provide the research implications, including ways high schools, community colleges, and policymakers can better support students with disabilities in obtaining success at community college. This Chapter concludes with the limitations of the study, suggested areas of future research, and a statement that summarizes final thoughts surrounding this study's findings.

Research Questions

This Chapter provides a discussion of the findings of the following research question and the four sub-questions. These questions include:

GQ. What home, college, and/or high school aspects do students with disabilities perceive as contributing to their success in community college? To what extent do these factors contribute to their success?

SQ1. How do students with disabilities experience the transition process from high school to community college?

SQ2. To what extent, if any, do students with disabilities use supports during their years in college?

SQ3. To what extent, if any, did self-discovery contribute to college success?

SQ4. What do participants want others to know about supporting students with disabilities at the community college level?

Connections to Theoretical Frameworks and the Related Literature Base

I used a disability studies and neurodiversity lens to interpret the data collected and analyzed for this study. As these frameworks position disability as a social phenomenon, located in social and cultural contexts (Taylor, 2006), the research becomes more meaningful when the voice of participants with disabilities are honored. Disability studies as a field focuses on the importance of allowing people with disabilities to speak for themselves and their communities (Charlton, 2004). Throughout the research process, I provided participants with ample opportunities to share their voice. Thus, the findings are a direct representation of their experiences as people with disabilities.

I also asked participants to share their suggestions for ways community colleges could improve to better support SWD, as I believe their voices are a necessary part of educational reform. Any person who is affected by reform should have the opportunity to share their beliefs. This way, legislators can design reforms with consideration to all people, and minority groups so the affected groups will not be negatively impacted.

While this study viewed disability as a natural part of the range of human diversity (Robertson & Ne'eman, 2008), participants shared several experiences when they felt marginalized. Participants in this study encountered challenges interacting with faculty, discomfort interacting with peers, and limiting beliefs from K-12 educators due to their disability labels. They also shared the desire not to use accommodations or disability services due to a perception of stigma from others.

While participants spoke to the kindness of DSPS counselors, the process of enrolling with DSPS required students to conform to the medical model of disability. As Gable (2005) identified, the medical model of disability positions professionals as authority figures, who are needed to support students in remediating limitations associated with their disability. Only students who are identified and labeled can access services. This process creates a disadvantage for people, who like the participants of this study, do not identify as having a disability label or do not believe they are impacted enough by their disability to receive services. If the people employed by educational institutions instead positioned disability as a basic human condition worthy of inclusion, equity, and respect—as disability studies researchers have suggested (Olkin & Pledger, 2003)—students would experience less stigma and potentially be less reluctant to seek out support. An institution could accomplish this by providing professional development related to disability studies and the impact of disability stigma.

Change also needs to occur at a societal level. As Vygotsky (1978) theorized, human learning occurs on a social and cultural level before it is internalized at the individual level; thus, human learning is a social process. Vygotsky (1993) further theorized that disability occurs on a biological level and a social cultural level. Differences in biology become disabling when the society does not adjust to provide equitable access. While most participants in this study were not denied access to accommodations needed to provide equitable access, E.T. shared that DSPS at one community college campus would not approve their accommodation. They were able to circumvent this challenge by speaking directly to understanding faculty. Participants also shared several experiences where they felt embarrassed or less than because of their disability. To create access and fully include students, the experiences of marginalization and social injustice of people with disabilities need to be addressed (Danforth, 2006).

Within the current educational system, little emphasis is placed on changing the system that encompasses the student (Katowitz & Thurman, 2017). As researchers and educators continue to support the inclusion of more diverse people within the educational system, the educational system needs to continue to evolve.

Interpretation of Findings

Data from the California Community Colleges indicated DSPS students have similar persistence rates from year to year (2019); however, they have low completion rates of degrees and certificates, lower completion of basic skills courses, lower transfer preparedness, and spend more time reaching their goals than non-DSPS peers (CCCCO, 2018). As a high school special educator, my purpose for this study was to add to the understanding of what aspects of home life, college life, and/or high school preparation SWD used to be successful in community college. Through examining the insight portrayed by the participants, I identified the following factors that supported SWD in achieving success at the community college level: (1) engagement with learning; (2) health and wellness; (3) self-reliance; (4) trusting relationships; and (5) diversity and inclusion.

Engagement with Learning

The data collected from interviews, focus groups, and photographs, indicated engagement with learning as an important factor in student success. Engagement with learning had three elements: college readiness, campus resources, and metacognitive practices.

College Readiness

The majority of the participants highlighted that attending college was different than attending high school. They felt like they had more freedom (e.g., choice in classes, professors, time on campus), and they had to be more independent. The participants explained they felt like

they were on their own and that no one was there to *hold their hand* or remind them to turn in their work. This finding is consistent with the literature, as Highlen (2017) identified that students leave a highly structure high school environment and enter the college environment where they must manage their own time and make their own decisions.

While the literature suggests that transition planning is an essential factor in promoting student success in college (Newman et al., 2016), participants in this study reported receiving little to no transition planning. The few activities participants mentioned included meeting with their high school case carriers and attending informational sessions hosted by the high school guidance counselors or disability services at college campuses. When participants shared about their high school preparation, it was clear that it varied from student to student. Those who took academically rigorous classes in high school they felt academically prepared for college. Four of the participants, who had IEPs in high school, shared that college classes were more difficult than their high school classes. This finding is supported in the literature, as Garrison-Wade and Lehmann (2009) reported that SWD are frequently less academically prepared for college than peers without disabilities, as they receive poor advisement and support. In their study, SWD were rarely advised to take college preparatory classes; when SWD did access these classes, only half of the time did they receive the necessary support.

Campus Resources

Participants spoke about campus resources that were important to their success. The main resource participants discussed was DSPS; however, they also mentioned the tutoring center and EOPS. Participants learned about the DSPS center in a variety of ways. Participants with IEPs in high school were referred to DSPS by high school case carriers and then followed through with the college registration process. This finding is important as previous literature indicated students

and families were unaware IEPs and the accommodations outlined in IEPs do not automatically transfer to college (Shaw et al., 2010); thus, high schools may be doing a better job preparing SWD for the transition to college. Other participants in this study were referred to DSPS by their therapist (both private or on-campus) or followed up independently after learning about the services from faculty's syllabi. Participants who did not have special education support in high school shared they were unsure about what types of students could receive services. Participants in this study suggested extended faculty conversations about disability services beyond a boilerplate description and additional advertising. This suggestion, provided by the participants, aligns with findings in the literature, as SWD who attended colleges where college administrators communicated available support (e.g., DSPS) and provided coordinated services found the transition to college to be smoother (Burgstahler et al., 2001; Milsom & Sackett, 2018). Additionally, SWD who registered for DSPS and used accommodations in their first year were more likely to continue in college than those who chose not to use accommodations (Fichten et al., 2014; Kim & Lee, 2016).

Five participants identified the tutoring center as beneficial, even though they did not all use it regularly. Most participants received additional time in the tutoring center, beyond what non-DSPS students received, as part of their accommodations. Although the literature identified student use of tutoring supports resulted in greater persistence, academic success, and completion of educational goals (Grigal & Hart, 2010), students must use this resource for it to be beneficial.

Patti and Karen both identified EOPS as beneficial to their success. They explained EOPS helped provide financial support and academic counseling. I gathered minimal information on the importance of EOPS, as both participants dropped out of the study early. However, the literature indicated financial burdens are one of the most common reasons SWD do

not finish college (Newman et al., 2011) and EOPS can be helpful in addressing financial concerns for some students.

Metacognitive Practices

As students transition to college, students must manage their own time and make their own decisions (Highlen, 2017). As part of the decision-making process, students need to make decisions that align with their learning style. These decisions include identifying what study habits work well for them and then putting those habits into action (Virginia et al., 2005). During this study, understanding about personal learning styles and practices to increase motivation emerged as important for the participant's success.

Learner Style. Participants shared the personal growth they experienced as a college student, particularly involving knowledge about their learner styles. As participants understood more about their learning preferences, they could put skills and practices into place to contribute to their success. Participants learned skills vital for success by trial and error (e.g., Birdie used computer games as a reward), from work (e.g., Beri used a checklist to help with time management), or from high school (e.g., Jinx learned how much extra time and extended support she needed when writing). However, high school preparation appeared to be significant in supporting students in college. Four participants (i.e., Beri, Jack, Jinx, and Tommy) shared they took a class focused on study skills while in secondary school.

This finding is consistent with the literature. Researchers found students who took academically rigorous high school courses were more likely to develop the academic skills necessary to be successful in college (Jackson & Kurlaender, 2014; Long et al., 2012). Also, Vaccaro et al. (2015) found that high school preparation was essential, as students identified that doing well in their classes and accomplishing specific academic tasks made them feel like they

were in the right place and belonged on campus. This sense of belonging is likely another factor that leads students to persist and complete goals.

Tools and Spaces. Students acknowledged personal devices (i.e., computers or tablets) as an essential tool for their success. Students utilized personal devices for note-taking, accessing homework, and reading digital copies of textbooks. Students tailored devices to their own needs by complementing the organizational structures they used and their learning styles. E.T. explained the ability to take their laptop anywhere created a sense of security and reduced their anxiety. At the same time, Jack shared having digital textbooks ensured he did not misplace his books (a self-described frequent occurrence due to his ADHD).

The participants identified two types of spaces that were integral to their success. These spaces were study spots and spaces that were outdoors. Preferred study spots varied from participant to participant. Some participants enjoyed studying in their rooms, while others favored spaces away from their house so they would not get distracted. Four students (i.e., Birdie, E.T., Jinx, and Karen) brought up various study spots on campus, highlighting that their community college provides a variety of study spaces to meet preferred studying styles. While I could not corroborate this finding in the literature, researchers noted the importance of providing accessible spaces (Agarwal et al., 2015; West et al., 1993). Agarwal et al. (2015) explained that SWD, who encountered obstacles that prevented physical access to areas of need (e.g., bushes in the walk way, buildings without elevators), found attending school difficult.

Motivation. Participants shared strategies they implemented to motivate themselves to succeed. One of the biggest sources of motivation was finding a major that aligned with their interests. Taking classes that were focused on a topic they enjoyed helped students maintain engagement in the class. Five participants (i.e., Beri, Birdie, E.T., Jack, Tommy) shared they

found their major once in college. While this finding was not explicitly stated in the literature, previous research identified that SWD choose community colleges due to the wide variety of degree options (Hunter et al., 2014; Mamiseishvili & Koch, 2012). The variety of choices may increase motivation (Kim & Lee, 2016), which Fichten et al. (2014) linked to an increased chance of success.

Health and Wellness

Participants shared about the impact of mental health and the importance of maintaining health and wellness. The photo analysis confirmed the importance of managing stress and anxiety, which, if ignored, could contribute to negative mental health and impact college success.

Mental Health

Analysis of the participant interviews identified mental health as another factor in student success. As such, I explored the role between mental health and success. Half of the final six participants did not have a diagnosed mental health disability. However, all students spoke about their anxiety and challenges managing stress. The high rate at which participants experienced anxiety was an unexpected but significant finding. Their increased anxiety may be in part due to the stigmatization of having a disability, as participants shared about stigmatizing interactions as stressful. Previous research identified students having experienced stigmatizing interactions with educators and peers, where others viewed the person with a disability as having limited intellectual capacity or reduced competence (Banks & Hughes, 2013; Garrison-Wade, 2012). The focus on personal weaknesses (Garrison-Wade, 2012), coupled with the perceived judgment from others, may cause additional stress and anxiety for students with disabilities. Banks and Hughes (2013) indicated these feelings stem from early interactions and follow students to college, causing students to shy away from social situations. As many participants in this study

shared, class discussions resulted in increased anxiety. As class discussions are social, SWD may shy away from participating in discussions due to the fear of stigmatization. Banks and Hughes further acknowledged that hard work, overcoming barriers, and shifting perspectives of what it means to have a disability helped build student confidence. Thus, positive and supportive interactions that focus on student success (as facilitated in this study) may help build confidence and challenge negative beliefs of what it means to have a disability. As discussed below in the Participant-related Outcomes subsection, students expressed various positive benefits that may help reduce the stress and anxiety associated with having a disability.

Further research into the connection between mental health and disability is warranted. The minimal literature found indicated poor mental health interferes with a student's ability to fulfill the requirements of postsecondary education (Mamiseishvili & Koch, 2012); although, mental health supports could mitigate some of the adverse effects of poor mental health (Brogden & Gregory, 2019; Porter, 2018). Unfortunately, colleges are struggling to meet the needs of the increasing number of students with mental health needs (CCCCO, 2019; National Council on Disability, 2017). For students with disabilities, non-traditional mental health supports, such as a focus on confidence building, may be beneficial.

Reducing Stress or Anxiety

Participants shared a variety of ways that they manage their stress and anxiety. These methods differed from person to person; however, many participants noted the importance of transportation and spaces in nature. Participants identified their cars as a tool critical to their success; however, this finding appeared to be missing from the literature. Participants shared that their vehicles were more than just a source of transportation. Their vehicles created a sense of independence and provided a personal space to relax and recharge. Students shared they used

their cars as a private space to decompress, which helped reduce anxiety. It was surprising to find that having a personal vehicle was a valuable means of reducing student stress and anxiety and that students frequently used their cars for this purpose. This finding appears to be novel, as it was not identified in the literature review.

Participants' conversations and photos also stressed the importance of time in nature (e.g., the beach, their backyard, a horticulture class). They acknowledged that being in nature was stress-reducing and that they used nature as a tool to support positive mental health. As Porter (2018) identified, students can encounter mental health triggers on campus (e.g., unknown triggers, relationship conflicts, academic stress); a space in nature where students can go may be beneficial in helping students manage moments of stress and anxiety.

Self-reliance

Participant input via the interviews, focus groups, and photo analysis confirmed previous research findings indicating college requires greater student independence than high school (Highlen, 2017; Korbel et al., 2011). All participants shared specific techniques they used to promote success. Self-reliance stemmed from having self-awareness, self-advocacy, and self-determination skills.

Self-awareness and Self-advocacy

Participant discussions highlighted the importance of having self-awareness about personal needs and then advocating for themselves to meet those needs. Students shared these factors contributed to student success, which was consistent with the work of Connor (2010). For some participants, this meant seeking out disability services once in college. For others, this meant advocating for specific accommodations, expanding existing accommodations, or planning their schedules to coincide with particular times of the day or specific faculty

schedules. Students often relied on DSPS counselors to support them with these needs; however, once they learned how to access what they required, they felt comfortable helping others (e.g., siblings, friends). College students with disabilities must understand their needs and have strong self-advocacy skills, as students need these skills due to the shift in support structures and the greater emphasis placed on self-reliance (Burgstahler et al., 2001).

Self-determination

Participants focused on two major aspects of self-determination that were important for their success in community college. These major aspects were goal setting and reflection. Participants discussed these as a cohesive process, thus they are discussed together below.

Goal Setting and Reflection. Participants in this study discussed the importance of goal setting and the impact of the academic plan they updated each semester with DSPS counselor support. This plan helped students identify college completion goals (i.e., certificate, associate's degree, transfer) and outlined the classes they needed to reach that goal. Students highlighted that this academic plan created an easy to follow plan of action, and meetings with DSPS counselors likely helped hold students accountable to this plan. Frequent meetings with staff also ensured that students reflected upon their plan and made any necessary revisions. These findings were consistent research that indicated SWD emphasized the importance of goal setting (Skinner, 2004). Setting specific goals helped students maintain focus and identify what plans were needed to achieve their goals (Field et al., 2003). Because SWD may take longer to accomplish community college goals than their peers (CCCCO, 2018), frequent check-ins can help keep students on track, ensuring they do not take unnecessary courses. While participants in this study shared that academic goal setting was done with support, this support taught them the necessary planning skills needed to achieve their goals with more independence in the future.

Trusting Relationships

Participants identified trusting and supportive relationships as an important component of student success. Participants discussed these relationships were mainly within the context of individual interviews. It may be that due to the intimate nature of these relationships, the participants only felt comfortable discussing trusting relationships in the individual interviews. Also, participants were asked not to capture people's photographs, which may have limited the discussion of trusting relationships within the focus group context.

On-Campus Support

Participants in this study identified a variety of supportive relationships on campus which included DSPS counselors, faculty, and peers.

Disabled Student Programs and Services Counselors. In this study, participants viewed the DSPS counselors as a critical aspect of student success. While students checked in with counselors at varying frequencies, the participants preferred to meet with DSPS counselors rather than the general campus counselors. They shared that counselors helped them develop academic plans, helped determine the number of classes to take, recommended professors, and referred students to campus resources. This finding was consistent with the results of McCleary-Jones (2008), who reported participants in their study indicated DSPS counselors were helpful, kind, and made students feel welcome. As in Johnson and Fann's (2016) study, participants found it valuable that DSPS counselors understood their specific needs and provided more individualized support. However, participants in this study identified long wait times to see counselors and suggested additional staff be added, particularly for students who need drop-in support. Previous research (Hunter et al., 2014; Johnson & Fann, 2016) recognized SWD make

decisions about what community college to attend based on others' input, especially input about what disability supports are available at the college.

Finally, while participants identified the importance of DSPS, they also shared examples of challenges initially identifying DSPS as a resource. This finding was confirmed in the literature, as Milson and Sackett (2018) noted that locating information, finding services, and identifying resources can be difficult for students to navigate. Participants in this study shared that they were initially unaware of DSPS as a resource or believed they would not qualify for services because they were not impacted enough. Thus, these students are missing a service they could use to support their success in reaching their academic goals, as students who need accommodations, but chose not to use them, were less likely to continue in college than those who used accommodations (Fichten et al., 2014; Kim & Lee, 2016).

Faculty. Several participants (i.e., E.T., Jinx, and Patti) expressed the importance of faculty support and detailed how this support contributed to their success. Students (i.e., Beri, Jack, Jinx, Karen, and Tommy) also shared interactions with faculty that were negative and created challenges for the participants. Some of these interactions were so undesirable that participants dropped the course, potentially extending the time needed to complete their community college goals. The literature suggests that both SWD and peers without disabilities who have positive college outcomes are more likely to have strong support systems, including support from faculty (Getzel & Thoma, 2008; Morrow & Ackermann, 2012; O'keeffe, 2013).

Peers. Participants shared that it was challenging to develop relationships with peers, as there were minimal opportunities for social interactions on campus. Participants explained that they most frequently met others in their classes and interacted with peers to discuss or study a particular topic. Participants who knew students from their high school attending the same

college relied on those peers for class recommendations and opportunities to take classes with someone familiar. Previous researchers identified relationships with peers created support systems for students (Getzel & Thoma, 2008), where peers can provide guidance and support (Garrison-Wade, 2012). As participants in this study identified, guidance and support from peers can include forming a study group or asking for course recommendations. Several participants also shared that they guided other peers with disabilities as they began seeking out disability services. Participants noted that it felt good to help others. While this finding was not specifically supported by the literature, other researchers (Fichten et al., 2014; Morrow & Ackermann, 2012; O'keeffe, 2013) found students who form a connection to other at their colleges increase their chances of success.

Home Support

Participants shared examples of how their family provided support for them while attending college. While several of the participants (i.e., Beri, Birdie, Chris, and Patti) highlighted their independence and how their families have not provided much help, with additional probing, all participants provided an example of how their families supported them financially or emotionally. It may be that as students focus more on their independence and their new responsibilities, they have a difficult time recognizing the support that families have always provided. Skinner (2004) noted families provide emotional support (such as encouragement) and financial support (such as access to tutoring).

Jinx and Jack acknowledged that without family support, they would not be where they are today. For both participants, their families provided access to supports, like tutoring or physical therapy, that helped target disability-related needs when students were younger. Jinx relayed that in addition to providing her with tutoring services, her mother was her main

advocate, and she encouraged Jinx despite negative beliefs from others. Family support like this may be one reason why Jinx is a strong self-advocate and has been successful in community college. Tommy recognized the significance of his family's financial support and shared that his family had high expectations for him. He expressed the expectation was always that he would go to college, and that expectation did not change after his disability diagnosis. These experiences correspond with the findings in Skinner's (2004) research, which indicated that families who acted as a source of encouragement and provided financial access to additional supports, like tutoring, facilitated success in community college. In addition, the findings in the current study also confirm previous research findings that suggested students achieved better post-high school outcomes when families had high expectations for their child and acted as strong advocates (Field et al., 2003; McCall, 2015). This research adds to the well-documented understanding that strong support systems positively affect SWD (Skinner, 2004).

Diversity and Inclusion

During the focus groups, interviews, and photo analysis, students identified the importance of promoting diversity and inclusion for SWD. While participant's photographs captured the positive aspects of diversity and inclusion, interviews and Focus Group 3 revealed that participants encountered inclusion barriers.

Promotion of Diversity

Prior research affirmed DSPS are a critical component of student success (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015), as registering for DSPS allows students to access accommodations. The interviews, focus groups, and photo analysis indicated that the use of DSPS Center's accommodations were the most beneficial factor in college success.

Participants who used disability services at multiple campuses highlighted DSPS supports' differences. Brown and Coomes (2016) identified disability supports vary from college to college based on the available resources and student population. Students who have identified disability services as necessary support before college chose colleges based on input from other students (Johnson & Fann, 2016), teachers, or guidance counselors (Hunter et al., 2014). These findings were not fully confirmed by participants in this study, as all but one participant chose colleges based on the proximity to their home and availability of relevant classes. Tommy switched colleges due to negative interactions with a professor, because it appeared to Tommy that the professor was not accepting of diverse viewpoints.

Accommodations. Kim and Lee (2016) indicated that DSPS provides various accommodations to meet each student's unique needs. While participants in this study accessed similar services (e.g., extended testing time, extended tutoring time), DSPS counselors tailored accommodations to meet individual student needs (e.g., access to a smartpen for students that had difficulty with attention). During the initial registration process with DSPS, participants worked with counselors to identify disability-related concerns and appropriate supports, similar to the findings in the Graham-Smith and Lafayette (2004) study. The participants in the current study shared that using accommodations was generally easy.

Barriers to Inclusion

Disability Stigma and Discrimination. Participants relayed experiences, typically with peers and faculty, where they encountered stigma or experienced discrimination. Participants shared that these experiences impacted their success. While peers were considered a source of support, participants in this study also identified peers as a stigmatization source. Garrison-Wade (2012) identified that interactions with peers could be stigmatizing when others reinforced

negative stereotypes of disability and made students feel like having a disability was a problem. Participants in this study shared they sometimes felt embarrassed or less than because of their disability. Furthermore, they were uncomfortable disclosing their disabilities to their peers and did not like it when peers asked questions about their use of accommodations. The negative association with disability likely stems from prior educational experiences as participants in Banks and Hughes's study (2013) indicated social interactions in high school created self-doubt and instilled feelings of incapability.

In the literature, faculty reported they were rarely familiar with disability resources and accommodation supports (Brown & Coomes, 2016). Thus, faculty may be unaware of how to interact with SWD. Karen's experience highlighted this, as she had a professor who announced in front of other students that he was giving her a copy of class notes (her accommodation). This experience made her feel uncomfortable and embarrassed, as she did not want others to know that she had a disability. Accommodations that require faculty action can prove challenging, mainly if the faculty member forgets to act or is not mindful of maintaining student anonymity.

Additionally, as faculty had more experiences teaching and interacting with people with disabilities, faculty attitudes became more positive (Rao, 2004). This is an incredibly important finding for secondary teachers to be aware of, as they can help prepare students to advocate for themselves with faculty who may not have a comprehensive understanding of disability. By advocating for themselves, students receive an immediate benefit, and increase the likelihood of positive interaction between faculty members and SWD the faculty members will encounter in the future (Rao, 2004).

Challenges with Accommodations. One participant, E.T., shared they were denied an accommodation (i.e., the use of headphones in class) at their current community college, even

though the accommodation was approved through DSPS at another community college within the same district. When E.T. shared that the DSPS counselor told them the accommodation was not allowed, other students encouraged them to return to ask again, as they believed that DSPS counselors should approve the accommodation. This suggests that accommodation used may vary not only from college to college, which is consistent with the findings of Brown and Coomes (2016) but also within a single community college district. In E.T.'s case, they did not need to return to DSPS, as they were able to use headphones in all of their classes by seeking direct approval from the professors.

Unfortunately, students in similar situations who are reluctant to speak with professors or do not have strong self-advocacy skills would lose potentially significant accommodations. While support for developing self-advocacy skills is not a required part of high school transition planning for SWD (Darden, 2013), high school staff would be doing their students a service by assisting students in developing this critical skill. Students who can communicate the need for and the type of accommodations they find beneficial experienced less resistance from faculty (Wright & Meyer, 2017). As discussed above, E.T. communicated the need for using headphones and was able to get approval to use that accommodation in their classes. Jinx also spoke to the benefit of advocating for herself. She was able to identify her needs with faculty and work with them to determine what accommodations they were comfortable letting her use.

While other participants in the current study experienced little difficulty getting the accommodations they needed, they expressed they chose not to use certain accommodations. There may be various reasons students are not using accommodations they were offered to the fullest extent. These reasons include challenges with professors (Kim & Lee, 2016), their discomfort with using the accommodation (Denhart, 2008; Newman & Madaus, 2015), or a lack

of understanding about using new accommodation added at the college level. The literature did not identify that a lack of understanding about a particular accommodation could prevent SWD from using the accommodation. However, the literature acknowledged that college accommodations do not completely match supports from high school, although DSPS staff provides students with the services needed to access the curriculum. Participants who felt uncomfortable using accommodations shared this discomfort stemmed from the stigma associated with having a disability, as students desired not to be seen as different. Denhart (2008) acknowledged the social pressures and stigma experienced by SWD creates further disabling circumstances, as the unused accommodations could ease their workload and improve their performance.

Significance of the Study

The interviews, focus groups, and photo analysis process revealed several important areas of significance. I grouped these areas of significance into two categories: participant-related significance and general significance.

Participant-Related Significance

All six of the final participants shared their belief that this project was important. All of the participants identified that they enjoyed taking part in the study, and they found the experience in the focus groups to be beneficial. During the exchange with others, they felt like their experiences as students were validated.

Participants found it beneficial to listen to others. Listening to others' stories reinforced that they were not alone in their experiences, validated their experiences as a student, and gave them a feeling of connectedness to others on their campus. Participants explained they had never engaged in a group conversation with other SWD about ways to promote success. They were

interested to see if others had similar experiences and coping mechanisms, and they were generally interested in how their peers obtained success. This finding was corroborated by one only other study I found that used photovoice with SWD. Agarwal et al. (2015) concluded that after participating in a participatory action photovoice study, participants felt others on their campuses validated their perspectives and needs.

Specific to this study, participants also shared the exchange of ideas also helped them identify specific strategies that worked for others that may also work for them. Four participants identified strategies they would like to implement in the future to help them be more successful during their time at community college or when they transferred to a four-year university.

Participants noted the process of reflecting on what contributed to their success was beneficial. It provided an opportunity for students to reflect on what has worked and what has not. This evaluative process allowed students to consider what to continue and what to change moving forward. Three of the participants close to transferring noted that the reflection process was particularly helpful as they would need to adjust to attending a four-year university. While this finding is possibly unique to this study, researchers (Field et al., 2003; Finn et al., 2008; Skinner, 2004; Thoma & Getzel, 2005) identified the connection between self-determination and success. Reflecting and evaluating is an essential aspect of self-determination (Korbel et al., 2011). Teaching students to increase their self-determination skills can increase students' self-confidence and ability to succeed (Garrison-Wade, 2012).

General Significance

The significance of this study was to add to the growing understanding of what helps promote the success of SWD at community college. Using a disability studies lens, an important aspect of this study was to allow people with disabilities to speak for themselves and their

communities (Charlton, 2004). I believe that the voices of people with disabilities should be present in educational reform discussions. Thus, this study was significant, as it helped explore people with disabilities' lived experiences as they worked towards achieving their community college goals.

The implications of this study were significant in the following ways:

1. This research contributed to the paucity of literature focused on the success of SWD at community college. This study clearly articulates the barriers SWD encounter.
2. This research added knowledge to the gap that exists in the literature surrounding the impact of mental health on SWD. Participants expressed the effects of poor mental health despite their disability labels. All participants, even those without diagnosed mental health disabilities, were impacted by poor mental health to some degree.
3. The use of photovoice allowed participants to be an integral part of the research process. The successful use of photovoice in this study contributes to the limited research that indicates photovoice methodology can provide an opportunity for people with disabilities to show how disability exists within the range of human diversity.
4. The voices of SWD were honored and highlighted throughout the study. The specific recommendations and insights that participants provided regarding what colleges are doing well and what needed to change for SWD are outlined in the next section.

Recommendations from Participants in the Study

As part of the final focus group, I asked the students to share their suggestions for how community colleges could better support students with disabilities in obtaining success. From the beginning of this project, it was made clear that I would share their recommendations with Community College A to help facilitate positive change. As people with disabilities are experts in their learning (Grandin, 2006), I felt it was important to share their experiences, understandings, and ideas related to community college success. I condensed this section into a short bullet point list below. I also crafted the findings into a letter (see Appendix C), which I will provide to the Director of DSPS at the completion of the dissertation process.

What have you taken away from this project?

Four of the students shared that they found it beneficial to listen to others, as they could relate to others' experiences. Listening to other students' stories reinforced that they were not alone in their experiences, and it gave students a furthered feeling of connectedness to others on their campus. During this experience:

- Students recognized a desire to connect more to those around them on campus. This desire to connect with others is beneficial, as a sense of belonging and connection to peers was positively related to success in college (Fichten et al., 2014; Morrow & Ackermann, 2012).
- Students identified that the reflection process is beneficial. As students were getting ready to transfer to 4-year schools, they shared it is important to know what has worked and what has not. This process helped students identify what needs to change moving forward. Self-reflection is a major aspect of self-determination (Jameson, 2007; Korbel et al., 2011). Stronger self-determination skills may lead to more positive outcomes for students with disabilities (Connor, 2012; Jameson, 2007).

- Students identified a clear connection between using the DSPS center (especially for testing) and success in classes. Other researchers (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015) have corroborated this finding.
- Students learned about tools and strategies others use. Several students shared they would like to implement tools (e.g., use of a smartpen) or strategies (e.g., having a particular spot to study, studying before playing video games) that others are using.
- Factors in this study that contributed the most to their success were also verified by the literature. These factors include accommodations (Fichten et al., 2014; Kim & Lee, 2016), supportive DSPS staff (Graham-Smith & Lafayette, 2004; Johnson & Fann, 2016; McCleary-Jones, 2008), positive faculty interactions (Denhart, 2008; Fichten et al., 2014; Kim & Lee, 2016; Rao, 2004), setting goals and having a plan to reach those goals (Korbel et al., 2011; Skinner, 2004; Thoma & Getzel, 2005), having a study space that matches students' needs, and having ways to reduce anxiety and stress (Brogden & Gregory, 2019; Porter 2018)—particularly when in class.

Students shared that, overall, they enjoyed participating in the project. Students expressed a desire to give back to their communities. They hoped that their experiences could help others identify tools to promote success, and they hoped their suggestions could facilitate positive change.

In what ways could community colleges improve in order to better support students with disabilities?

While each student had individualized suggestions for ways community colleges could best support students with disabilities, there were several leading suggestions. These included:

- Providing students with a way to identify to what degree a faculty member is disability friendly. Disability-friendly faculty were identified as accepting diverse students, were approachable, willing to accommodate, had some knowledge about disability, and maintained student confidentiality. One student shared that they would like to see a rating system, like RateMyProfessors.com tailored to students with disabilities. Another student shared that she gets positive recommendations from the DSPS counselors. The literature

confirmed connections with encouraging faculty fostered positive college experiences for students (Fichten et al., 2014; Vaccare et al. 2015), although faculty lack knowledge about disability resources and have limited experience discussing disability with students (Brown & Coomes, 2016).

- More staff in the DSPS center. All students identified they prefer to see DSPS counselors rather than the general academic counselors. Participants preferred DSPS counselors because they were able to provide more personalized recommendations, they better understood the challenges that come with having a disability, and students developed personal relationships with them. Two students suggested a designated drop-in counselor, as there is too long a wait time when making an appointment. Two students shared they would like extended testing hours to take tests when they had class instead of arranging other times. The literature identified disability services are impacted by available resources and student population (Brown & Coomes, 2016); however, disability services is a major component of student success (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015).
- Students shared concerns about the term disability. Because disability is in the title Disabled Students Program and Services, students were hesitant to register or did not think that the services were for them. This finding is significant, as the literature shows students who registered for DSPS and used accommodations were more likely to persist than those who did not use accommodation (Fichten et al., 2014; Kim & Lee, 2016). Students who registered for services were also more likely to have higher GPAs, higher degree aspirations, and take full-time course loads (Mamiseishvili & Koch, 2012; Quick et al., 2003). Students in this study suggested additional advertising around campus or more detailed information from faculty that identifies the types of disabilities served (e.g., ADHD, OCD, Dyslexia, Anxiety, Depression, Learning Disability, Autism), thus making it more clear which types of students could benefit from services.
- Students had several issues involving finding basic information, like where the DSPS office is located, how to verify disability status, and what services are offered. All of this information is available on the DSPS webpage; however, none of the students had been to the webpage or knew the webpage existed. This finding indicates this form of

information dissemination is not working and that information may need to be provided differently, or students need to be actively directed to the webpage.

- Students also wanted faculty to know that mental health disabilities may not look the same throughout the semester. One student identified that he might participate less or look like he isn't paying attention if he has a bad day. He shared it is not helpful for faculty to call him out or try to make an example of him. Three students shared that they dropped or stopped attending classes because of negative interactions with faculty.

Findings from the California Community College System's 2019 Mental Health Services Report identified a series of goals and objectives (i.e., increased mental health services, increased training for faculty and staff, stronger relationships with community-based mental health services) that should support students with mental health needs moving forward.

What are community colleges currently doing well in order to support students with disabilities?

When asked about what community colleges are currently doing well, students most frequently identified specific DSPS center services. This finding was not surprising, as researchers identified DSPS as an important component of student success in the literature (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015). Researchers highlighted specific accommodation support (Graham-Smith & Lafayette, 2004; Kim & Lee, 2016), check-ins with DSPS counselors (Graham-Smith & Lafayette, 2004; McCleary-Jones, 2008), and the general facilitation (Fichten et al., 2006) that occurs through DSPS as beneficial to their success. Participants in this study shared:

- The testing center and all the resources in it (e.g., lockers, supplies, partitions) are working well. Participants noted the quiet environment and extended time was beneficial.
- The accommodations form was clear and could be updated easily. The form made it clear what the professor needed to do.

- The academic plan was helpful for goal setting and helped students stay on track. Reviewing it with DSPS counselors was beneficial, as they could help students make decisions about the appropriate number of units, classes, professors, etc.
- The DSPS staff was kind, committed, and supportive. They were welcoming and provide a good first impression, making students want to return, even if they were nervous or hesitant to register for services.
- The group shared that they appreciated that DSPS provided workshops, as it provided a space to socialize and learn about a particular topic. However, only two of the six participants had attended a workshop. One workshop centered around planting succulents. The workshop centered around mental health, particularly ways to relieve stress. Both students expressed that they enjoyed the workshops. One student suggested future workshops include life skill-based topics, like how to transition to living on your own (or with roommates), how to budget, how to do taxes, or how to cook simple meals.
- One participant shared that DSPS offered small group video conferences after the shift to distance learning due to COVID-19. While none of the participants had taken advantage of this service, they found it beneficial that counseling support was still available. As society considers the changes resulting from COVID-19, this may prove to be a positive change. Students who are hesitant to seek out in-person counseling may be more comfortable with the digital format and thus be more likely to follow up with needed support. Additionally, students who find it difficult to get to campus due to challenges with transportation or busy schedules may find digital counseling easier to access.

The information gathered through this study seeks to help educators and families understand what types of support facilitates student success during their college career. This information is valuable, as educators need to know what skills to begin teaching students when students are still in K-12 education and what partnerships they need to help create at the college level. Although this research targets students and educators, it may also help inform policymakers as they consider revising current special education and disability related laws.

At the time of writing this dissertation, the impact of the letter the participants crafted is unknown; however, most of the participants (i.e., Birdie, E.T., Jinx, and Tommy) shared they hoped their insight could provide positive changes that would support other SWD.

Recommendations

The findings of this study have implications both for both secondary education and higher education, as well as for families of college-bound SWD and SWD themselves. The life experiences the students shared in this study were insightful. Their expressed journeys can teach us how to facilitate and better support SWD as they embark on their college careers. The results of this study have recommendations for (a) high school teachers, school counselors, school psychologists, and administrators; (b) families of SWD; (c) DSPS counselors and office personnel; (d) faculty teaching at community colleges and four-year colleges or universities; (e) students with disabilities planning on attending college or currently attending college, and (f) policymakers. I will address each of these areas in the following sections.

Recommendations for High School Teachers, School Counselors, School Psychologists, and Administrators

- Foster stronger connections to the local DSPS offices (i.e., inform students about the supports provided through DSPS, arrange a visit to the DSPS office with students, have students currently enrolled in DSPS at community college come talk with current students, encourage students and families to attend DSPS open house nights, so families have more information and are familiar with the office).
- Help prepare students for the transition (i.e., include self-advocacy training in high school curriculum, increase focus on developing self-determination skills, help students gather the necessary paperwork they need to enroll with DSPS, talk with students about the types of accommodations they may be eligible for at the community college, encourage students to take a variety of classes so they can identify likes and dislikes).

- Ensure students are prepared for college-level courses (i.e., encourage students to take academically challenging courses, provide access to a study skills course so students can learn the critical skills essential for college success, as students continue through high school encourage independence, so student develop the skills needed to be independent learners in college).
- Help prepare families for the transition (i.e., ensure families know the differences between the supports their child had in high school versus what supports they will have in college, discuss the change in roles—student must seek out services).

Recommendations for Families of SWD

- Prepare for the transition to community college (i.e., learn about the college application process, learn about applying for financial aid, understand their child’s academic needs will be different in college than they were during high school).
- Support their child through the transition (i.e., support their child through the application process, talk to their children about what keeps their child may need, and whether the family can support those needs or assist in obtaining the resources that would meet those needs).

Recommendations for DSPS Counselors and Office Personnel

- Understand what students value (i.e., kindness, committed counselors, people who know how the college operates, staff that is available in a timely manner or for drop-in support, alignment of DSPS support from college to college—especially when colleges are in the same district)
- Clearly identify supports for students with mental health needs (i.e., access to drop in counselors, access to spaces for students to decompress privately)
- Hold workshops that: allow students to share their experiences and learn from each other, teach students how to plan and advocate for themselves, address topics relevant to increasing student success at community college, teach faculty and staff about disability related issues, etc.
- Increase advertising about DSPS services, so students are aware of the service, what types of students may benefit from the service, etc. Also, consider current advertising and assess if it is reaching target populations.

- Be aware of the stigma associated with the term disability, as people with disabilities can associate the term with negative experiences. Also, students may identify with a particular disability label, but not the general term disability.
- Consider the positive and negative impact of changes resulting from COVID-19. For example, college counselors are offering counseling services online during COVID-19. Students who are hesitant to seek out in-person counseling may be more comfortable with the digital format and thus be more likely to follow up with needed support. Additionally, students who find it challenging to get to campus due to challenges with transportation or busy schedules may find digital counseling easier to access.
- During semester meetings with students, identify which accommodation students are not using and why they are not using them. Assist students if they are having difficulty using a particular accommodation.

Recommendations for Faculty Teaching at Community Colleges and Four-Year Colleges or Universities

- Learn more about disability (i.e., attend campus workshops, take it upon themselves to learn more about disability, learn more about potential accommodations students may need).
- Learn more about students with mental health needs (i.e., how to reduce student anxiety in the classroom and what to do when they seem to be experiencing poor mental health).
- Focus on being approachable and accessible (i.e., implement Universal Design Strategies, encourage all students to talk to you about supports they need to be successful, reach out to students who appear to be struggling, include classroom activities that promote community building).
- Maintain student confidentiality (i.e., do not announce one student's needs to the class, set aside time before or after class to talk with student).

Recommendations for SWD Planning on Attending College or Currently Attending College

- Become a self-advocate (i.e., learn skills for seeking information, reach out to faculty if struggling, educate faculty on their needs, use DSPS services, suggest improvements if campus services are lacking)

- Work on dismissing stigma related issues—if this is an issue—by learning more about their disability, learning more about disability in general, educating themselves on disability legislation
- Identify and implement factors that can promote success (i.e., identify how they best learn, seek opportunities to engage fully at the community college, develop trusting relationships with others on campus, reach out to others who have disabilities, and identify what can be learned from each other)

Recommendations for Policy Makers

- Consider ALL students when making policy decisions that affect students, so SWD do not remain marginalized in educational systems
- Learn more about SWD and the challenges they face in going to community college
- Talk with SWD before suggesting legislation that may impact SWD
- Reach out to policymakers in other states who have experience developing legislation that impacts SWD

Limitations of the Study

The in-depth nature of qualitative research results in credibility with a more nuanced understandings of the setting and the participants; however, as this type of research is highly contextualized, it reduces the transferability or the generalizability to a larger population (Bailey, 2007). Due to the choice of methods, the study was impacted both by the beliefs and perception held by myself and the participants. As discussed in the methods section, I took precautions to limit my impact on the interpretation of data. It is important to note that while we spent time defining success, the perception of student success stems from the participants' interpretation of their own experiences. Thus, this study cannot be generalized to the broader population of students with disabilities.

Due to the nature of this study, the group of students that participated was small. Participant drop out made the group smaller and reduced the diversity of the participants. Thus, transferability is further limited. Challenges during the recruitment process resulted in

participants from only one community college in Southern California. Thus, it is likely the findings do not capture the experiences of other SWD at other community colleges in Southern California or across the state.

In addition, interviews with participants were short. Certain participant characteristics, like disability label (e.g., students on the autism spectrum), may have impacted how long participants felt comfortable sharing and the ease in which they could express themselves. Four of the participants specifically highlighted that their anxiety makes it difficult to participate in discussions when they are at school. As this study was interview-based, participants may have experienced anxiety and chose to keep their interviews short. However, the variety of data collection methods (i.e., interviews, focus groups, and photographs) provided multiple means of input, resulting in a richness and depth of information. Because I collected data in various ways, other students may recognize their own experiences within the participants' experiences detailed in this study.

Future Research

In the future, research like this study could include a greater number of participants from diverse backgrounds. These different perspectives would provide greater insight into how students of diverse ethnicities, socio-economic backgrounds, etc. obtain success in community college. Furthermore, as the options for students entering community college change (e.g., reduced access to remedial courses, greater access to dual-enrollment), additional research should be done to capture students' shifting needs.

Further research into the connection between mental health and disability is also warranted. I found minimal literature that indicated poor mental health interferes with a student's ability to fulfill post-secondary education requirements. In this study, participants indicated that

poor mental health proved to be a barrier to success in community college; more information is needed to understand what supports positively impacts students with mental health needs.

The passing of AB 705, and similar programs in other states, reduced access to remedial courses. Because this legislation is new, little is known about the impact this legislation will have on SWD. Research in this area is essential as SWD take basic skills course at higher rates than their peers without disabilities (CCCCO, 2018); thus, they may be disproportionately impacted by these reforms. Numerous other states are implementing legislation similar to California; therefore, SWD nationwide will most likely be affected by these legislative changes. As a result, continued research needs to highlight areas in which SWD experience both success and challenges so that college administrators can make adjustments to best support their college outcomes.

Dual-enrollment and SWD is another area for future study. As access to college-level academic courses in high school allow students to earn college units, little is known about best practices in this area for SWD. The limited available research (Davis et al., 2018; Hugo, 2001) indicated positive community college outcomes (e.g., earn all credits attempted their first year, and persist to their second year of college) for students who participated in dual enrollment programs. Overall, strengthened ties between secondary schools and community colleges will likely lead to greater success for SWD (Connor, 2012); however, additional research is needed to ascertain the best strategies for ensuring this success.

Call to Action

Based on this study's findings and the conclusions of other researchers, SWD are finding success in community college, although this success may take them longer to achieve. While the federal and state governments have passed laws to reduce discrimination and promote access for

SWD, additional work is needed to support the success of community college SWD. As demonstrated in this study, SWD have valuable insight to share their success and challenges. Thus, there is a need for higher education institutions to elicit the voices of SWD to better provide support, especially as the course pathways at community college change to adapt to new legislation, like AB 705. With students, high school teachers and counselors, families, DSPS offices and counselors, and faculty members working together, equitable opportunities will be afforded to SWD in their pursuit and obtainment of their community college goals.

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Appendix A

Facilitator's Toolkit for a Photovoice Project

Note. The following pages contain the selected pages reviewed with the participants. The pages were retrieved from a PDF on April 4th, 2019 from:

https://www.wpunj.edu/uppc/projects/photovoice/UPinPC+Photovoice+Facilitator+Toolkit+Final.pdf?language_id=1

BACKGROUND

What is photovoice?

Photovoice is a participatory action research methodology created by Caroline Wang and Mary Ann Burris in the early 1990's where "people can identify, represent, and enhance their community through a specific photographic technique" (Wang & Burris, 1997, p. 369). According to Wang and Burris (1997), photovoice provides the opportunity for community members to creatively document their concerns and simultaneously act as "catalysts for change" (p. 369). Additionally, it ignites interest about important topics that are relevant within a community and allows a community to express themselves through photography. Photovoice breaks past language and traditional communication barriers that often prevent members of a group from expressing their concerns. (See Appendix A)

Three Main Goals of Photovoice:

To enable people to record and reflect their community strengths and concerns.

To promote critical dialogue and knowledge about important issues through large and small group discussions of photographs.

To reach policy makers and encourage the adoption of health promoting policies.

Why does it work?

Over the last twenty years, several peer-reviewed articles have been published on photovoice projects that have taken place in various community settings, each with different cultural issues/concerns, e.g., substance abuse (Brazg, Bekemeier, Spigner, & Huebner, 2011), violence (Wang, Morrel-Samuels, Hutchison, Bell, & Pestronk, 2004), college campus issues (Goodhart et al., 2006), occupational safety (Flum, Siqueira, DeCaro, & Redway, 2010). Photovoice is unique in that it brings community members together to discuss and act on critical issues presented through photographs and narratives. Participants are active contributors throughout all phases of the photovoice project.

Photovoice is a highly customizable community-based intervention. After creation of the photos and narratives, it is important to present them in multiple venues around the community; the more exposure the project receives, the more likely it will affect change in the community. If working with a large group of people, it may be easier to have multiple trainings and processing sessions to accommodate the different schedules of participants.

Ethical Considerations

The concept of a photovoice project is simple and may seem harmless, but there are several ethical considerations that need to be addressed prior to and during a photovoice project.

1. **Obtain Informed Consent** – Consent must be given for participation (from adults and minors), to utilize photographs for exhibits and promotional purposes, to take pictures of people and/or private homes or businesses, and for consent of people identified in photographs. (Appendix B)

ASK YOURSELF? Is it invading someone's privacy?

Consent Needed	Consent NOT Needed
<ul style="list-style-type: none">•Taking a picture of someone who is recognizable (faces, tattoos, or markings)•Taking a picture minors (under 18 years)•Taking a picture of personal belongings and/or personal property	<ul style="list-style-type: none">•Taking a picture of public figures•Taking a picture of the environment or public settings•Taking a picture of people who cannot be specifically identified

2. **Protect Participants** – Participants must refrain from entering dangerous spaces/situations to complete the project. Think not only about danger in terms of physical harm, but also in emotional harm, harm to an individual's reputation, or potential financial harm, among others.

ASK YOURSELF? Will it harm me or others? Is it dangerous?

3. **Protect the Community** – It is important to protect others by abstaining from taking pictures that may harm the reputation, safety, or individual liberty of another.

ASK YOURSELF? Will it put a person's employment, status in the community, etc... in jeopardy?

4. **False Light** – It is necessary to make sure that situations in the community are reflected accurately. Necessary steps must be taken to accurately portray the community and to avoid taking photographs of images that could be taken out of context.

ASK YOURSELF? Is it truthful? Does it accurately represent the situation?

Photograph and Narrative Examples

Example 1

By Katie Ruhl

This is Skyline Park. It has a baseball field, a basketball court, and a playground with a gazebo. As per most parks, there is a sign with rules and regulations along with consequences for breaking those rules. What you don't see is the place where most addicts drank their first beer, smoked their first joint or shot up for the first time. In high school, this was where we came to "hang out", which meant drink or do drugs. When you said you were going to Skyline Park your friends knew what you were going to do there, regardless of the sign.

After it became known to most parents what actually went on at this park, I was no longer allowed to hang out there after school and most importantly after dark. From experience, cops have driven by, telling us to get lost. But we never did. It was dark. We just quieted down. Enforcement of these rules and regulations may have deterred some people from using for their first time. When I was a teenager, I would have said it was "lame" when a cop would tell us to leave, but now I wish they had done more than that, especially for some of my friends.

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Example 2

By Kyle Ormston

What used to be a creative way of publicly celebrating birthdays and igniting team spirit has become a billboard for the latest overdose victim.

This once fun local tradition has evolved into a depressing reminder of the loved ones we have lost.

The blank wall represents not knowing "who will be next".

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HOW TO UTILIZE PHOTOVOICE

Process Overview

Photovoice is much more than simply taking a photo and telling a story about the photo. Photovoice is a community engagement process in which participants are introduced to photovoice and trained in its use before photos are taken. After photographs have been taken, participants reassemble for a group processing session or sessions. Finally the group collectively decides how to leverage the photovoice project to encourage and enact change within the community through the exhibition of the completed photovoice stories. This process is displayed in the following figure.

CONTINUOUS PLANNING: (14 weeks)

Before Implementation – Identify staff roles, participants, dates and times for project implementation, convenient meeting locations, identify stakeholders and community exhibition locations. Make sure to think about what each phase is going to look like before actually getting right into it. For example, for phase four, think about the financial resources available to print the photographs taken in this photovoice project. Also, consider using incentives to encourage participation and show appreciation for the time participants dedicate on the photovoice project.

- ★ *It is important to obtain parental consent from any minors who will be participating in the photovoice project. The “Minor Consent Form” can be found in Appendix B.*

Appendix D

Photography Tips

What are you taking a picture of?

Do you have a clear idea of what you want your image to say? Before cell phones and digital cameras one would have been limited to 24 images on a single roll of film. That means you would only have 24 opportunities to showcase what you are trying to say. How many times do you retake a picture before finding the right photo?

Does it stand out?

PHOTO BY VANESA APAZA

There is a lot to look at in this photo, but it is clear that the main object of focus is the sticker on the pole. Some cameras allow for the background to remain out of focus while the main image, or foreground, is focused. This can also be achieved by zooming in.

When taking a picture of a small object or a singular object among many it is important to focus on the main message. Is your photograph telling the same story that you are seeing?

Color makes a difference.

Color is a key player in taking a powerful photograph as colors often relate to one's emotions. Red can be interpreted as passion either in a loving or negative way, whereas the lack of color may also help express your message. Does a black and white photograph help promote your message?

PHOTO BY VANESA APAZA

In this office setting where many items are black, white, or gray, this red object really stands out. If this photo was taken in black and white, then it would not have the same effect on the viewer. Immediately, the viewer's eyes are drawn to the red cup.

All about perspective.

Naturally we take a picture from the angle we are looking, but consider looking at the world from a different perspective. Children see the world from the ground up, and birds from the sky down, try holding your camera at different levels and angles to see the world a little differently.

PHOTOS BY PHOEBE DESANTIS

In the first picture it is unclear what the photographer is intending, is the focus on the student, the walkway, or the construction? However, in the second picture the main emphasis is on the dump truck. The low angle at which this photograph was taken makes the construction vehicle appear larger than life, highlighting its power and importance.

Rule of thirds.

PHOTO BY PHOEBE DESANTIS

The subject in this photo was intentionally placed off-centered in the frame. By placing the subject in one of the frame's "thirds", it becomes more aesthetically pleasing to the viewer.

To get someone's attention through photography you must make sure that the photos are interesting out of context, meaning that it is visually pleasing even without knowing the story behind it. Try using the rule of thirds to make an image more appealing. Instead of lining up your main subject directly in the middle of the photograph, imagine that there are these lines over the top of your picture. Try placing your subject where the lines intersect.

Appendix E

SHOWeD Method

After you have selected two photographs, use the questions below to identify and explore the community concerns related to the project topic that is illustrated in the photos.

What do we <u>S</u> ee here?	<hr/> <hr/> <hr/>
What is really <u>H</u> appening here?	<hr/> <hr/> <hr/>
How does this relate to <u>O</u> ur lives?	<hr/> <hr/> <hr/>
<u>W</u> hy does this situation, concern, or strength <u>e</u> xist?	<hr/> <hr/> <hr/>
What can we <u>D</u> o about it?	<hr/> <hr/> <hr/>

Appendix B

Participant Photographs

Photographs Taken by Beri

Photograph	Participant Description
<p>The library contributes to my success in school because it's a quiet place to work without too many distractions. It is also convenient because it is across the street from my house.</p>
<p>Friends the tv show contributes to success because it's very relatable to what I'm going through in school and life in general. If they can get through stressful situations, so can I.</p> <p><i>Note:</i> This is an image retrieved from a Google search.</p>

Note: Photograph not shared during Focus Group 2.

Baked goods contribute to success because I eat them to make myself feel better after a hard day at school. Also, I get these from work. Work has helped me learn time management because there are specific things I need to do every hour based on a checklist.

When asked why this photo was not shared, Beri explained:

It didn't really fit into the conversation that they were all talking about. This photo is from the place I work. Work relaxes me a little bit because I know what to do and how to do it right, versus learning completely task. With school, you always have new classes and new professors. You have to learn what they want.

Photographs Taken by Birdie

Photograph	Participant Description
A photograph of a white stuffed cow with a large orange nose and black spots, sitting on a black gaming keyboard with red backlit keys. The keyboard is on a black mousepad with the brand name 'PECHAM' visible. A computer mouse is also visible on the right side of the mousepad.	<p>This is my gaming computer. I use it for everything, from school work to games. It helped me be successful because I used games as a reward system for getting work done or being productive. Games motivated me to do my work, which helped me develop study habits and stay focused.</p>
A photograph of the same stuffed cow toy sitting on the steering wheel of a car. The steering wheel has a silver Toyota logo in the center. The background shows a view of the sky through the car's windshield.	<p>This is my car. Having my own car helped me be able to get to class on time and go to campus for extracurriculars whenever I needed to. The flexibility of having my own means of transportation contributed to my success because it allowed me to access campus easily and at any time.</p>

This is the testing center specifically for students in Disability Students Programs and Services (DSPS). It allowed me to have a quiet testing environment with my other accommodations, which greatly contributed to my success. I am extremely grateful for the DSPS staff and the resources DSPS provided for me.

This is the Life Sciences building. It contributed to my success because it provided a quiet study environment with few people. This is also the building where I took my first biology classes, which is when I discovered my huge interest in biology.

Photographs Taken by E.T.

Photograph	Participant Description
<p>My headphones are like a safety net. Wearing them helps prevent sensory overload for me, whether I have soft music playing or not. They're not noise-canceling so I can still clearly hear what's going on around me, but if I start to spiral, it's easy for me to step away and turn the music up so I can focus on de-escalating my anxiety.</p>
<p>The horticulture lab introduced me to gardening, which has proven to be soothing and fulfilling. For someone who takes a lot of comfort in tactile stimulation, it's extremely satisfying and more peaceful than I ever thought possible.</p>

Crochet, or even just having yarn to play with, is a very helpful grounding method. It keeps me focused on my immediate surroundings and helps me stay calm and listen when I don't need to take notes.

Having multiple screens helps me study like little else does. Being able to simultaneously see my notes, my homework, and my solutions at the same time keeps me from losing my train of thought. Instead of flipping a page or clicking to a new tab and immediately forgetting why or what I'm checking for, I can highlight where I am on each screen and constantly look between them for context.

Model kits are a great source of comfort and help me to better commit things to memory, as opposed to struggling to position things in my head, stressing out when I can't get it right, and falling into a downward spiral.

When asked why this photo was not shared, E.T. explained:

There's one picture I didn't show that just sort of it like wasn't relevant at that point anymore. It was a picture of all the molecule models, just to sort of go over tactical learning. But I feel like we really went over like tactical anchors, in terms reducing of anxiety.

Note: Photograph not shared during Focus Group 2.

Photographs Taken by Jack

Photograph	Participant Description
<p>Photo 1 helps me take notes and copies it on my computer for me to look at later.</p>
<p>Photo 2 helps me get to school on time. I also use my car to go to the beach to relax.</p> <p><i>Note:</i> This is an image retrieved from a Google search. Jack explained his car was currently in the shop, but this was the make, model, and color of the car he owned.</p>

Photo 3 records lectures so if I forget something important I can listen to it and write it down.

Photographs Taken by Jinx

Photograph	Participant Description
<p>This is my sketchbook. Art is something I use to ground myself when I have anxiety or stress. Having the ability to draw whenever or wherever I need to, gives me confidence, and helps me remain present. It is something that is always accessible. I just need a pen and paper to get out of my head.</p>

This is my dog. I have had her since I was eight. She has been with me since I was diagnosed with a learning disability. Her unconditional love and support has been with me through my whole learning process. She sees me for who I am, regardless of my struggles. She gives me unconditional love regardless of what I am going through. All she ever does is provide me with love and she reminds me that my problems are just mine. I don't need to feel the weight of the world. Problems are subjective and they are just obstacles that I can get over.

This is my mom's shrine. This represents my mom and her dedication to me and her support throughout my entire life. She not only supported me but gave me access to whatever help I needed (tutors, programs). She never gave up on me regardless of what others said. Always having someone in my corner helped me be successful because she encouraged me to keep trying.

This is a picture well before my upper division math class started of me going to open up my math classroom so other students could have access to the math computer programs. I also help other students. My teaching others helps me better understand the material and tests my knowledge and understanding. They can get the help they need and I am also benefiting from it.

This is me relaxing and studying. It has a bubble bath that has been calming for me and gets me out of the traditional studying environment where you sit at a desk and a chair and are isolated. Having my bath and snacks gets me in a different headspace and helps me study. There is different scenery and smells. A new location helps me look at things in a new way and gives me a fresh perspective.

Photographs Taken by Tommy

Photograph	Participant Description
<p>In order to succeed I need a place to relax away from my desk. Sitting in my room where I work on my breaks makes it so I cannot recharge myself properly, I can't feel cooped up like that.</p>
<p>To succeed I need a quiet and organized place to do my work. If I am going to be efficient in achieving my success I can't have a cluttered space that I share with others for a workspace.</p>

To be successful I need a car so I can be independent while commuting to class, and have my own space to relax at school. After a few hours at school, I need to be alone to reset, and if I didn't have a car I'd have to hide in a bathroom or something just to stay calm.

Appendix C

Letter to DSPS Director

Dear Disabled Students Program and Services Director,

Thank you for the opportunity of allowing me access to some of your students. In this correspondence, I have listed the summary of findings from my study, titled *The Success of Students with Disabilities at Community College*. The information gathered through this study seeks to help educators and families understand what supports student success over the long term in college. This information is valuable, as educators need to know what skills to begin teaching students when students are still in K-12 education and what partnerships they need to help create at the college level. Although this research targets students and educators, it may also help inform policy makers as they begin to consider revising current special education law.

The following recommendations were gathered from a series of individual interviews and focus groups discussing what supported students with disabilities in obtaining success at community college. All of the six participants shared their excitement about participating in the project and their belief that this project was important. While the individual interviews allowed space for the students to share personal information, the group setting allowed for social connection.

As part of the final focus group, the students were asked to share their suggestions for how community colleges could better support students with disabilities in obtaining success. From the beginning of this project, it was made clear that their suggestions would be shared with Community College A in order to help facilitate positive change. This section was condensed into this brief report provided for you. The conversation in the final focus group centered around three main questions: (1) What have you taken away from this project? (2) In what ways could

community colleges improve in order to better support students with disabilities? (3) What are community colleges currently doing well in order to support students with disabilities?

What have you taken away from this project?

Four of the students shared that they found it beneficial to listen to others, as they could relate to others' experiences. Listening to other students' stories reinforced that they were not alone in their experiences, and it gave students a furthered feeling of connectedness to others on their campus. During this experience:

- Students recognized a desire to connect more to those around them on campus. This desire to connect with others is beneficial, as a sense of belonging and connection to peers was positively related to success in college (Fichten et al., 2014; Morrow & Ackermann, 2012).
- Students identified that the reflection process is beneficial. As students were getting ready to transfer to 4-year schools, they shared it is important to know what has worked and what has not. This process helped students identify what needs to change moving forward. Self-reflection is a major aspect of self-determination (Jameson, 2007; Korbel et al., 2011). Stronger self-determination skills may lead to more positive outcomes for students with disabilities (Connor, 2012; Jameson, 2007).
- Students identified a clear connection between using the DSPS center (especially for testing) and success in classes. Other researchers (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015) have corroborated this finding.
- Students learned about tools and strategies others use. Several students shared they would like to implement tools (e.g., use of a smartpen) or strategies (e.g., having a particular spot to study, studying before playing video games) that others are using.
- Factors in this study that contributed the most to their success were also verified by the literature. These factors include accommodations (Fichten et al., 2014; Kim & Lee, 2016), supportive DSPS staff (Graham-Smith & Lafayette, 2004; Johnson & Fann, 2016; McCleary-Jones, 2008), positive faculty interactions (Denhart, 2008; Fichten et al., 2014; Kim & Lee, 2016; Rao, 2004), setting goals and having a plan to reach those goals (Korbel et al., 2011; Skinner, 2004; Thoma & Getzel, 2005), having a study space that

matches students' needs, and having ways to reduce anxiety and stress (Brogden & Gregory, 2019; Porter 2018)—particularly when in class.

Students shared that, overall, they enjoyed participating in the project. Students expressed a desire to give back to their communities. They hoped that their experiences could help others identify tools to promote success, and they hoped their suggestions could facilitate positive change.

In what ways could community colleges improve in order to better support students with disabilities?

While each student had individualized suggestions for ways community colleges could best support students with disabilities, there were several leading suggestions. These included:

- Providing students with a way to identify to what degree a faculty member is disability friendly. Disability-friendly faculty were identified as accepting diverse students, were approachable, willing to accommodate, had some knowledge about disability, and maintained student confidentiality. One student shared that they would like to see a rating system, like RateMyProfessors.com tailored to students with disabilities. Another student shared that she gets positive recommendations from the DPSP counselors. The literature confirmed connections with encouraging faculty fostered positive college experiences for students (Fichten et al., 2014; Vaccare et al. 2015), although faculty lack knowledge about disability resources and have limited experience discussing disability with students (Brown & Coomes, 2016).
- More staff in the DSPS center. All students identified they prefer to see DSPS counselors rather than the general academic counselors. Participants preferred DSPS counselors because they were able to provide more personalized recommendations, they better understood the challenges that come with having a disability, and students developed personal relationships with them. Two students suggested a designated drop-in counselor, as there is too long a wait time when making an appointment. Two students shared they would like extended testing hours to take tests when they had class instead of arranging other times. The literature identified disability services are impacted by available

resources and student population (Brown & Coomes, 2016); however, disability services is a major component of student success (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015).

- Students shared concerns about the term disability. Because disability is in the title Disabled Students Program and Services, students were hesitant to register or did not think that the services were for them. This finding is significant, as the literature shows students who registered for DSPS and used accommodations were more likely to persist than those who did not use accommodation (Fichten et al., 2014; Kim & Lee, 2016). Students who registered for services were also more likely to have higher GPAs, higher degree aspirations, and take full-time course loads (Mamiseishvili & Koch, 2012; Quick et al., 2003). Students in this study suggested additional advertising around campus or more detailed information from faculty that identifies the types of disabilities served (e.g., ADHD, OCD, Dyslexia, Anxiety, Depression, Learning Disability, Autism), thus making it more clear which types of students could benefit from services.
- Students had several issues involving finding basic information, like where the DSPS office is located, how to verify disability status, and what services are offered. All of this information is available on the DSPS webpage; however, none of the students had been to the webpage or knew the webpage existed. This finding indicates this form of information dissemination is not working and that information may need to be provided differently, or students need to be actively directed to the webpage.
- Students also wanted faculty to know that mental health disabilities may not look the same throughout the semester. One student identified that he might participate less or look like he isn't paying attention if he has a bad day. He shared it is not helpful for faculty to call him out or try to make an example of him. Three students shared that they dropped or stopped attending classes because of negative interactions with faculty. Findings from the California Community College System's 2019 Mental Health Services Report identified a series of goals and objectives (i.e., increased mental health services, increased training for faculty and staff, stronger relationships with community-based mental health services) that should support students with mental health needs moving forward.

What are community colleges currently doing well in order to support students with disabilities?

When asked about what community colleges are currently doing well, students most frequently identified specific DSPS center services. This finding was not surprising, as researchers identified DSPS as an important component of student success in the literature (Fichten et al., 2014; Kim & Lee, 2016; Mamiseishvili & Koch, 2012; Vaccaro et al., 2015). Researchers highlighted specific accommodation support (Graham-Smith & Lafayette, 2004; Kim & Lee, 2016), check-ins with DSPS counselors (Graham-Smith & Lafayette, 2004; McCleary-Jones, 2008), and the general facilitation (Fichten et al., 2006) that occurs through DSPS as beneficial to their success. Participants in this study shared:

- The testing center and all the resources in it (e.g., lockers, supplies, partitions) are working well. Participants noted the quiet environment and extended time was beneficial.
- The accommodations form was clear and could be updated easily. The form made it clear what the professor needed to do.
- The academic plan was helpful for goal setting and helped students stay on track. Reviewing it with DSPS counselors was beneficial, as they could help students make decisions about the appropriate number of units, classes, professors, etc.
- The DSPS staff was kind, committed, and supportive. They were welcoming and provide a good first impression, making students want to return, even if they were nervous or hesitant to register for services.
- The group shared that they appreciated that DSPS provided workshops, as it provided a space to socialize and learn about a particular topic. However, only two of the six participants had attended a workshop. One workshop centered around planting succulents. The workshop centered around mental health, particularly ways to relieve stress. Both students expressed that they enjoyed the workshops. One student suggested future workshops include life skill-based topics, like how to transition to living on your own (or with roommates), how to budget, how to do taxes, or how to cook simple meals.

- One participant shared that DSPS offered small group video conferences after the shift to distance learning due to COVID-19. While none of the participants had taken advantage of this service, they found it beneficial that counseling support was still available. As society considers the changes resulting from COVID-19, this may prove to be a positive change. Students who are hesitant to seek out in-person counseling may be more comfortable with the digital format and thus be more likely to follow up with needed support. Additionally, students who find it difficult to get to campus due to challenges with transportation or busy schedules may find digital counseling easier to access.

The information gathered through this study seeks to help educators and families understand what types of support facilitates student success during their college career. This information is valuable, as educators need to know what skills to begin teaching students when students are still in K-12 education and what partnerships they need to help create at the college level. Although this research targets students and educators, it may also help inform policymakers as they consider revising current special education and disability related laws.

At the time of writing this dissertation, the impact of the letter the participants crafted is unknown; however, most of the participants (i.e., Birdie, E.T., Jinx, and Tommy) shared they hoped their insight could provide positive changes that would support other students with disabilities.

Recommendations of This Research

The findings of this study have implications both for both secondary education and higher education, as well as for families of college-bound students with disabilities and students with disabilities themselves. The life experiences the students shared in this study were insightful. Their expressed journeys can teach us how to facilitate and better support students with disabilities as they embark on their college careers. The results of this study have implications for (a) high school teachers, school counselors, school psychologists, and

administrators; (b) families of students with disabilities; (c) DSPS counselors and office personnel; (d) faculty teaching at community colleges and four-year colleges or universities; (e) students with disabilities planning on attending college or currently attending college, and (f) policymakers. I will address each of these areas in the following sections.

Recommendations for High School Teachers, School Counselors, School Psychologists, and Administrators

- Foster stronger connections to the local DSPS offices (i.e., inform students about the supports provided through DSPS, arrange a visit to the DSPS office with students, have students currently enrolled in DSPS at community college come talk with current students, encourage students and families to attend DSPS open house nights, so families have more information and are familiar with the office).
- Help prepare students for the transition (i.e., include self-advocacy training in high school curriculum, increase focus on developing self-determination skills, help students gather the necessary paperwork they need to enroll with DSPS, talk with students about the types of accommodations they may be eligible for at the community college, encourage students to take a variety of classes so they can identify likes and dislikes).
- Ensure students are prepared for college-level courses (i.e., encourage students to take academically challenging courses, provide access to a study skills course so students can learn the critical skills essential for college success, as students continue through high school encourage independence, so student develop the skills needed to be independent learners in college).
- Help prepare families for the transition (i.e., ensure families know the differences between the supports their child had in high school versus what supports they will have in college, discuss the change in roles—student must seek out services).

Recommendations for Families of Students with Disabilities

- Prepare for the transition to community college (i.e., learn about the college application process, learn about applying for financial aid, understand their child's academic needs will be different in college than they were during high school).

- Support their child through the transition (i.e., support their child through the application process, talk to their children about what keeps their child may need, and whether the family can support those needs or assist in obtaining the resources that would meet those needs).

Recommendations for DSPS Counselors and Office Personnel

- Understand what students value (i.e., kindness, committed counselors, people who know how the college operates, staff that is available in a timely manner or for drop-in support, alignment of DSPS support from college to college—especially when colleges are in the same district)
- Clearly identify supports for students with mental health needs (i.e., access to drop in counselors, access to spaces for students to decompress privately)
- Hold workshops that: allow students to share their experiences and learn from each other, teach students how to plan and advocate for themselves, address topics relevant to increasing student success at community college, teach faculty and staff about disability related issues, etc.
- Increase advertising about DSPS services, so students are aware of the service, what types of students may benefit from the service, etc. Also, consider current advertising and assess if it is reaching target populations.
- Be aware of the stigma associated with the term disability, as people with disabilities can associate the term with negative experiences. Also, students may identify with a particular disability label, but not the general term disability.
- Consider the positive and negative impact of changes resulting from COVID-19. For example, college counselors are offering counseling services online during COVID-19. Students who are hesitant to seek out in-person counseling may be more comfortable with the digital format and thus be more likely to follow up with needed support. Additionally, students who find it challenging to get to campus due to challenges with transportation or busy schedules may find digital counseling easier to access.
- During semester meetings with students, identify which accommodation students are not using and why they are not using them. Assist students if they are having difficulty using a particular accommodation.

Recommendations for Faculty Teaching at Community Colleges and Four-Year Colleges or Universities

- Learn more about disability (i.e., attend campus workshops, take it upon themselves to learn more about disability, learn more about potential accommodations students may need).
- Learn more about students with mental health needs (i.e., how to reduce student anxiety in the classroom and what to do when they seem to be experiencing poor mental health).
- Focus on being approachable and accessible (i.e., implement Universal Design Strategies, encourage all students to talk to you about supports they need to be successful, reach out to students who appear to be struggling, include classroom activities that promote community building).
- Maintain student confidentiality (i.e., do not announce one student's needs to the class, set aside time before or after class to talk with student).

Recommendations for Students with Disabilities Planning on Attending College or Currently Attending College

- Become a self-advocate (i.e., learn skills for seeking information, reach out to faculty if struggling, educate faculty on their needs, use DSPS services, suggest improvements if campus services are lacking)
- Work on dismissing stigma related issues—if this is an issue—by learning more about their disability, learning more about disability in general, educating themselves on disability legislation
- Identify and implement factors that can promote success (i.e., identify how they best learn, seek opportunities to engage fully at the community college, develop trusting relationships with others on campus, reach out to others who have disabilities, and identify what can be learned from each other)

Recommendations for Policy Makers

- Consider ALL students when making policy decisions that affect students, so students with disabilities do not remain marginalized in educational systems

- Learn more about students with disabilities and the challenges they face in going to community college
- Talk with students with disabilities before suggesting legislation that may impact students with disabilities
- Reach out to policymakers in other states who have experience developing legislation that impacts students with disabilities

Final Thoughts

Based on this study's findings and the conclusions of other researchers, students with disabilities are finding success in community college, although this success may take them longer to achieve. While the federal and state governments have passed laws to reduce discrimination and promote access for students with disabilities, additional work is needed to support the success of community college students with disabilities. As demonstrated in this study, students with disabilities have valuable insight to share their success and challenges. Thus, there is a need for higher education institutions to elicit the voices of students with disabilities to better provide support, especially as the course pathways at community college change to adapt to new legislation, like AB 705. With students, high school teachers and counselors, families, DSPS offices and counselors, and faculty members working together, equitable opportunities will be afforded to students with disabilities in their pursuit and obtainment of their community college goals.