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Fostering Self-Determination Skills Among High Schools Students With Disabilites in an Online Environment

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FOSTERING SELF-DETERMINATION SKILLS AMONG HIGH SCHOOLS STUDENTS WITH DISABILITES IN AN ONLINE ENVIRONMENT

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DEDICATION

This dissertation is dedicated to my family far and near. Throughout my life I have always strived to be better each day and earning my PhD has been a goal of mine since I began working in education twenty-five years ago. I cannot thank my family enough, especially my husband, for the constant encouragement, support and understanding through this long process. There were many nights and weekends that were devoted to research and writing putting family time on the back burner. Without the support of you all, I never would have been able to reach this goal and dream! You are more important and precious to me then you will ever know, and I hope that through my perseverance, an example has been to set to never give up and keep pushing and working towards your dreams. To my daughter Katelyn, always strive to be better and continue learning and growing! You have taken on a journey yourself as an educator and I cannot wait to see how your future continues to progress in education! If I have taught you anything, I hope it is that you are stronger and braver then you think and you can accomplish anything you set your mind to!

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ABSTRACT

This qualitative case study explored the understanding of high school special education teachers in an online setting, in regard to self-determination skills. It also explored current instructional practices utilized in the online setting as well as perceived challenges and barriers for instruction and the acquisition of self - determination skills for students with a variety of disabilities in grades 9-12 enrolled in two specific online schools located in the south east region of the U.S. Two semi-structured interviews were conducted and held virtually with the nine participants in this study. The emerging themes were analyzed and viewed through the lens of the Schneiderman's Student Engagement Theory (1994) and the 5 C's of Student Engagement Framework developed by Reppetto and colleagues (2010). The findings demonstrated that these particular special education teachers had limited understanding of self-determination skills, as defined in the literature, or impact it had on their students with disabilities post-secondary outcomes. In addition, the results demonstrated that currently evidence-based practices are not being utilized or implemented in daily instruction. Barriers/challenges to the implementation difficulties were identified by the participants. The implications for both practice and research are discussed.

Keywords: self-determination, special education online, post-secondary outcomes

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CHAPTER ONE

NATURE AND SIGNIFANCE OF THE PROBLEM

Promoting self-determination skills in students with disabilities has become a best practice in secondary education and transition services (Wehmeyer at al., 2010). Self-determination is important for all people, including students with disabilities. Self-determination was defined by Deci and Ryan (1995), as:

> The capacity to choose and to have choices, rather than reinforcement contingencies, drives or any other forces or pressures, and to be the determinant of one's actions. But self-determination is more than a capacity; it is also a need. A need to act out of choice rather than an obligation. (p.38)

Skills included in self-determination, such as problem-solving, goal-setting, and decision- making, enable students to assume responsibility and control. When students with disabilities show they can make things happen and take responsibility for planning and decision-making, others change their perceptions and expectations (Ward, 1996). Self-determination is a combination of skills that facilitates self-regulated desired behaviors. Students who are self-aware and adjust to their environment are more likely to have a positive perception of themselves (Campbell-Whatley, 2008). A self-determined student is able to set goals and exhibit self-control by responding to events independently (Wehmeyer et al., 2000). Although self-determination is considered a characteristic of an individual, educators may be able to teach skills to enhance self-determination (Morgan

& Riesen, 2016). Educators may begin addressing self-determination skills as early as elementary school, although it does not typically occur until later in an individual's school career (Murasaki & Wilshinsky, 2005).

An individual will encounter many transitions throughout his/her educational experience, but one of the most significant transitions occurs at high school graduation (Test et al., 2009 b). The transition from high school to adulthood is a time of many challenges. Research studying adolescents with disabilities, including intellectual disabilities, learning disabilities, emotional and behavioral disabilities, and autism, has shown that adolescents identified with these disabilities are less self-determined than their non-disabled peers (Pierson at al., 2008; Ward & Meyer, 1999; Wehmeyer et al., 2007; Wehmeyer, 2015; Wehmeyer & Shogren, 2008). This can have an impact on the ability of the individual to move into employment and/or post-secondary education institutions (Wehmeyer et al., 2010). Studies have further shown that students with disabilities who left school self-determined were more than twice as likely as their peers who were not self-determined; to be employed one year after graduation. They also earned greater salaries. Three years after graduation, those same individuals with higher levels of self-determination were more likely to have health benefits and vacation time, and to live in places other than home (Wehmeyer et al., 2003). Individuals may not be able to achieve positive post-secondary outcomes, such as securing competitive employment, in order to live independently and make positive contributions to society, without some self-determination skills (Gragoudas, 2014). A series of studies have been conducted to examine the relationship between self-determination skills in individuals with disabilities and post-secondary outcomes.

The National Longitudinal Transition Study-2 (2012) is the third in a series of studies conducted over several decades to examine the characteristics, experiences, and post-high school outcomes of a nationally representative sample of youth with disabilities. Among adolescents with disabilities who had been out of school one to four years, 58% reported working full time and 19% reported that employers were aware of their disability (NLTS2, 2012). Of the students with disabilities who continued on to post-secondary school, 45%, did so within five months of leaving high school. Those individuals who were currently enrolled in post-secondary school, reported they were working toward a diploma or certificate (NLTS2, 2012).

In 2018, a current population survey (CPS) was conducted through the U.S. Bureau of Labor Statistics. The survey was sent to about 60,000 households nationwide and focused on individuals with disabilities 16 years and older. Based upon the survey responses, only 19% of individuals with a disability were employed compared to 65.9% of peers without disabilities. The report also indicated that 69% of individuals with disabilities were more likely to work full time compared to 83% of individuals without disabilities (U.S. Bureau of Labor Statistics, 2018). In 2019, according to the U.S Department of Labor, 23.5% of individuals with disabilities ages 16-19 are in the work force and 44.3% of individuals with disabilities ages 20-24 are in the current workforce (U.S. Department of Labor, 2019). The statistics paint a bleak picture for individuals with disabilities regarding positive post-secondary outcomes. The Individuals with Disabilities Education Act (2004) implies that when adolescents with a disability graduate from high school they will have the skills that will lead them to employment and independent living

(IDEA, 2004; Gragoudas, 2014). Individuals with disabilities have struggled with obtaining employment or continuing in post-secondary education for many years.

In 2009, a systematic correlational literature review of twenty-two articles was conducted by Test et al., to research evidence-based secondary transition predictors for improving post-secondary outcomes for students with disabilities. The goal was to provide educators/ practitioners with practices designed to improve students' post-secondary outcomes. The results of the review included sixteen predictor categories associated with positive post-secondary outcomes in the areas of education, employment, and/or independent living. The predictors identified were career awareness, community experiences, exit exam requirements/high school diploma status, inclusion in general education, interagency collaboration, occupational courses, paid work experiences, parental involvement, programs of study, self-advocacy/self-determination, self-care/independent living, social skills, student support, transition program, vocational education, and work study (Test et al, 2009 a). Students who passed more than half the courses in eight curriculum areas (remedial academics, traditional content classes, personal finance, community access, behaving responsibly, goal-setting, or problem-solving, specialized vocational education, and regular vocational education) were more likely to be engaged in post-secondary employment (Halpern et al, 1995; Wehmeyer & Schwartz, 1998; Powers et al, 2012).

Postschool outcomes are influenced by a number of factors related to personal characteristics and available opportunities and supports. One of the personal characteristics that has been hypothesized to influence outcomes is self-determination (Shogren et al., 2015). Shogren, Wehmeyer, Palmer, Rifenbark and Little (2015 a),

conducted an analysis of 779 students with disabilities to examine the relationship between self-determination status when exiting high school and adult outcomes one and two years post high school. The purpose of the study was to extend earlier research, exploring to what degree self-determination predicted post-secondary outcomes in a large number of individuals with disabilities who participated in self-determination interventions while in high school. The findings suggested that participation in self-determination interventions prior to exiting high school predicted positive outcomes in achieving employment one year and two years after graduation (Shogren at al., 2015 a). This study supported earlier claims by researchers (Halpern et al, 1995; Powers et al, 2012; Wehmeyer & Schwartz, 1998) that students with higher levels of self-determination experience positive adult outcomes. The study also suggested that educators can consider self-determination interventions a useful component of instruction (Shogren et al, 2015 a).

Self-determination skills in individuals with disabilities often have to be directly taught. IDEA (2004) mandated that instructional goals relating to self-determination skills must be included in a student's transition plan. In 2000, Wehmeyer, Argan, and Hughes surveyed 1,219 special education teachers from 50 states to find out if they promoted self-determination and self-directed learning. Although 60% of the teachers who responded were familiar with the term self-determination, only 22% reported that students had goals in this area and instruction was occurring (Wehmeyer et al., 2000). The respondents indicated the most frequent exposure to self-determination was through journal articles, conferences, and graduate training. They also rated instruction in components of self-determination as "moderately important" or "very important"

(Wehmeyer et al., 2000). Overall, teachers reported that self-determination is an important instructional area, however, many reported that their students would not benefit from the instruction, and the environment often affected their ability to teach the skills directly (Wehmeyer et al., 2000). Instruction in choice-making, problem-solving, self-advocacy, and self-regulation have developed into stand-alone curricula or are incorporated into small special education settings, such as self-contained classrooms (Abery & Stancliffe, 1996; Wehmeyer et al., 2000). However, educators can also infuse self-determination skills into general education settings for students with disabilities who are anticipating their transition from high school to post-secondary or employment (Denney & Daviso, 2012). The students need opportunities, instruction, and settings in which to practice the skills.

The Individuals with Disabilities Education Act (IDEA) operationalizes instruction in self-determination by mandating student participation and decision making in the IEP process (IDEA,2004). These rules require that students, minimally at 16 years of age, must have the opportunity to provide input towards their own IEP and transition objectives, goals, and activities based upon their own preferences, self-perceived needs, and interests (IDEA, 2004; Martin & Marshall, 1995). Other instructional strategies in self-determination can teach students to predict where they are going and determine how they will get there, how long it will take and how they will know when they arrive (Gragoudas, 2014; Martin & Marshall, 1995; Wehmeyer & Field, 2007). Students can learn to choose goals based upon their interests, skills, and limits. Through various instructional methods, students can learn how to act on their goals by planning, using

self-management strategies, acting on that plan, self-evaluating their progress and adjusting as needed in any environment (Gragoudas, 2014).

Research has examined how educators can infuse self-determination skills into the general education curriculum for students with disabilities (Denney & Daviso, 2012). Teaching students to self-direct their learning to set goals, advocate for themselves, and problem solve often does not lend itself to a traditional model of instruction in which the teacher directs and the student learns, requiring instead, instruction that supports student empowerment and self-direction (Gragoudas, 2014; Wehmeyer & Field, 2006). The Self-Determined Learning Model of Instruction (SDLMI) is an example of an instructional process developed to address this issue. The student selects his/her own learning goal, then puts together a plan to meet that goal, takes action, and determines whether the plan worked or needs adjustments (Gragousdas, 2014; Hagiwara et al., 2017; Lee et al., 2008; Wehmeyer et al., 2000).

Self-determination can assist students in gaining more control over their education as well as in their lives. Having control over their education has a positive effect on individual well-being and empowerment (Gragousdas, 2014). Individuals with disabilities need to experience situations in which they have the opportunity to self-advocate. One of those settings is the individualized education plan (IEP) meeting (Denney& Daviso, 2012; Test et al., 2009 a; Test et al., 2009 b). By expressing their goals for their future and offering suggestions on how those goals can be met, students with disabilities are able to exhibit self-advocacy skills. Although the student is directing his/her own learning and education, the teacher must be present to provide support for the student. Current literature suggests that these methods of teaching self-determination are reflected in face

to face sessions in a traditional brick and mortar school. The question remains on how to integrate these essential skills and instruction in an online environment. Research has not yet addressed teaching self-determination skills to individuals with disabilities in an online environment or how online instruction affects student's participation in the IEP's development.

Online schools can be uniquely positioned to meet the needs of students with disabilities because of their ability to accommodate students with extended times and varied multimedia technologies references (Rose & Blomeyer, 2007; Vasquez & Straub, 2012). The schools can also offer individualized instruction to meet specific needs of learners, flexibility in location and schedule, and expanded accessibility for students who are not able to attend traditional brick and mortar schools (Rose & Blomeyer, 2007). The proportion of special education students attending full-time online schools (15.5%) exceeds the national average of students without disabilities of 13.1%. Students in this population have an identified disability and an Individualized Education Plan (IEP). The proportion of students with disabilities in virtual schools has grown rapidly -from 6.8% in 2010-11 to 13% in 2015-16, and then 15.5% in 2016-17 (Molnar, 2019). Successful students in an online environment are individuals who are highly motivated by intrinsic sources, have strong time management, and literacy and technology skills- traits typically, only seen in adult learners, such as graduate students, and not typically in youth with disabilities (Barbour & Reeves, 2009; Morgan, 2015).

Students participating in online schools experience a very different environment from a traditional classroom. In online schools in grades K-12, the classroom is in the home or on the road, or wherever an internet connection is available. A full time

student's day may consist of a combination of online lessons; independent activities not on the computer, including textbooks and workbooks provided by the school; interactions with teachers and classmates via online or phone; and/or guidance from their Learning Coach (K12, 2019). Students are expected to complete schoolwork each day and attend virtual classroom sessions as scheduled by their teachers with no direct face to face interaction. Very little is known about best practices in teaching students in K-12 online settings. (DiPietro et al., 2008). Given that students in an online environment need to be fairly independent and able to self-manage their time to complete instruction and assignments, teaching self-determination skills in this environment presents a challenge. Parents often guide and support students in the online environment, thus impacting a student's ability to become fully independent. Assessing a student's true independence and self-determination skills are often also challenging due to lack of face to face interactions and lack of ability for the teachers do conduct direct observations. Progress and assessment data are often reported via checklists/notes from parents.

Research Purpose

The purpose of this research is to explore the understanding of self-determination skills and instructional practices by high school special education teachers in an online setting in grades 9-12. Strong self-determination skills are a predictor of positive post-secondary outcomes for students with disabilities (Harpen et al, 1995; Morgan & Risen, 2016; Test et al, 2009 a, b; Wehmeyer et al., 1997,1998 & 2010), however, in spite of the growth in online schools and the enrollment of students with disabilities on the rise in these settings (Barbour & Reeves, 2009; Molnar, 2019; Morgan, 2015), these issues have not been explored or researched (DiPietro at al., 2008). Current research on teaching

self-determination skills to adolescents with disabilities has focused on instruction delivered in brick and mortar schools. Through this research, I hope to discover exactly what the challenges are that online special education teachers face with teaching self-determination skills, as well as what practices are currently being utilized in the online environment to teach self-determination skills.

Research Questions

RQ 1: What are special education teachers' understanding of self-determination and its relationship to post-secondary outcomes?

RQ 2: How do special education teachers understand assessment and instruction of self-determination skills to students with disabilities and what challenges do they perceive delivering instruction in an online setting?

Method

This study will be an exploratory case study conducted within a public school district located in the southeastern part of the United States. The participants will be special education teachers, currently teaching grades 9-12 in a full-time online school, with an expected voluntary sample size of ten. The teachers will be providing online instruction in two specific virtual schools located within the district: Virtual School #1 School and Virtual School #2. The primary data collection method for this study will be one-on-one semi-structured interviews with each participant, conducted by the researcher. Interviews will be scheduled at a mutual time and location as agreed upon between the researcher and participant. Semi-structured interviews will allow me to ask specific questions structured around the overall questions of this study. The interview data will be analyzed through transcription of the interviews and coding for themes that

are relevant to the research questions. I will also conduct a review of one month's lesson plans of each participant and a random sample review of individuals IEP's. The purpose of the document review will be to verify that special education teachers are indeed teaching self-determination skills to those students who have identified goals on their IEP.

Terms and Definitions

Brick and Mortar Schools are traditional places of education that may use bricks and mortar in the construction. Students will spend a set amount of time during the day being educated face-to-face by teachers in a school building away from home (IGI Global, 2020).

IDEA refers to the Individuals with Disabilities Education Act, which is a federal law that defines a child's rights in special education. It also defines transition and post-secondary goals for students age sixteen and older (IDEA, 1990, 2004).

Individualized Education Plan (IEP) is a plan or program developed to ensure that a child who has a disability identified under the law and is attending an elementary or secondary educational institution receives specialized instruction and related services. The plan is required to include goals, and services addressing post-secondary education (IDEA, 1990, 2004).

Least Restrictive Environment (LRE) is part of the Individuals with Disabilities Education Act (IDEA). IDEA states that children who receive special education should learn in the LRE. LRE means that students should be educated in general education with peers to the maximum extent that is appropriate. Removal from the general education

setting should only occur when the disability is so severe that supplementary aids and services cannot be provided for an appropriate education. (IDEA, 1990, 2004).

Online School is a full-time education program in which students (K-12) attend virtually, utilizing technology. Online schools may draw students with disabilities and students without disabilities from across the state. In online schools, all educational instruction is delivered virtually using various platforms from instructors, and students typically work independently at home or at another location of the student's choice (Barbour & Reeves, 2009).

Post-Secondary Outcomes are adult milestones, achieved by individuals, with or without disabilities, upon completion or aging-out of high school. These outcomes include level of independent living, higher education (attend a two or four year program full or part time), competitive employment (pay at or above minimum wage for more than 90 days after high school), other education/training (job corps, vocational technical school) or other employment (work for at least a 90 day period after leaving high school) (Test et al, 2009 a; IDEA, 2004).

Self-Determination is a collection of skills in which individuals are taught how to problem solve, make choices and decisions, set personal goals, advocate for themselves, create action plans to achieve goals, and self- regulate and self-manage day-to-day actions (Wehmeyer et al., 1998).

Secondary Transition is a process of preparing students for adult life after they leave high school. Transition can be thought of as a bridge between school programs and the opportunities of adult life, including higher education or training, employment, independent living, and community participation (OSERS, 2017).

Special Education Services means specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability, including instruction conducted in the classroom, the home, in hospitals and institutions, and in other settings. The services include speech and language pathology, or any other related services required, travel training and vocational education (IDEA, 2004). Services maybe delivered in a variety of ways including, but not limited to, inclusion in a general education classroom, resource in a separate classroom with only special education students, and/or a self-contained setting in which students receive all instruction in a special education classroom with special education peers and a special education teacher for all or the majority of their school day (Epler & Ross, 2015).

Specially Designed Instruction refers to adapting instruction, as appropriate, to the needs of an eligible child under IDEA. The content, methodology, or delivery of instruction must meet the unique needs of the child that result from the child's disability and to ensure access of the child to the general curriculum. The child must have access to meet the educational standards of the public agency that apply to all children (IDEA, 2004).

Vocational Education consists of organized educational programs that are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career not requiring a baccalaureate or advanced degree (IDEA, 2004).

CHAPTER TWO

REVIEW OF THE LITERATURE

Self-determination is a key educational outcome for all students, with and without disabilities. It increases the likelihood of high levels of academic achievement in all levels of school, success in employment, and becoming engaged in the community in adulthood (Ticha et al., 2018). If they are to become successful in post-secondary life, individuals with disabilities must acquire the skills that allow them to determine their own life courses. To identify the most significant factors of self-determination, a thorough review of the literature was conducted. This review included an examination of the following factors: the definition of self-determination and its included elements, a review of the history of self-determination in relation to individuals with disabilities, and perceptions of self-determination skills from student, parent, and educator lenses. It then provides a review of evidence-based practices for assessing and instructing self-determination skills as well as, service delivery options, including online K-12 schools. This chapter details the scholarly literature on each factor.

History of Self-Determination

Early Perceptions of Self-Determination

Individuals who experience cognitive, mental, or physical disabilities have traditionally been a hidden minority in American society (Percy, 1989). Segregation predominated disability programs from the 1920's to the 1970's (Berkowitz, 1987). Individuals often were warehoused in large institutions, isolated from the social

mainstream, and denied the benefits and opportunities available to people without disabilities (Ward & Meyer, 1999). Independence was not encouraged for individuals with disabilities, and primary care was typically given by the family at home. Individuals with disabilities were often not seen in public, even for school. (Gill, 2017). During this time period, all decisions regarding the individual typically were made by others, and individuals with disabilities often did not have input or control over their own lives (Ward, 1996). Society has treated individuals with disabilities in a very inhospitable manner over the years, as if they were incapable of and not expected to contribute to society (Shapiro, 1993).

Many states allowed for the exclusion of students from public education with not only physical and mental disabilities, but also individuals who exhibited behaviors that would make school attendance inadvisable from the viewpoint of the officials (Ward, 1996). Gradually, public policy began to support opportunities for individuals with disabilities in education (Ward, 1996). Some school districts assumed responsibility for individuals with disabilities, primarily due to the demands of parents. Parents, teachers, and students became advocates for education that prepared individuals for successful postschool outcomes, either college or competitive/sheltered employment (Ward, 1996). Later research has supported the development of self-determination skills as a critical component of successful post-secondary outcomes (Gragoudas, 2014; Pierson et al., 2008; Shogren & Ward, 2018; Ward & Meyer, 1999; Wehmeyer, 1997, 2015; Wehmeyer et al., 2007, 2010).

Self-determination for individuals with disabilities was first seen in the writing of Benget Nirjie and was reflected in his principle of "normalization" (Ward, 2005). The

principle referred to a cluster of ideas, methods, and experiences of individuals with mental disabilities and should be applied to all, regardless of an individual's level of cognitive disability. According to Nirjie (1972) normalization meant having:

- Opportunities to have choices, wishes, and desires taken into consideration and respected.
- Opportunities to experience a normal rhythm of the day, with daily events, like getting out of bed and eating meals, occurring under similar circumstances and at similar times as the population without disabilities.
- Opportunities to experience a normal routine of life, including access to and participation in a similar range of activities (e.g., work, leisure, home) in the same settings used by people without disabilities.
- Opportunities to experience the normal rhythm of the year with the celebration of holidays and days of personal or family significance, including the opportunity for vacation and travel.
- Opportunities to encounter the normal developmental experiences of the life cycle (For youth with disabilities, this means learning about one's abilities and potential, obtaining an understanding of oneself, and building one's self-confidence. For older youth with disabilities, it is important to move away from home and to live as independently as possible.)

The principle of normalization stressed that the choices, wishes, and desires of individuals with disabilities have to be taken into consideration and respected (Nirje, 1994). Nirje' s writings also called for a wide range of actions that would allow individuals with disabilities to better control their lives and destinies. These actions included choice of personal activities, education, independence, participation in decisions, and problem-solving. Making choices, asserting oneself, self-management, self-knowledge, decision-making, self-advocacy, self-efficacy, autonomy, and independence have become the essential features of personal self-determination (Nirje, 1994).

Roger Perske, in 1972, expressed his desire for the opportunity for people with severe disabilities to experience the "dignity of risk" (Ward, 2005). Individuals with disabilities can be prepared to take that "dignity of risk" through strong self-determination skills. He described this risk as:

> The world in which we live is not always safe, secure, and predictable...Every day that we wake and live in the hours of that day, there is a possibility of being thrown up against a situation where we may have to risk everything, even our lives. This is the way the real world is. We must work to develop every human resource within us in order to prepare for these days. To deny any person their fair share of risk experiences is to further cripple them for healthy living (p 108).

Nirjie's and Penske's advocacy for self-determination, and the opportunity to experience the dignity of risk, laid the foundation for future initiatives and reform for students with

disabilities in all aspects of their lives. The attention and focus on self-determination and the rights of individuals with disabilities in general, lead to judicial and legislative support throughout the years.

Judicial and Legislative Support for Self-Determination

A number of laws have supported independent living, empowerment, and the right for self-determination for individuals with disabilities. (Case, 2008). The laws have led individuals with disabilities to be afforded the same civil rights as other minorities. These rulings have addressed accessibility, participation in public education, and discrimination.

In 1968, the Architectural Barriers Act (ABA) (PL 90-48) required that all construction supported with federal funds had to be accessible to people with disabilities. This was the first measure by Congress to ensure access to the built environment for people with disabilities. (ABA, 1968). For the first time, the country recognized through law that (1) individuals with disabilities were a part of the public and (2) accommodations were required to ensure they had access to public facilities (Ward, 1996). Individuals with physical disabilities could now enter public buildings, such as schools, with the creation of this act.

A class action lawsuit was brought to the District of Columbia in 1972, *Mills v. Board of Education, 348 F. Supp. 886*. This lawsuit was on behalf of seven school-aged children who had been denied placement in a public education program for long periods of time because of alleged mental, behavioral, physical, or emotional disabilities. The plaintiffs desired an injunction that the individuals had been denied their constitutional rights to Due Process. The court held that no child could be denied a public education because of "mental, behavioral, physical or emotional handicaps or deficiencies." It was

also further noted that the school system could not fail to educate the students by the claim of insufficient funds, which was the basis of their case (Mills, 1972).

Also, in 1972, Thomas Gilhool, who represented the Pennsylvania Association for Retarded Children (P.A.R.C), filed a lawsuit on behalf of fourteen children with developmental disabilities; *P.A.R.C. v. Commonwealth of Pennsylvania, 334. F. Supp.279.* These students had been denied access to public education in Pennsylvania, under a specific state law that allowed the schools to exclude children who had not reached a "mental age of five," by the time they should be enrolling in first grade (P.A.R.C, 1972). The court ruled that any child up to the age of twenty-one must be permitted to enroll in a public school program "appropriate to his/her learning capacities: and the educational status may not be changed without the opportunity for a due process hearing" (P.A.R.C., 1972). These two cases were forerunners for future legislative support for students with disabilities to be educated in public school.

Section 504 of the Rehabilitation Act (PL 93-112) was passed in 1973. This civil rights law's purpose was to protect individuals with a disability from discrimination in any setting where federal funding was provided. No one could be excluded or discriminated against because of his/her disability; those with a disability are defined as a person who has an impairment of either mental or physical areas that measurably limits one or more life activities. (Section 504, 1973). The law also set requirements that each school must make "reasonable accommodations" for all students viewed as having a disability.

The Education for All Handicapped Children Act of 1975 or PL 94-142, mandated that all children and youth with disabilities attend a public school. This law

guaranteed a free and appropriate education to every child with a disability. This law had a positive and dramatic impact on millions of children in every state and community across the country. The law had four major purposes: (1). To ensure that all children with disabilities have available to them a free and appropriate public education which emphasizes special education and related services designed to meet their unique needs, (2) to assure that the rights of children with disabilities and their parents are protected, (3) to assist states and localities to provide for the education of all children with disabilities, and (4) to assess and assure the effectiveness of efforts to educate all children with disabilities (Education for All Handicapped Children Act, 1975) . Between 1978 and 2015, fifteen different federal laws supporting self-determination were enacted (Case, 2008) (see **Appendix A**).

These laws were the beginning steps individuals with disabilities needed to begin to gain control over their own lives. Providing physical accessibility to a building allowed individuals to be participants in activities in a variety of locations. Access to public education also allowed individuals with disabilities to begin to be a part of their own education and interact with non-disabled peers, thus creating avenues for social interactions to occur.

Society has a history of being perplexed about how to respond to individuals with disabilities. They have often been feared and excluded from society. They have lived on the fringe of society separated from others by stigmatizing labels and supposed inabilities (Brotherson et al., 1995). Discrimination has occurred concerning access to education and other areas of society, forcing individuals with disabilities to become advocates for equal treatment and accessibility. By the 1960's, the civil rights movement began to take

shape, and disability advocates saw the opportunity to join forces alongside other minority groups to demand equal treatment, equal access, and equal opportunity for individuals with disabilities (Ward, 1996). The goal was to enable individuals with disabilities to be productive, contributing citizens who chose a way of life, and take responsibility of their own lives; to be self-determined (Winter, 2003).

Social Movement Support for Self-Determination

Individuals with disabilities began demanding that they had rights and could choose, belong, and participate as full and equal members of society (Berkowitz, 1987). Groups were formed in Great Britain, Canada, and the United States by people with intellectual disabilities to advocate for their own community living (Berkowitz, 1987). In 1972, a group formed in Oregon and named their self-advocacy group, "People First," because they felt their disabilities were secondary to their being a person first and foremost. This was the first self-advocacy group for individuals with disabilities in the United States (Ward, 2005).

Robert Wood Johnson II, who built the family firm of Johnson and Johnson, the world's largest health care products maker, created a foundation in 1972, called the Robert Wood Johnson Foundation. The foundation's goal, through the use of grants, is "to improve the health and health care of all Americans" (RWJF, 2019). This organization has funded nineteen state self-determination grants over the years. The grants focused on students with developmental disabilities and were aimed at having individuals with disabilities and their families have more control and direction at choosing and purchasing services and for control over their own services (Case, 2008).

The United Nations elected to give the movement some momentum by declaring 1981 to be the International Year of the Disabled Person (United Nations, 2019). The General Assembly called for a plan of action at the national, regional, and international levels, with an emphasis on equalization of opportunities, rehabilitation, and prevention of disabilities (United Nations, 2019). In the United States, the self-advocacy movement had become so powerful by 1991, a new organization was founded called Self Advocates Being Empowered (SABE) (SABE, 2019). This organization had also been awarded a grant from the Administration for Community Living to establish its own Self Advocacy Resource and Technical Assistance Center (SARTAC). This made it easier for SABE to provide resources for the other groups to be organized and supportive of each other in their continuing effort for equal rights (SABE, 2019).

The Office of Special Education and Rehabilitative Services (OSERS) began a self-determination initiative in 1988. This initiative focused on system-wide activities to enable individuals with disabilities to have more input in the decisions that affect their lives (Shogren & Ward, 2018). Self-determination was referred to as both the attitudes that lead people to define goals for themselves, and the ability to make the choices to achieve those goals. According to Wehmeyer (2015), a key milestone in this movement occurred in 1989. Over sixty individuals with disabilities gathered at the National Conference on Self-Determination. The Office of Special Education and Rehabilitative Services invited the individuals to meet and recommend directions the agency should take to support individuals with disabilities and self-determination.

The result of that conference lead to twenty-nine recommendations OSERS could do to support individuals with disabilities and the development of self-determination at

the state and federal level. Some of those recommendations included creating a program for developing and supporting state and local self-advocacy organizations, rating grant proposals designed to benefit individuals with disabilities according to how well they included the concept of self-determination and including individuals with disabilities on grant review teams. It was also recommended that a formal course in human disability be included in the social studies curriculum of all public schools, and that a national research and training center on self-determination be created (Ward, 2005). OSERS then announced a grant competition in September of 1989 for model demonstration projects to "identify and teach skills necessary for self-determination, as well as the in-school and out of school experiences that lead to the development of self-determination," (Ward, 2005).

Between 1990 and 1996, OSERS funded more than twenty-six model demonstration projects that focused on self-determination theory development, assessment, and interventions (Shogren & Ward, 2018). These projects contained various innovative approaches (Ward & Kohler, 1996). The projects focused on person-centered planning processes to teach strategies for achieving a self-determined future, and the development of a self-determination curriculum. A focus on self-determination as a process by which students become actively involved in goal- setting and making decisions through activities such as self-evaluation, and individualized education program (IEP) planning and implementation were also focused projects (Ward & Kohler, 1996).

Self-determination for individuals with disabilities is not only about having control over his/her life and making decisions such as buying a home, having a good job and self-advocating for themselves, it is also about empowering the individuals.

Throughout history, laws and social movements have supported individuals with disabilities to become self-determined. These individuals no longer live in isolation with no input on their lives or future. Self-determination is an interplay between the individual and society. Society must continue to give individuals with disabilities, opportunities, and the support to do so (Ward, 2005). The support from social movements and laws, have enabled individuals with disabilities to be viewed differently from multiple perspectives.

The Construct of Self-Determination

Self-determination can be viewed as the intrinsic motivation of all persons to be the primary determiner of their thoughts, feelings, and behavior (Deci & Ryan, 1995, 2017). It does not "lie within the person," but rather is the product of both the individual and the environment. It is about the individual using the skills, knowledge, and beliefs at his/her disposal to act on the environment with the goal of obtaining valued and desired outcomes (Abery & Stancliffe, 1996; Shogren et. al., 2015 a; Wehmeyer et al, 2003). Everyone, including young children, elderly individuals, and individuals with severe disabilities have the potential to exercise, to some degree, a level of control over their lives.

There is a general consensus about the characteristics/behaviors that are typical of self-determined individuals, however, over the years, various research has defined self-determination in many different ways, describing specific characteristic traits and/or as actions that individuals with disabilities can perform to demonstrate they are self-determined. In 1994, Field et al, described some self-determined behaviors as awareness of personal preferences, interest and strengths, the ability to differentiate between wants and needs, the ability to take action when needed, ability to set and work toward goals,

ability to self-regulate behavior and the ability to use communication skills such as compromise, negotiation, and persuasion to reach goals. They further continued to define self-determined characteristics of individuals with disabilities as self-confident, full of pride, persistent, and creative (Field et al., 1994). Ward and Meyer, (1999) defined self-determination as the attitudes which lead people to define goals for themselves and their ability to take the initiative to achieve the goals. They further identified the characteristics of self-actualization, assertiveness, creativity, pride, and self-advocacy as associated with self-determination.

Field and Hoffman (1994) defined self-determination as one's ability to define and achieve goals based on a foundation of knowing and valuing oneself'. Their focus of self-determination has five major components: (1) know yourself, (2) value yourself, (3) plan, (4) act, and (5) experience outcomes and learn. The skills are promoted by both internal factors within the individual control such as values, knowledge and skills and environmental variables that are not within an individual's control such as opportunities for making choices or attitudes of others.

Wehmeyer (1996) defined self-determination as acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue external influence or interference. Individuals are self-determined if their actions reflect four essential characteristics: (1) the individual acted autonomously, (2) the behaviors were self-regulated, (3) the individual initiated and responded to events in a psychologically empowered manner, and (4) the individual acted in a self-realizing manner. These essential characteristics emerge based on the acquisition of a set of skills,

including choice and decision-making, problem-solving, self-management, and self-advocacy skills and adaptive perceptions of control, efficacy, and self-awareness.

Shogren at al., (2015 b), have extended the definition of self-determination to incorporate a causal agency theory (FM-CAT). They now define self-determination as a "dispositional characteristic manifested as acting as causal agents in one's life "(Shogren et al., 2015 b, p. 258). Self-determined individuals (causal agents) act upon freely chosen goals and enable an individual to be the causal agent of his/her own life. The FM-CAT has a focus on the individual, as well as on fostering and developing skills such as: choice- and decision-making; problem- solving; goal-setting and attainment; communication, self-advocacy; self-regulation skills; enhancing self-knowledge; an understanding of the service system and one's rights; and supporting the development of an internal locus of control and sense of self-efficacy (Shogren et al, 2015 b; Wehmeyer & Abrey, 2010).

Self-determination has been defined in many different ways, but the core characters of problem-solving, goal setting, decision-making, choice-making and self-advocacy can be found in all current definitions (Martin & Marshall, 1995; Shogren et al., 2015 b, 2016). For research and instructional purposes, the most common definition of self-determination is that self-determined individuals are causal agents; they make things happen in their lives (Shogren et al., 2015). They are goal oriented and apply problem-solving and decision-making skills to guide their actions. They know what they do well and where they need assistance. Self-determined people are active participants in their own lives (Martin & Marshall, 1995; Shogren et al., 2015 b, 2016). Others' understanding of the importance of self-determination and its applicability to individuals with disabilities, can define the

opportunities for those individuals to become self-determined, and affect the individual's quality of life (Lachapelle et al., 2005; Shogren et al., 2016; Wehmeyer, 1997).

The concept of self-determination, especially as it relates to individuals with disabilities, can be easily misunderstood by many in disability-related fields, including education. There is a perception that self-determination is the same as independence (Shogren et al., 2015 a). This view may imply that in order to be self-determined, individuals should have complete control over all aspects of their lives and support from others. It also may imply that self-determination is possible only for individuals with mild disabilities, who have more opportunities for independence as adults. Self-determination skills can look different for each individual with a disability, it is not a "one-size: fits all. Each individual will need to learn and acquire different skills with various levels of support. Self-determination is important, however, to all students with disabilities and not specific to a certain group of individuals with disabilities (Wehmeyer, 2015).

Importance of Self-Determination

Self-determination skills are important and viewed differently from the individuals', parents', and educators' perspectives. The acquisition of self-determination skills is essential in instilling students with disabilities problem-solving and decision-making skills (Cho et al, 2013). As they enter adolescence, self-determined individuals are better able to cope with the academic and social demands of life in middle and high school (Cho et al., 2013). After high school, they are more likely to transition successfully to adult life (Wehmeyer & Schwarz, 1998). Self-determination is necessary for successful navigation of adult life; without it, others will be responsible for making decisions in the lives of individuals with disabilities (McCollin & Obiakor, 2010). Special

education research has shown that students with disabilities who left school more self-determined were more than twice as likely as their peers who were not as self-determined to be employed one year after graduation, and they had higher salaries then their non-self- determined peers (Shogren et al., 2015 a). Three years after graduation, they were more likely to have obtained jobs that provided benefits like health coverage and vacation and were more likely to be living somewhere other than the family home (Wehmeyer & Schwartz, 1997).

Using the ARC's Self- Determination Scale, Wehmeyer and Schwartz (1997), measured the self-determination of students with intellectual and learning disabilities during their final year of High School. Study participants were 80 students with cognitive disabilities from school districts in Virginia, Connecticut, Alabama, and Texas. Students were recruited for participation if they were receiving special education services based upon a cognitive disability (mental retardation or learning disability) and would be leaving school by graduating or receiving a certificate of attendance at the end of the 1994-1995 school year. Data on self-determination was gathered during the administration of the ARC and nine months after graduation, a survey was sent home to follow up on the individual's post-secondary status (Wehmeyer & Schwartz, 1997).

Participants were placed into two groups; high self-determination and low self-determination, based upon the frequency distribution of self-determination total scores. To prevent the groups being spilt by intelligence level, two frequency counts were computed, one each by disability (learning disability, intellectual disability). The top and the bottom third of each frequency count were assigned to the high or low self-determination groups. The mean IQ for the low self-determination group was 72 (*SD*

=24.7) and the mean for the high group was 75 (*SD* = 18.52). The majority of the individuals (90%, *n* =72) still lived at home with their parents nearly one year after graduation. The high self-determination group (*p* =.03) was more likely to maintain both a checking and savings account. They were also more likely to be employed for pay than their peers in the low self-determination group; 80% for the high self-determined group compared to 40% for the low self-determined group. Individuals who earned the most had significantly higher self-determination scores.

Shogren et al. (2015 c) followed students who participated in previous group-randomized, control group studies which examined the effect of self-determination in secondary school into adulthood in order to explore the relationship between self-determination and adult outcomes, as well as the impact of exposure to self-determination interventions. The previous studies conducted group-randomized, control group studies to examine the efficacy of several self-determination interventions on student self-determination in secondary school. The findings of these studies were that students who were exposed to self-determination curriculum showed significantly greater growth in self-determination.

In the Shogren et al. study, participants were 779 students with disabilities recruited from six states (Arkansas, Kansas, Missouri, Nebraska, Oklahoma, and Texas) and 50 school districts. Any participant who was enrolled in high school and had contributed data to the previous studies was eligible to participate in the present study. Participants ranged in age from 14.3 to 21.8. All participants had Individualized Educational Plans (IEPs) while they were in high school and the majority were served under the categorical label of learning disability (37%) or intellectual disability (30%).

The majority of the participants were Caucasian (56.7%). Each high school that agreed to the study was assigned to be a "treatment" or a "control" group. The first 3 years of the 2-year follow-up study involved project staff mailing out adult outcome surveys to the students, 1- and 2-years post-school. Baseline data were collected prior to the study which included demographic information and measures of self-determination, including the SDS. The same data collected at baseline were also collected during the second and third years of the project to examine changes in student self-determination as a function of exposure to self-determination interventions. To measure adult outcomes, a survey was used from previous research and included the following: Employment, Community Access, Financial Independence, Independent Living, and Life Satisfaction. Structural Equation Modeling (SEM) was used because it allowed the researchers to move beyond looking simply at single indicators of adult outcomes and look at adult outcome constructs with multiple indicators.

To find the relationship between self-determination status when leaving secondary school and adult outcomes, researchers tested for variance in the beta pathways across the control and treatment groups, and then tested the significance of the beta pathways across the control and treatment group. It was found that SDS at Time 1 predicted SDS at Time 2, which predicted SDS at Time 3. SDS at Time 3 significantly predicted Community Access at Time 4 (β =1.078) and at Time 5 (β = 0.948). In Employment, SDS at Time 3 significantly predicted Employment at Time 4 (β = 0.504) but not at Time 5, although Employment at Time 4 predicted Employment at Time 5 suggesting an ongoing indirect effect of self-determination. SDS at Time 3 predicted a significant decrease in Financial Independence at Time 5. For the second research question, which looked at exposure to

self-determination interventions while in secondary school impacting the relationship between self-determination status when leaving secondary school and adult outcomes, they found that there were significant differences across groups in SDS at Time 1 and 2, as well as significant differences in Life Satisfaction, Community Access, and Employment at Time 4. With the exception of Life Satisfaction, the control group scored higher.

The results for both research questions suggest that self-determination status when exiting high school does impact adult outcomes, but the nature of the relationships is complex. Youth's current level of self-determination predicts their future level of self-determination. Self-determination status at Time 3, which was their last year of high school, predicted higher levels of community access and employment outcomes 1-year post school. They also found that youth with higher levels of self-determination were more likely to have a job and have access to job benefits 1-year post high school (Shogren et al., 2015 c). These studies both required the individuals participating to indicate their perceptions of their own self-determination skills through a self-report. Research utilizing self-reporting measures such as surveys, interview and/or rating scales, are directly tied to the individual's experiences. They do not reveal whether other factors, such as parent support, education, or environment, influenced self-determination (Nonnenmacher & Bambara, 2011).

Self-determination skills do have a positive impact on individuals with disabilities and post-secondary outcomes as demonstrated through the above studies. They are more likely to be employed and earn higher wages then their non- self-determined peers. Over time, self-determined individuals are likely to maintain consistent employment and benefits. The individuals are able to take control over their lives with various levels of

support. Multiple factors can influence an individual's self-determination perception of themselves. These factors can include their parent perceptions and their teacher's perceptions.

Self-perception

Specific research focusing on individuals' self-perceptions is limited and rarely are the perspectives of individuals with disabilities included in research literature. Three specific studies were found in this review; one of the studies focused only on individuals with intellectual disabilities (Carter et al., 2008; Nonnenmacher & Bambara, 2011; Stroner et al., 2006). Research indicates that individuals with an intellectual disability tend not to live very self-determined lives and many live in highly structured, supported settings (Nonnenmacher & Bambara, 2011). Understanding the perspectives of individuals with disabilities regarding his/her own self-determination skills may help us understand how to best support, encourage, and educate individuals in or on specific areas of self-determination.

Stoner et al. (2006) interviewed adults with physical disabilities regarding their perceptions about factors that facilitated and impeded their self-determination. The study investigated the perceptions of 12 adults with physical disabilities related to their self-reported abilities and opportunities to practice self-determination, the obstacles they encountered and strategies they used to attain self-determination, and suggestions they made for facilitating self-determination in other individuals with physical disabilities. Interview results indicated that participants' definitions of self-determination involved the importance of family, overcoming obstacles, and having the ability to persevere and attain goals. Facilitators of self-determination centered around four themes: (a) intrinsic

factors; (b) support from families, individuals, and support networks; (c) opportunities; and (d) setting goals. Participants consistently recognized and identified the need to experience self-determination through various opportunities (Stroner et al., 2006)

In 2006, Carter et al, examined the self-determination of adolescents with emotional disabilities (ED) and learning disabilities (LD) from the perspectives of special educators, parents, and the students themselves. Eighty-five high school students with ED (n = 39) or LD (n = 46) that were randomly selected from four different high schools, were assessed during the spring semester of the academic school year. Students ranged in age from 14.1 to 19.1 years old. Thirty-one students were in ninth grade, twenty-six were in tenth grade, sixteen were in eleventh grade and twelve were in twelfth grade. In order to be included in the study, students had to be (a) receiving special education under a primary disability of either ED or LD, (b) provide parental consent for participation, and (c) provide assent to participate (Carter et al., 2006).

The AIR Self-Determination Scale was used and completed by the students to measure the students' capacity for, and opportunities to, engage in self-determined behavior. The scale is guided by the theory that prospects for self-determination are influenced both by students' skills, knowledge and beliefs, and opportunities in the environments (Wolman et al, 1994). It is comprised of five scales under two sections: capacity and opportunity. The capacity section is designed to measure the extent to which students connect beliefs about what the need, want, and could do with their expectations, choices, actions, and results. Respondents are asked to rate each questionnaire item on a 5-point Likert scale to indicate how frequently the student engages in the behavior, ranging from *never* (1) to *always* (5). The opportunity section is

designed to evaluate the opportunities students have to engage in self-determination behaviors at home and at school. Items are rated on a 5-point Likert-type scale to indicate how frequently the student has opportunities to engage in each behavior ranging from *never* (1) to *always* (5) (Carter et al., 2006).

In the area of capacity, there was no significant difference found between the two disability groups in their individual perceptions on ability ($M = 3.34$ for ED, $M = 3.69$ for LD), and perception of skills ($M = 3.36$ for ED, $M = 3.70$ for LD). Both groups rated themselves between "sometimes" and "almost always" displaying capacity skills. In the area of opportunity, there was a significance between the two disability groups in regard to opportunities for self-determination at school and at home ($p < .0001$). Individuals with LD rated themselves as having more opportunities related to self-determination skills in school ($M = 3.73$) and home ($M = 3.88$) as compared to individuals with ED ($M = 3.14$, $M = 3.02$). This implies that individuals with ED may not be given the same opportunities as individuals with LD to engage in opportunities to display their individual self-determination skills (Carter et al., 2006). Adolescents with ED were judged to have limited capacity to engage in self-determined behavior. This finding may be indictive of the limited efforts made by educators nationally to promote self-determination of adolescents with disabilities in general and adolescents with ED specifically (Carter et al., 2006).

Nonnenmacher and Bambara (2011) examined the perceptions of adults with intellectual disabilities regarding their own self-determination skills and the social supports they needed. The qualitative interview study consisted of ten adults, all were individuals with intellectual disabilities and members of a self-advocacy group. The

individuals were asked to discuss their understanding of the term self-determination and ways in which support staff have either supported or hindered their own self-determination. Along with cognitive weaknesses, individuals with intellectual disabilities may also have physical weaknesses and are not likely to act completely autonomously, but rather require the support of others to participate in daily decision-making and to advocate for their own preferences and needs (Thompson et al, 2009).

One to one, in-depth semi-structured interviews were conducted to explore the individuals' experiences and perspectives concerning their self-determination. The individuals lived in settings such as group homes, personal family homes, or semi-independent housing with a roommate, and each was currently working in some type of employment (sheltered or competitive) or had prior work experience (Nonnenmacher & Bambara, 2011). Each participant chose either to be interviewed at home or in a private location away from others. The participants defined self-determination in two main ways, (1) speaking out and (2) being in charge. Expressing on their own behalf what they wanted or did not want and making those intentions heard was a common view, along with the importance of knowing their own rights. Making decisions and acting upon them was defined as part of self-determination as well. Examples of making decisions and being in charge included deciding what to do during free time, choosing where to work and live, what to do with personal spending money, and choosing to have intimate relationships (Nonnenmacher & Bambara, 2011). The individuals seemed aware of their personal limitations and restrictions placed on them due to their living and work situations and turned to support from staff or others for assistance.

Five themes emerged that the individuals characterized as actions supporting their self-determination from others, specifically staff members. These actions include: (1) expanding options and experiences to encourage choice, (2) supporting access to people with authority above their current staff, (3) being approachable and accessible, (4) listening without judgement and (5) providing support for, follow through (weight loss, assistance with getting to a bank, taking daily medications, going to doctors' appointments). Good relationships with the support staff seemed to create quality interpersonal relationships with the individuals and impacted their self-determination perceptions (Nonnenmacher & Bambara, 2011).

An individual who perceives themselves as self-determined and has the skills, makes conscious choices enabling purposeful actions to achieve an end result. Making those decisions can be exciting to individuals, but the individuals may lack confidence and uncertainty and require support (Morgan & Reisen, 2016). The perspectives of individuals on their own self-determination can provide important insight to researchers, practitioners, and family members on the effect of specific interventions and supports they feel they need to be successful as adults.

Parent Perceptions

Parental support and family involvement are recognized by many stakeholders as a critical factor in the development of self-determination for individuals with disabilities (Abery, 1994; Field & Hoffman, 1994; Grigal et al, 2003; Lachapelle et al., 2005; Shogren et al., 2016; Wehmeyer, 1996)**.** There is little research that documents parents' knowledge or perceptions of self-determination, however, as schools increasingly infuse self-determination into education, it is important to examine parents' beliefs about self-

determination related to different types of disabilities. Parents' views and beliefs are reported throughout the research based upon self-reporting assessments (surveys, scale and/or interviews). The success of self-determination instruction and the opportunities an individual is given to practice self-determination skills can depend greatly on parents' views of its appropriateness and desirability (Grigal et al., 2003).

In 2003, Grigal et al., conducted a study of 496 parents of high school students 16 -21 years old with high and low incidence disabilities. A survey was used to determine the parent's beliefs about self-determination. The survey included questions designed to examine parents' beliefs about teaching self-determination as part of the curriculum, participation of students with disabilities in IEP meetings, and their child's opportunity to make choices and express interests in school (Grigal et al., 2003). The survey included eight questions focused on three large areas, (1) parents' beliefs about student participation in IEP meetings (2) parents' beliefs about their child's opportunity to learn how to express their interests and their abilities and make choices in school, and (3) parents' beliefs about emphasizing self-esteem in their child's classes as well as teaching goal setting and decision-making processes.

Twenty-seven percent of the students in this study were in a high school program that focused on college preparation, twenty-two percent were in a program that emphasized career and technology development, and thirty-three percent were in a community/life skills program. Sixty-eight percent of the parents reported that their child would receive a high school diploma upon graduating, while twenty one percent reported their children would receive a high school certificate. The remainder of the parents were

unaware of what type of document his/her child would receive upon graduation or exiting out of a program (Grigal et al., 2003).

The results of the survey indicated that parents agreed their students with disabilities should be informed and skilled participants in IEP meetings when their child was in either a college preparatory program (M = 1.51, SD =.67) or career/technology program (M =1.43,SD =.53) as opposed to a community-based/life skills instruction (M = 1.43, SD = .53). The participants also agreed that students with disabilities should be taught self-determination skills in school (M = 1.5, SD =.64), with 98% of the respondents indicating some level of agreement. Finally, the respondents' average scores on the construct, student expression of choice and interest, was 2.55 (SD = 1.15), indicating that parents slightly agreed that their child has the opportunity to apply self-determination skills at school (Grigal et al., 2003).

Parents can play a critical role in the development of self-determination for students with disabilities (Abery, 1994; Field & Hoffman, 1994; Grigal et al, 2003; Lachapelle et al., 2005; Shogren et al., 2016; Wehmeyer, 1996). If parents believe that self-determination is an important part of their child's education, the school may be more likely to foster its development. Parents who do not believe its importance may undermine the success of implementing self-determination strategies (Grigal et al., 2003).

Carter and associates (2013) examined the parents' views of self-determination skills and capacities of their young adult children, ages 19-22, with autism or intellectual disabilities (Carter, et al., 2013). The participants were sixty-eight parents or caregivers of young adults with an intellectual disability or autism enrolled in twenty-five public

school districts from three regional areas of the Midwest. A survey was used to rate the value of the importance of seven specific components of self-determination: choice-making, decision-making skills, goal-setting skills, problem-solving skills, self-advocacy/leadership skills, self-awareness/self-knowledge, and self-management/self-regulation skills (Carter et al, 2013).

The parents were asked to complete a written survey and to provide ratings of the importance of their child acquiring a range of self-determination skills, the extent to which their child performs those skills, and their ratings of their child's overall self-determination capacity. The survey asked the parents to rate the importance of their child learning each of the seven component skills. The child's self-determination capacity was evaluated utilizing the AIR Self-Determination Scale. The scale includes six statements rated using a 5-point Likert scale ranging from (1) *never* to (5) *always* (Carter et al. 2013).

Overall, the parents indicated it was very important for their children to learn each of the seven component elements of self-determination with mean scores ranging from 2.52 for self-advocacy and leadership skills to 2.77 for self-awareness and self-knowledge skills. More than 75% of the parents rated choice-making, decision-making, problem-solving, self-management and self-regulation skills, and self-awareness and self-knowledge as being very important for their children. More than 60% of the parents rated goal-setting skills and self-advocacy and leadership skills as very important (Carter et al., 2013). However, they indicated that their young adult did not perform these skills well. Less than 5% of the parents reported their children performed very well in terms of decision-making, problem-solving, goal-setting, self-advocacy and leadership, and self-

management and self-regulation skills. Parents did indicate their children were slightly more successful in their ability to perform choice-making skills (13.3%) and to a lesser extent self-awareness and self-knowledge skills (9.0%). This indicates a clear discrepancy between the importance parents place on self-determination skills and their child's performance of these skills (Carter et al, 2013).

On the AIR Self-Determination Scale, 45% of the parents reported their child almost *always* or *always knew* what he/she needs, likes and is good at, most parents reported that their children *never* or *almost never* engaged in setting their own goals, figuring out how to meet those goals independently, work on plans to meet the goals as soon as possible, checking their own progress towards meeting the goals, and trying another plan if it does not work. Individuals identified as having mild/moderate disabilities and those without intellectual disability were rated by their parents as having greater self-determination capacity ($p < .001$) then those individuals identified as having a more severe and intellectual disability ($p = .0052$) (Cater et al., 2013).

The perspectives of parents are a key factor in illustrating the importance of self-determination skills. Parent support of fostering self-determination skills could set the stage for stronger collaboration and coordination across home, school, and community settings (Carter et al., 2013). Both of the studies mentioned indicate that parents believe self-determination skills are important and should be taught to the students in school. The individual skills needed to demonstrate self-determination are important to their student's success in the future, according to the studies. Parents may be the most consistent influence on the lives of their children with disabilities particularly after school services end. The degree to which the parents see value in self-determination skills, may

have a long influence on the acquisition of self-determination skills for his/her child in and out of educational settings (Carter et al., 2013; Grigal et al., 2003).

Educator Perceptions/Preparation

Educators often rely upon a model in which the teacher is given full responsibility for determining when, what, why, where, and how a student will learn. Rather than rely on that traditional instructional model, we are beginning to realize that there are advantages in having students take a more active role in their educational decision making and in some cases the instruction (Black & Leake, 2011; Gragoudas, 2014; Powers et al., 2012; Shogren & Shaw, 2016; Shogren et al.,2015 a, b; Wehmeyer et al., 2000 b; Wehmeyer &Palmer, 2003). Teaching self-determination skills is one way to maximize active student involvement in their learning. The focus of teaching these skills to students is for them to become active participants in their learning and to assume more responsibility for their behavior. Although research supports the importance of self-determination skills (Gragoudas, 2014; Powers et al., 2012; Shogren et al., 2015 a, b; Ward, 1996; Wehmeyer et al., 2000 b, 2015) information about teacher attitudes towards self-determination or what they believe its benefits are limited (Argan et al., 1999).

Agran, Snow, and Swaner (1999), conducted a study that included a list of 800 potential participants received from the Utah Project for Inclusion, Utah State Office of Education; 100 respondents were randomly selected from this pool. The participants included special education teachers from middle and secondary levels, transition specialists, job coaches, administrators and other related school personnel who typically serve students with disabilities from the Utah Project for Inclusion. A survey was mailed to the participants in order to seek information on their perspectives of the value of self-

determination and strategies that may be used to promote it. Each questionnaire included sections on (a) demographic information, (b) prevalence of self-determination, (c) definitions of self-determination and strategies used, (d) characteristics associated with self-determination and (e) the benefits of self-determination (Agran et al., 1999). The majority of the respondents (84%) indicated they served students with severe disabilities, 67% served students with moderate disabilities, 33% served students with mild disabilities, and 33% served students with profound disabilities. Respondents' answers to the importance of self-determination indicated that 42% rated it is very important, 35% rated between medium and the highest priority, and 17% rated as a medium priority. Only 3% of the respondents indicated it as a low priority. According to 55% of the respondents, self-determination skills were either not on their students' IEPs or only appeared in some. In addition, more than half (59%) of the educators indicated that discussing the need to be self-determined with their students was not at all to moderately important (Agran et al, 1999).

The survey addressed views of self-determination, specifically what the respondents thought it was, which strategies they utilized to teach the skills, and what type of professional development had that had on self-determination skills. Ninety-one percent of the respondents reported that self-determination is mostly concerned with choice-making. Seventy percent indicate it concerned self-monitoring, seventy-four indicated goal-setting, seventy-two indicated problem-solving, seventy-one indicate self-reinforcement and sixty one percent felt it concerned self-advocacy. The majority of the respondents also indicated they had received instruction in teaching self-determination skills (55%) provided at an in-service, university course, or from professional materials.

Overall, 55% of the respondents believed that self-determination was very helpful in preparing their students for post school life, and only 25% believed it was from somewhat to very helpful (Agran et al., 1999).

The vast majority of the respondents thought self-determination was an important part of a curriculum and it provided positive effects for post school outcomes. Since the individuals in the sample served students with varying levels of disabilities, this suggests that many teachers believe self-determination is a critical skill area for all students, regardless of the severity of their disabilities. It is important to note that, although respondents found self-determination to be an important area, more than half indicated that the goals relating to self-determination were either not included on their student's IEPs or appeared only on some (Argan et al., 1999).

Wehmeyer et al. (2000a) reported similar findings in a study involving 1,219 teachers identified as being members of the Association for Persons with Severe Handicaps (TASH) from across all 50 states and serving students with disabilities who were 14 to 21 years of age. The majority of the respondents (n = 1,159) were special education teachers. Respondents were asked to identify the primary disability of students they taught. The disabilities identified were moderate intellectual disability (55), mild intellectual disability (50), specific learning disability (44), multiple disability (40), severe intellectual disability (38), speech/language impairment (35), autism (31), emotional disability (26), orthopedic impairment (21), visual impairment (20), hearing impairment (17), traumatic brain injury (15) and deaf blindness (8). They were also asked to identify the instructional setting in which the students received their education. The instructional environment most frequently reported was a separate class (41%), followed

by a general education classroom (26%) and a resource setting (16%). A survey was mailed to the respondents and consisted of two sections; (1) demographic data, and (2) a set of 10 questions focusing on teaching self-determination which included yes/no and rating scales.

The researchers found that 60% of the respondents (n = 725) were familiar with the idea of self-determination and rated skills (choice-making, decision-making, problem-solving, goal- setting and attainment, self-advocacy, self-management and self-regulation skills and self-awareness and self-knowledge) as moderately to very important. Decision-making, problem- solving, and choice-making received the highest mean rankings (M = 4.93, M = 4.94, M = 5.03). When asked to what extent promoting self-determination would help prepare students for success in school, a mean score of 4.84 (out of 6 possible) was obtained as compared to the same question with a focus on success for post school life, in which a mean score of 5.27 was obtained. Thirty-one percent of the respondents indicated that none of their students had self-determination related goals on their IEP or transition plan, 47% indicated some students did, and 22% indicated that all their students had self-determination related goals (Wehmeyer at al., 2000a). The findings suggest that, nationally, teachers working with secondary students are generally familiar with self-determination as a construct and believe that it is an important instructional area. However, the degree to which teachers indicated their beliefs in the importance of promoting self-determination was not consistently reflected in their instruction. A variety of reasons given by the respondents may explain why instruction to promote self-determination was or was not implemented.

Reasons included (1) lack of benefit from the instruction for their students (*n* = 42), (2) insufficient training/information to provide the instruction (*n* = 41), (3) lack of authority to provide instruction in those areas (*n* = 32), (4) other instruction more urgent (*n* = 29), (5) unaware of curriculum/assessment materials to provide the instruction (*n* = 17), (6) lack of time to provide the instruction (*n* = 15), (7) students already have self-determination skills (*n* = 12), and (8) someone else is responsible for instruction in those areas (*n* = 4). Teachers who are familiar and comfortable with instructing sills associated with self-determination, are more likely to support the development and instruction of the skills to students with disabilities (Wehmeyer et al., 2000 a).

Grigal et al., (2003) also examined the views of teachers on self-determination. Six hundred ninety-eight special education and general education teachers from across school districts in the mid-Atlantic states were asked to complete a survey. The survey consisted of eight questions. All the special education and general education teachers provided some type of instruction to high school students, ages 16 to 21, with a high incidence disability (specific learning disability, mild/moderate intellectual disability, emotional disability, speech, and language disability) or a low incidence disability (autism, multiple severe disabilities, severe orthopedic disability, profound intellectual disability, visual or hearing impairments, traumatic brain injury).

More than half of the teachers were general education teachers and 36% were special education teachers. The remaining 11% indicated they were a vocational educator or selected "other" when asked to describe their teaching role. The majority of the teachers (61%) provided instruction in a college preparation programs while 10% primarily focused on career and technology education and 13% taught in a community -

based/life skills program. It was reported that 88% of the teachers worked with one or more students with high incidence disabilities and 12% worked with one or more students with low incidence disabilities. Thirty-eight percent of the teachers worked with students with disabilities for 5-6 hours per day, 23% for 3 to 4 hours per day, 29% for 1-2 hours per day and 9% for 1 hour or less per day (Grigal at al., 2003).

This study sought to determine the familiarity of self-determination for teachers. Scores for each factor on the teacher survey were obtained by averaging the respondent's item scores. For the construct, teacher familiarity with self-determination, the average score was 2.88 (*SD* = 1.11), on a six-point Likert-type scale (ranging from *1= strongly agree* to *6=strongly disagree*) that best represented their level of agreement or disagreement with each item. This indicated that teachers were familiar with self-determination and how to teach it. The majority of the respondents indicated some level of agreement with the construct measured by this factor, as a factor score of 63% of the teachers were 3 or lower (i.e.., slightly agree to strongly agree). Respondents also slightly agreed that students with disabilities have the opportunity to acquire and learn and practice self-determination skills at their school with a factor score of 2.44 (*SD* = .88). The majority of the teachers indicated some level of agreement with the construct measured by this factor, as 84% of the scores for this factor were 3 or less. These researchers examined this familiarity within and across four different constructs.

Self-determination was examined with respect to type of student disability and secondly with respect to teacher type. Special educators of students with high-incidence disabilities (*M* = 2.50; *SD* = 1.00) indicated more familiarity than general educators (*M* = 3.23; *SD* = 1.14). However, no difference was reported between special educators

(M = 3.08; SD = 1.33) and general educators (M = 2.93; SD = 1.01) who taught students with low-incidence disabilities. Next, self-determination was examined with respect to type of instructional program (college preparatory and career technology versus community-based life skills). Teachers who taught community life skills to students (M = 2.58; SD = 1.10) with high incidence disabilities were more likely to believe they were familiar with self-determination and how to teach it than with teachers who taught in college preparatory and career technology programs (M = 3.01; SD = 1.13, $p < .05$). Additionally, special educators who taught in college preparatory and career technology (M = 2.65; SD = 1.00) were more likely to believe that they were familiar with self-determination and how to teach it then general educators who taught the same subjects (M = 3.21; SD = 1.15, $p < .05$).

Finally, self-determination was examined with respect to teaching experience. Teachers with more than 10 years of experience (M = 2.88; SD = 1.16) instructing students with high-incidence disabilities were more likely to believe they were familiar with self-determination and how to teach it than teachers of students with low-incidence disabilities (M = 2.88; SD = 1.16, $p < .05$). Educators of students with low-incidence disabilities who possessed fewer than 10 years teaching experiences (M = 2.42; SD = 1.01) were more likely to believe that they were familiar with self-determination and how to teach it then were teachers who taught those same students for more than 10 years (M = 3.67; SD = .82, $p < .05$). Individuals who had taught for less than 10 years in a low incidence class appeared to have a stronger perception of their teaching skills then those who had been in the field for more than 10 years. Clearly, teacher perceptions are crucial to implementation of self-determination (Grigal et al., 2003).

Another study conducted by Carter, Lane, Pierson, and Stang (2008) surveyed 340 general and special education high school teachers regarding reported importance of teaching components of self-determination and actual time spent teaching these components. Reported results indicated that 66% of teachers assigned the value of very important to problem solving, self-regulation/self-management, decision-making, and goal setting. Both general and special education teachers implemented self-determination instruction as much as they valued the importance of all components. Additionally, the researchers found that special educators taught self-determination more frequently than general educators. Correlations were reported for teachers' perceptions of the importance of self-determination and rated importance and self- determination instructional practices for seven components. The correlations are as follows: choice-making (r = .75); decision-making (r = .74); problem-solving (r = .76); goal-setting/attainment (r = .72); self-advocacy/leadership (r = .75); self-management/ self-regulation (r = .71); and self-awareness/self-knowledge (r = .72). The results of this study confirm that both special education teachers and general education teachers believe that the components of self-determination are important for all students (Carter et al., 2008).

The results and implications of this research are very much relevant to today's world. Researchers have been examining self-determination skills and students with disabilities for years, and we continue to be discussing the very same topics over twenty years later. Educators continue to believe that self-determination skills are important for students to learn, but yet many struggle with teaching those skills for various reasons in a school setting across different instructional delivery models (Argan, 1999; Cater et al., 2008; Grigal et al., 2003; Wehmeyer et al., 2000 a). Prospective programs need to

include strategies and materials on self-determination for special and general education teachers. New teachers and veteran teachers will likely benefit from support for teaching self-determination skills. Teachers may be exposed to concepts related to self-determination in training, such as student decision-making and self-advocacy, however, may not be relating those concepts to self-determination (Grigal et al., 2003). Given the relationship between self-determination skills and adult outcomes, it appears instructional time should be devoted to teaching self-determination skills, and teachers should have some authority over the schedule and structure of that instruction. If the educational system is going to play a critical role in the development of self-determination for students with disabilities, schools may need to place greater emphasis on its development by making self-determination an integral part of the school improvement (Carter et al., 2013).

A number of studies have been undertaken to document the impact of self-determination on student outcomes. Research indicates that self-determination predicts employment, and community access and participation (Shogren & Shaw, 2016; Shogren et al., 2015 a; Wehmeyer & Palmer, 2003); positive transition outcomes, including higher levels of independent living and the development of positive social relationships (Martorell at al., 2008; Shogren & Shaw, 2016); increased quality of life and life satisfaction (Lachapelle et al., 2005; Norta et al, 2007), and greater stability in outcomes (Shogren et al, 2015 a). In addition, in education, the teaching of self-determination skills has been associated with enhanced academic outcomes (Fowler et al., 2007; Lee et al, 2011; Shogren et al., 2012). Outcomes include greater success in achieving academic and transition goals (Agran et al, 2000; McGlashing-Johnson et al, 2003), and

opportunities for the exercise of personal control (Wehmeyer et al, 2012). However, research has also indicated that teaching self-determination skills and the opportunities to exercise self-determination skills are infrequently included in the programs for students with disabilities (Shogren et al., 2012, 2015a; Shogren & Shaw 2016). As a result, when many students with disabilities leave the supportive environment of school, they do not understand their strengths, needs and basic rights well enough to explain the accommodations they need beyond school life (Ticha et al, 2018).

Each year special educators are charged with facilitating the transition from high school to adult life for students with disabilities and their family members. Transition planning includes a focus on such postschool activities as employment, recreation, post-secondary education, self-determination, and community living (Thoma et al., 2002). The importance of self-determination in the transition process has been designated as one of the most critical issues for students with disabilities (Thoma et al., 2002). Transition planning must take into account the student's preferences and interests (IDEA, 1990). However, despite the legislation efforts and increased attention on successful transition outcomes for students with disabilities, overall positive post-secondary outcomes are weak (Newman et al., 2011). The need for trained professionals to provide quality instruction, planning, and services for students with disabilities is needed (Plotner et al., 2015). The necessity of infusing self-determination curricula in teacher preparation programs suggests that this is an important link in supporting and promoting self-determination to students even at early ages (Bambera et al., 1998; Plotner & Simonsen, 2018; Wehmeyer et al., 2000). Teachers need to possess the knowledge and skills in order to facilitate the acquisition of self-determination skills in students (Thom et al.,

2002). The literature indicates that special education teachers and/or transition specialists do not feel prepared to properly plan and implement lessons and activities that mead to positive post-secondary outcomes for students (Plotner & Simonsen, 2018; Plotner, Trach & Struaser, 2012). The topic of teacher preparation specifically for teaching transition/ self-determination skills goes as far back as 2000.

Wehmeyer, Argan & Hughes, (2000) conducted a study that determined the degree to which special education teachers were aware of the principles of self-determination and to what extent self-determination and self-directed learning strategies were included in instruction. The results of the self-reported surveys indicated that in 60% of 1,219 surveys received *(N* = 731), special education teachers reported they were familiar with the construct of self-determination, yet teachers needed more information and training to promote self-determination for their students. The study also found that frequently cited sources for learning about the principles of self-determination were professional articles (*N* = 433), conferences (*N* = 358), and graduate training (*N* = 315). The most frequent strategies taught were self-reinforcement (*N* = 894), self-evaluation (*N* = 833) and goal-setting (*N* = 793) (Wehmeyer, Aragn & Hughes, 2000). The study also revealed that some special education teachers (*N* = 517) did not believe that their students would benefit from promoting self-determination and others (*N* = 501) indicated they did not believe they had sufficient training or information to support self-determination strategies (Wehmeyer, Argan & Hughes, 2000). It also noted that 851 of the teachers indicated they involved students in educational planning meetings, 683 structured the classroom environment to support student-directed learning, 579 provided instructional

activities in non-educational settings and 280 implemented mentoring programs (Wehymer, Argan & Hughes, 2000).

In 2002, Thoma et al., conducted a study to investigate whether special educators were learning about self-determination in their teacher preparation courses, what strategies they learned, and how effective they believed those strategies to be. The 46-item self-reporting survey was developed to solicit teachers' perceptions and skills in supporting/teaching the various component skills of self-determination. Seventy-five percent of the participants responded that they were familiar with the term self-determination and 25% said that they were not familiar with the term. When asked if the training or instruction they had received regarding self-determination, 33% said it was and 67% said their training was inadequate (Thoma et al., 2002). Thirty-two percent of the participants indicated they learned about self-determination in graduate -level courses, 25% indicated they learned about it from journal articles and 23% indicated the knowledge was from workshop/conference presentations. Only 14% of the participants indicated they had learned about self-determination through their school district in-services. Others indicated knowledge was gained from reading books (18%), undergraduate course (16%) or other ways (12%) (Thomas et al., 2002).

In 2016, Mazzotti and Plotner, conducted a study to research the knowledge and skills of transition service providers to implement evidence-based practices effectively, to ensure students with disabilities experience positive post-secondary outcomes (Mazzotii & Plotner, 2016). An online survey was created and sent to transition service providers across five states, three from the Southwest region and two from the Midwest region, for a total of 592 participants. There were 224 high school special educators, 56 middle

school special educators, 122 transition specialists, 70 school administrators/special education program coordinators, 45 vocational coordinators, 36 rehabilitation counselors, and 39 other disability professionals (Mazzotti & Plotner, 2016). Six of the questions assessed transition service providers' training, access, and preparedness to implement secondary transition EBPs. Participants were asked to complete a 4-point Likert-type rating scale (i.e., 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *strongly agree*) related to each question. Lastly, 10 questions were asked related to implementation, which assessed transition service providers' knowledge and use of secondary transition EBPs (Mazzotti & Plotner, 2016). In addition, participants reported the extent to which they gained knowledge of EBPs though professional journals and university personnel preparation programs.

The findings indicated that 26.0% (n = 154) were *seldom* provided PD opportunities, and 25.8% (n = 153) of participants were *never* provided PD opportunities by their district or agency. Additionally, 35.8% (n = 212) indicated they were *occasionally* provided with PD opportunities, and only 12.3% (n = 73) reported receiving PD opportunities *very often* by their district or agency. Furthermore, 45.3% (n = 268) of participants reported they were *never* or *seldom* provided resources related to secondary transition EBPs. Only 16.9% (n = 100) of participants (n = 100) reported their district or agency *very often* provided secondary transition EBP resources. Of the 592 participants, 61.1% (n = 362) indicated they had *seldom* or *never* received PD opportunities related to EBPs that included training on using data-based decision making to determine effectiveness of EBPs for improving student outcomes. When asked about other methods of gaining access to EBPs and preparedness to implement EBPs, 55.2%

(*n* = 327) *agreed* or *strongly agreed* they gained knowledge of EBPs through professional journals, while 44.8% (*n* = 265) *disagreed* or *strongly disagreed*. Overall, when asked to rate whether PD opportunities had fully prepared them to implement EBPs with secondary youth with disabilities, more than half of the participants (56.3%; n=333) reported they *disagreed* or *strongly disagreed* (Mazzotti & Plotner, 2016).

Participants were also asked to identify their use of EBP's (i.e., Self - Determination Learning Model of Instruction, Who's Future is it Anyway, self-management strategies) for providing self-determination instruction. The most commonly used EBP was self-management strategies, with 72.2% (*n* = 427) of participants indicating they *always, often*, or *sometimes* used self-management strategies. About half of participants (53.6%; *n* = 317) indicated they *always, often*, or *sometimes* used the *Self-Determined Learning Model of Instruction*. The least used EBP was *Who's Future is it Anyway?* with 60.8% (*n* = 360) indicating they *never* used this EBP (Mazzotti & Plotner, 2016). Based on this research, about one out of every two professionals providing services to transition-age students with disabilities are not prepared nor do they have the skills necessary to implement evidence-based practices focusing on transition/self-determination skills.

In 2018, Plotner and Simonsen, examined 41 secondary transition-focused preparation projects funded between 2001 and 2016 through a systematic abstract review. The results indicated a decline in the Office of Special Education Programs (OSEP) funded personnel preparation grants over the time period. Although teacher preparation programs should ensure graduates are competent in assisting transition-age students with disabilities in planning for and working toward post-secondary education goals, this

frequently was not the case (Kohler & Greene, 2004; Plotner et al., 2015). The range of secondary transition projects funded each year was from zero in 2008 and 2014 to nine in 2011 ($M = 2.56$). Some overarching themes arose from the findings which include areas such as: certification/credentials, faculty expertise, federal funding, and a shift towards academics. Participants believed that state-recognized credentials for transition would lead to more participation in personal preparation programs. They also believed federal funding should help support the development and sustainability of transition personnel preparation programs. The development and implementation for preparation programs was believed to have been initiated only by faculty with a specific interest, experience, and expertise in transition service delivery. The majority of the participants also indicated the shift from vocational training for students to college and career ready was creating a challenge for them to find the sufficient time to address specific transition service needs with other competing demands (Plotner & Simonsen, 2018).

Self-determination for individuals is knowing and believing in his/herself, knowing what he/she wants their future to be and how to make plans to achieve that future and knowing what supports he/she will need to take control of their life (Wehmeyer et al, 2000). Given that school districts are evaluated in part on outcomes for students with disabilities, self-determination is an important educational outcome. Due to federal mandates and oversight, districts are forced to take a closer look at how and what students with disabilities are being taught. Educators and the educational process continue to play an important role in enabling individuals with disabilities to become self-determined adults. A focus on self-determination will provide students with disabilities one more tool they need to become independent, productive, and integrated

citizens and to achieve self-sufficiency (Ticha et al., 2018). The evidence from the research shows that the construct of self-determination is relatively familiar to special education teachers, but most of their knowledge of teaching self-determination skills comes from professional journal articles and conferences. There has also been a focus change from teaching vocational transition skills to students with disabilities to a more college and career ready focus which has impacted special education teacher's ability, due to lack of time, to really address specific needed transition/self-determination skills for their students (Plotner & Simonsen, 2018). Further research needs to investigate teachers' awareness of the understanding of self-determination skills and the strategies and techniques that work for implementing assessment, goals, and instructional practices in order to facilitate student self-determination (Thoma et al., 2002).

Evidence-Based Practices

Assessment of Self-Determination Skills

As in any instructional program, assessment is an important first step to designing effective instruction in self-determination. Assessment involves (a) collecting information on factors that affect students' self-determination, and (b) conducting all assessment in a manner that places students in a central role in the assessment process (Field & Hoffman, 1994; Shogren et al, 2015). Promoting student involvement in the assessment process helps ensure that key points from the student's perspective are addressed and the student has ownership in the assessment process and the subsequent educational planning process.

The primary use for assessment of self-determination is for instructional planning purposes (Shogren et al., 2015 b). Assessment has often been used to identify student

weaknesses and to target instruction at those weaknesses, however, it is just as important to identify areas in which the student may excel. Instruction and support can be utilized to strengthen or reinforce skills as well as remediate areas of weakness (Shogren at al., 2015 b). Research recommends that self-determination assessment be a team process. Students, parents, and support services (e.g., counselors, psychologists, and adult agency representatives) all play an important role in the self-determination assessment process (Shogren et al., 2015 b).

The two-primary means of assessing self-determination over the last twenty-five years are the ARC Self – Determination Scale (Wehmeyer & Kelchner, 1995) and the AIR Self-Determination assessment (Wolman et al., 1994). The two assessments measure distinct aspects of self-determination, however, the practitioners who utilize the assessments, must specifically consider the goal of the information they are trying to obtain (Shogren et al., 2008). The ARC focuses on collecting information about the autonomy, self-regulation, psychological empowerment, and self-realization of the students, while the AIR focuses on the student's capacity and their opportunities for self-determination. The ARC consists of a seventy-two item self-report measure that the individual completes. It has four subscales representing the four essential characteristics of self-determined behavior: Autonomy, Self-Regulation, Psychological Empowerment, and Self-Realization. Subscale scores as well as a total self-determination score can be calculated. The AIR has a student, educator, and parent version. Each version is a series of questions in a survey format and responses are rated on a scale of 1 (*never*) to 5 (*always*) (Shogren et al., 2008). The remainder of this section will describe these two assessments in greater detail.

One of the first assessments of self-determination skills, the ARC Self-Determination Scale, was created by Wehmeyer and Kelchner in 1995. It was developed through a grant from the U.S. Department of Education, Office of Special Education Programs, Division on Innovation and Development to the ARC of the United States (formerly Association for Retarded Citizens of the United States) (Wehmeyer, 1995). The scale was constructed based on a definitional framework of self-determination as an educational outcome. The framework defines self-determination as acting as the primary causal agent in one' s life and making choices and decisions regarding the quality of life free from undue external influence or interference (Wehmeyer, 1995, 1997). An act is self-determined, according to Wehmeyer (1995), if the individual's actions reflect four essential characteristics: (1) the individual acts autonomously; (2) the behaviors are self-regulated; (3) the person initiates and responds to the event (s) in a psychologically empowered manner; and (4) the person acts in a self-realizing manner,

The purpose of this assessment was to (a) assess the self-determination strengths and weaknesses of adolescents with disabilities, (b) facilitate student involvement in educational planning and instruction to promote self-determination as an outcome, (3) develop self-determination goals and objectives, and (d) assess student self-determination skill for further research practices. It was designed for students 12-18 years and can be administered individually or to a group (up to 15 members), with adolescents with mild cognitive disabilities or learning disabilities. The ARC Self-determination Scale is composed of 72 items in four formats: 4 point Likert-type scale items, story completion items, items that require the student to identify goals and break the goals into smaller steps, and items that require students to make a choice between two options. Students

can read the test independently or it may be read to them. After the students complete the assessment, a total self-determination and four sub-domain scores are calculated. The sub-domains include autonomy, self-regulation, psychological empowerment, and self-realization (Field at al., 1994; Wehmeyer & Kelchner, 1995). It is important to note, that the scale is not a diagnostic or perspective tool. When used to identify students' strengths and weaknesses, users should look at repeated measures across time and examine individual improvements. The results can be utilized as a vehicle for discussion in regard to a low level of self-determination and potential interventions to assist in the development of skills, but not to identify casual relationships between the students and the reasons for the students lack self-determination skills (Wehmeyer, 1995). Based on the analysis of a pilot and field-tests, it was determined the ARC Self-Determination Scale has adequate construct validity. Some alterations were made to wording in several questions based on feedback from educators and students involved, however the changes did not alter the content of meaning of questions or responses (Wehmeyer & Kelchner, 1995).

The second scale, scale, the American Institutes for Research (AIR), in collaboration with Teachers College, Columbia University in New York City, developed the student, parent and educator versions of the AIR Self-Determination assessments with funding from the US. Department of Education, Office of Special Education Programs in 1994. The AIR Self-Determination Scale provides information on students' capacity and opportunities to self-determine for all school-age students, ages 8 to adult. The scale is based on the theory of Mithaug et al., (1993, 1996), that focuses on the process by which students become self-determined learners. The theory attempts to explain how

individuals "interact with opportunities to improve their prospects of getting what they want and need in life" (Wolman et al., 1994, p.4). In pursuing the opportunities, students learn to adjust and regulate their thoughts, feelings, and actions (Mithaug et al., 2003). Self- determination according to Mithaug et al., depends on students' capacities and opportunities. (Mithaug et al., 1993, 1996).

The AIR Self-Determination Scale produces a profile of the student's level of self-determination, identifies strengths and areas needing improvement, and identifies specific education goals that can be incorporated into the student's IEP. There are two broad self-determination components, (1) capacity and (2) opportunity. Capacity refers to the student's knowledge, abilities and perceptions that enable them to be self-determination. Opportunity refers to the student's chances to use their knowledge and abilities (Wolman et al., 1994). The AIR Self-Determination Scale continues to be utilized as a measure of self-determination skills for a variety of students with disabilities (Carter et al., 2008, 2013; Grigal et al, 2003; Shogren et al., 2008; Garrels & Granlund, 2018; Mumbardo et al., 2018; Wong et al., 2017).

The ARC Self-Determination Scale and the AIR Self-Determination Scale were developed in the 1990's and have been primarily used with adolescents with disabilities. Today, intervening to promote self-determination of students with disabilities is recognized as a best practice (Shogren, 2013; Test, 2009b), and is linked with enhanced and post-school outcomes (Shogren et al., 2015 a; Wehmeyer et al., 2012). Given the changes in special education in the last twenty to thirty years, Shogren et al., (2015 b) introduced a new theoretical framework for understanding the development of self-determination skills in adolescents, Causal Agency Theory. This theory created an

opportunity and a need for the development of a new assessment of self-determination. Causal Agency Theory builds on the previous research and frameworks of the ARC and AIR; however, it focuses on integrating emerging research from the field of education and psychology that incorporates all students, those with and without disabilities (Shogren et al., 2015 b). The focus of the research is on positive psychology related to strengths- based assessments and invention and motivational psychologically with an emphasis on creating environments to facilitate autonomy and competence (Shogren et al., 2019 a).

How disabilities are understood is changing, and those changes are affecting practices in the special education field. The changes are focused on improving a fit between the individual with a disability and his/her capacities and the demands of the environment (Shogren et al., 2014). It is considered beneficial to students if the issues concerning self-determination are seen through the lens of strengths-based concepts. To assist in achieving that, Shogren (2013), wanted to create a common language and understanding between the use of the self-determination construct in both special education and positive psychology based on the information and understandings that exist today. Individuals are influenced by the contexts in which they live and develop, and it is within these contexts that they become agents of their own actions or casual agents of their lives (Shogren, 2013). The Casual Agency Theory emphasizes the importance of three domains; (a) volitional action (making a conscious choice based upon individual preferences), (b) agentic action (self-directed action for the purpose of a goal) and (c) action-control beliefs and attitudes (belief individual has a personal empowerment; believe they have what it takes to achieve chosen goals) (Shogren et al., 2017). There was

a need for the expansion of existing interventions and assessments of self-determination to align with this theory. The Self-Determination Inventory System (SDIS) was developed to align with the Causal Agency Theory. The SDIS is comprised of two new measures: The Self-Determination Inventory- Student Report (SDI:SR) and the Self-Determination Inventory: Parent/Teacher Report (SDI: PTR).

The SDI-SR was designed to be a self-report measure for students aged 13-22 years with and without disabilities. It asks students questions about how he/she feels about their ability to be self-determined, make choices, set, and go after goals, and make decisions. The SDI-PTR measures a teacher's or parent/family member's perception of the individual's self- determination. It includes questions about goal-setting, decision-making, and choice-making skills and takes only about ten minutes to complete (Shogren et al., 2017). This assessment has the potential to enable the application of inventions and assessments in inclusive contacts, providing supports for all students to develop self-determination skills (Shogren et al., 2017).

A core set of twenty-one items can be used on the SDI-SR to assess the essential characteristics and component constructs associated with self-determination as defined by the causal agency theory for adolescents with and without disabilities (Shogren et al., 2019 a). This new assessment, while still in the research stage, can further assist with educators in planning and implementing interventions to develop and enhance self-determination skill in all students.

Assessment can be seen as a problem-solving process that involves many ways of collecting information about the student (Swanson & Watson, 1989). In special education, the information- gathering process often involves direct observation of the

student's interactions/behaviors with parents, teachers, and peers in various settings (Roth-Smith, 1991). Self-determination skills, however, are assessed primarily through subjective observation and self-reports. This information is then utilized to determine an individual's progress. Assessing an individual's instructional progress in self-determination is often conducted utilizing tools such as the ARC or the AIR (Shogren, 2013). Despite new assessments becoming available such as the SDIS, data continues to be through self-reporting surveys for students, parents and educators, and direct observation of student's behaviors and interactions in situations in which self-determination skills are utilized.

Researchers have continued to pursue opportunities to develop and evaluate self-determination skills utlizing tools such as the ARC and the AIR. The SDIS once, out of the research stage may also be widely used as well. The value of assessing self-determination skills utlizing these scales, has been illustrated through various studies (Carter et al., 2008, 2013; Garrels & Granlund, 2018; Grigal et al, 2003; Mumbardo et al., 2018; Shogren et al., 2008; Shogren et al., 2017; Wehmeyer & Kelchner, 1995; Wong et al., 2017). Future assessments can be developed and utilized to obtain information that can assist in guiding specific interventions/curricula use for instruction.

Instructional Practices

Evidence-based Practices for Teaching Self-Determination Skills

Evidence-based practices (EBPs) are instructional methods for enhancing student outcomes (Test et al., 2009 a, b). Special education research in evidence-based instruction is very complex because of the variability of the actual participants (Odom et al., 2005). Researchers cannot just address a simple question about whether a practice in

special education is effective; they must specify for whom the practice is effective and in what context (Odom et al., 2005). In an effort to improve educational outcomes for all students, congress has required schools to utilize instructional programs and practices based on research per the Individuals with Disabilities Act (IDEA) and the Elementary and Secondary Education Act (ESEA). In special education, research has been conducted to identify EBP's that enhance school and post-school outcomes for adolescents and interventions to promote self-determination skill development (Burke et al., 2020; Cook & Odom, 2013; Test et al., 2009 a, b). The focus within the research, has shifted from identifying EBP's to implementation (Wang & Lam, 2017). There are multiple EBP's recommended through research to enhance self-determination skills.

Self-determined individuals act upon freely chosen goals and self-determination actions function to enable a person to be the causal agent in their life (Burke et al., 2020). When reviewing EBP's focusing on self-determination, research has focused on specific skills associated with self-determination and the effect or outcomes the interventions have upon those skills. Previous and current research has focused on interventions that support the following skills: (a) choice-making, (b) decision-making, (c) problem-solving, (d) self-advocacy, (e) goal-setting and attainment, (f) self-management, (g) self-awareness and (i) self-knowledge (Algozzine et al., 2001; Burke et al., 2020;). The majority of the self-determination literature is focused on transition-aged students with disabilities.

In 2001, Algozzine et al., conducted a comprehensive review of literature on interventions to promote the components of self-determination. This was the first comprehensive review that focused solely on self-determination skills. To define the

components of self-determination, Algozzine et al., (2001) reviewed definitions of self-determination published between 1972 and 2000 and listed all that were identified by two or more sources. The target studies focused on enhancing choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy, self-efficacy, self-awareness, and self-observation. Fifty-one studies were identified that researched interventions to promote one or more of the self-determination components; twenty-two of these studies were included in the meta-analysis.

Algozzine et al. reported that no articles addressing self-determination interventions were published between 1972 and 1977; 51 articles were identified from 1978 to 2000. Nine (18%) were included in the group research meta-analysis and 13 (25%) were appropriate for the single subject meta-analysis. An additional 29 studies (57%) were identified that met the criteria for inclusion as self-determination interventions but that could not be included in the meta-analysis because they used a qualitative research approach, had no experimental design, or did not provide adequate description of the data to be able to compute effect size. Fourteen of the studies used a pretest–posttest design. Subjects were randomly assigned to treatment conditions in five studies, six used a nonequivalent comparison group, five used a single-case multiple baseline design, and four used qualitative methods. Four studies reported results of a survey of opinions about the intervention program. The total number of participants in the 51 studies was 992. The average number of subjects in the group intervention studies was 41 (SD = 38), and in the single subject studies, it was 4. The median number of subjects in the group research was 23, with a range of 6 to 130 subjects per study and for single subject 3 (range 1–16). Four group design articles (15%) reported outcomes based on less

than 10 students, 10 (38%) represented findings for 10–25 students, 4 (15%) for 26–50 students, and 8 (31%) for more than 50 individuals with disabilities. Only one article per year appeared in 1978 and 1980, and again for a few years in the mid-1980s. With the exception of 1997, when only one article was published, the number of articles per year increased in the 1990s. Five or more articles were published each year in 1994, 1998, and 1999.

Individual self-advocacy, goal-setting and attainment, self-awareness, problem-solving skills, and decision-making skills were among the most common intervention targets in group studies, whereas choice-making skills, problem-solving skills, and self-observation, evaluation, and reinforcement were most commonly targeted in single-subject studies. Although all components of self-determination were represented in the research, the components least studied were self-advocacy knowledge (n = 5) and self-efficacy (n = 2).

All 51 studies used teaching as an intervention approach. The major intervention themes found in the self-determination literature (based on the 51 total studies found) are self-advocacy and choice-making. It was also revealed through the research that self-determination was being taught using a variety of methods. Interventions (teaching strategies) included direct instruction of self-determination through various lesson modules, role-playing, written exercises, modeling, corrective feedback/praise and task analysis, verbal and visual prompts and video modeling. Face to face training took place in various locations such as the community, self-contained special education classrooms, resource classrooms, general education classrooms and IEP meetings. None of the training or instruction was done remotely or online. Instructional settings included large

group instruction with a mean group size of 23, individual conferences and one to one behavioral intervention with systematic prompting and feedback as the individual practiced the skill. All fifty-one of the studies utilized various teaching strategies as the intervention. The most commonly utilized approach throughout the studies was direct instruction of skills for higher functioning students with disabilities; for lower functioning students, often role playing, and verbal and visual prompts were typically used (Algozzonie et al., 2011). The major intervention themes found in the self-determination literature (based on the 51 studies) were choice-making (*n* =19), self-advocacy (*n* =18), problem-solving (*n* =14), and goal-setting and attainment (*n* =13). Although most studies focused on face to face direct instruction, a few promoted self-determination instruction through other forms of support including using preference assessments to enhance choice-making (*n* = 3) and person-centered planning to enhance goal-setting (*n* = 3). About half of the studies (*n* = 22) included observations and assessment of the participants using self-determination skills in real life settings, such as restaurants, in the classroom or during an IEP meeting. Other methods utilized to evaluate self-determination included paper-and-pencil assessments (*n* = 6), validation through parent or teacher reports (*n* = 2), changes in teacher knowledge or performance through self-reports (*n* = 3) and performance during role play situations (*n* = 6). Since 2011 additional research has been conducted over the years regarding self-determination with focus on specific disabilities, however, there has not been an additional comprehensive review of the literature until 2020 (Burke et al., 2020).

The purpose of this review was to conduct an up-to date review of the literature on interventions to promote overall self-determination and skills associated with self-

determined action (choice-making, decision-making, problem-solving, goal-setting and attainment, planning, self-management, self-advocacy, self-awareness, and self-knowledge). The review was based on the premise of the Causal Agency Theory (as explained previously in this study) which reconceptualized self-determined actions and therefore omitted studies addressing self-observation, self-evaluation, and self-reinforcement (Burke et al., 2020).

A total of thirty- four articles published between 2000 and 2015 were included in the review. Twenty-three of the articles specifically focused on individuals between the ages of 14-adult. Most articles were published in 2012 (n = 6 or 17.6%), and half the studies in this year were conducted by a single research team. Twelve studies (35.3%) measured change in overall self-determination using a valid measure such as the ARC's Self-Determination Scale and eighteen studies measured change in one or more skills associated with self-determination using a valid measure or a researcher-created measure of the skill. Four studies (11.8%) measured both overall self-determination and one or more skills associated with self-determination. Twenty-four studies (70.6%) measured outcomes in addition to self-determination (postschool outcomes) (Burke et al., 2020).

The premise behind this current review was to utilize current meta-analysis procedures that were unavailable in 2001 to identify the effective of interventions designed to promote self-determination, with a specific focus on students. The major findings of this review include (a) an increase in the number of participants in self-determination studies (n = 3.091), and (b) positive outcomes for students with diverse personal characteristics (disabilities) (Burke et al., 2020).

Overall, the literature continues to support that self-determination interventions can be useful in promoting or enhancing self-determination skills (choice-making, decision-making, problem-solving, goal-setting and attainment, planning, self-management, self-advocacy, self-awareness, and self- knowledge). Like the previous research conducted in 2011, direct instruction appeared to be the most commonly utilized instructional approach for higher functioning individuals, as well as verbal and visual prompting for lower functioning individuals. Educators can continue to help students set and achieve postschool goals and education that will assist them in the development of the self-determination skills mentioned above and postschool success, through the utilization of various interventions/curricula (Burke et al., 2020). Multiple studies have been conducted that reveal examples of how specific self-determination skills such as goal-setting, self-advocacy/self-awareness, and choice-making can be taught in a classroom setting to students with various disabilities, without a specified curriculum, utilizing teachers and additional providers. The studies presented below, describe representative interventions in detail, and reflect instruction across individuals with a range of disabilities in each of these three areas.

Goal-Setting

Teaching self-determination skills to students with disabilities can improve behavior and academic achievement while having a lasting impact on life outcomes (Estrapla & Reed, 2020). Goal-setting is a highly useful and transferable life skill that can enhance motivation, increase access to curriculum, and promote independence while improving academics and behavior. Unfortunately, students with disabilities are often not provided with instruction to learn and practice goal-setting skills in school.

In 2020, Estrapala and Reed developed a goal-setting instruction guide for high school students with high incidence disabilities such as learning disabilities and emotional disabilities. The article presented a step-by step guide for teachers to explicitly teach high school students with disabilities how to self-set goals to improve their behavior and academic achievement. These students often exhibit both academic and behavioral difficulties in classrooms. Based upon earlier research (Hagiwara et al., 2017) high school students with high incidence disabilities can improve both their academic and behavioral performance which is the premise of the step by step guide (Estrapala & Reed, 2020). Goal- setting increases engagement by focusing the student's attention on a specific skill or desired outcome. When students commit to a specified goal for their learning, they often redirect their behavior towards achieving that goal and away from behaviors such as inattention, blurting out or non-compliance. Goal-setting also often enhances the student's motivation (Estrapala & Reed, 2020).

According to Estrapala and Reed, goal-setting can be taught in a series of steps to individual students or small groups (3-5) and should be specific (*S*), measurable (*M*), achievable (*A*), relevant (*R*), and time-bound (*T*) (SMART) (Munoz& Jojoa, 2014). The teacher's role is to enable students to make decisions that will improve their outcomes. It is important for teachers to have a conversation about their thoughts regarding setting goals before engaging in direct instruction. Once the conversation occurs and the students become engaged teachers can then begin to teach specific steps.

The first step in their instructional procedure is to enable the students to identify specific strengths and deficits. Students gather the data or evidence and organize it in portfolio. Teachers might have to come up with the data sources and model for students

how to identify and assemble important information. They may also need to have guided practice on how to bookmark a web address for online grading for example. Teachers then need to provide explicit instruction and visually model how to display the data in a matrix that clearly identifies the student's strengths and needs. The development of a summary statement that address the behaviors need to engage in to change their behavior is developed based on the data. Teachers may have to guide the students by listing specific behaviors or actions they can take to improve their performance. Once this is completed, teachers then explicitly instruct the students on writing specific, measurable, achievable, relevant, and time-bound (SMART) goals. This can be done by providing examples and nonexamples of SMART goals, discussing the examples and visually model the writing of a goal. Teachers should provide guidance to students and praise them for completing. Finally, teachers should assess the student progress frequently through observation and/or checklists and teach the students how to assess their own goal progress utilizing a rubric. The purpose of the process is to develop the student's self-determination skills of goal-setting but will also enhance problem-solving, decision-making skills, and self-advocacy skills as well (Estrapala & Reed, 2020).

Palmer et al., 2012, reviewed a model developed in 2006 called Beyond High School (BHS). This multi-stage model was designed for students with intellectual disabilities to promote involvement in their educational planning. One hundred and nine high school students in three states, Kanas, Missouri, and Texas, receiving special education services under the categorical area of intellectual disabilities were identified by their school's districts. Teachers identified students with mild (54%) and moderate (46%) intellectual disabilities. Participants were recruited to participate in the study

examining the impact of BHS model's implementation on student self-determination over two years. Training was provided to the teachers of the BHS model's implementation, after which, teachers implemented the model for the remainder of the school year, typically for a duration of 24 weeks. The following year, teachers involved received a brief retraining at the beginning of the year, and again, continued implementing the model for another 24 weeks prior to post testing.

Students established short term and long-term goals based on personal preferences, identified abilities, and interests, while becoming more involved in their IEP process. Instructional strategies utilized by the teachers included direct instruction in goal- setting and monitoring and tracking progress, as well as, ensuring multiple experiences and practice were given to the students. Students in the first stage were involved in targeted instruction, focused on teaching them to self-direct planning and decision-making specific to the transition process. During the second stage, students were involved in convening a student-directed meeting that brought together stakeholders in the instructional practice to work with them on refining goals, and support the students as needed. In the third and final stage, the student utlizing the goals from stage two, implemented the plan, monitored his/her own progress in achieving the goals, evaluating the success, and making revisions as needed, with guided support and modeling from the teacher.

To assess the student's overall self-determination scores at baseline and posttest, the ARC Self-Determination Scale was utilized. The scores indicated there was a significant increase in the students' self-determination scores from baseline to postintervention. Initially, students with mild intellectual disabilities demonstrated higher

scores, over time both groups were able to show a pattern of change. Males with a mild intellectual disability obtained a score of 93.2 at baseline and 101.4 for posttest. Males with a moderate intellectual disability obtained a score of 81.4 at baseline and 91.0 at posttest. Females with mild intellectual disability obtained a baseline score of 101.4 and a posttest score of 105.7. Moderately intellectually disabled females obtained a baseline score of 81.4 and 85.3 at posttest.

For the ARC Self-Determination Scale, there was a significant overall effect (p = .03) with students showing a significant increase in their self-determination scores from baseline to postintervention. A significant main effect was also found for intellectual impairment level (p = < .001). The results supported that implementation of the BHS model and the evidenced-based instructional strategies utilized contributes to enhanced self-determination and goal-setting skills for individuals with mild or moderate intellectual disabilities (Palmer et al., 2012). The model showed promise to help build individual capacity through direct and guided instruction in setting and achieving goals and by enhancing the opportunities that must be available to students with intellectual disabilities.

Providing direct instruction, making sure multiple opportunities to experience and practice self-determination abilities such as goal-setting are available, and having expectations for all students with disabilities, including those with intellectual disabilities, can continue to provide positive outcomes (Palmer et al., 2012). Although adolescent brains are still developing and maturing, high school students are expected to exert greater independence over their academics and lives. Goal-setting encourages a student to focus on a specific skill or desired outcome. An achievable goal allows students to take

small steps to a desired outcome rather than attaining the maximum outcome in one large step. Well-developed goals, such as SMART goals, can ensure that students have enough information and specificity to monitor and evaluate their progress toward attaining the goal (Estrapala & Reed, 2020). Achieving small goals at a time, can give students with disabilities confidence and in turn, they will feel empowered to self-advocate for themselves.

Self-Advocacy/Self-Awareness

Self-advocacy and self-determination skills are extremely important for individuals with disabilities to develop in order to gain independence for themselves. Instruction in self-advocacy is so important that IDEA includes it in the law so that individuals with disabilities receive it while in school (IDEA, 2015). IDEA requires student participation and student interests and preferences to be taken into account when they are discussed at an individual's IEP meeting. The classroom is an essential place for students to learn functional skills, such as self-advocacy that will help them become more independent in later life.

In a review conduct by Cuenca-Carlino et al., (2016), a self-regulated strategy development model (SRSD) of writing was utilized to teach middle and high school students with emotional/behavioral disabilities to use persuasive writing as a tool to advocate for their needs and wants. Writing can help students develop self-determination skills and self-expression with the time needed to reflect on what they want to say, which can make the writing process an empowering tool. Students are expected to master persuasive writing by developing logical arguments with sound reasoning to support their claims. Students with emotional/behavioral disabilities need support in developing those

skills, especially in relation to real-world experiences that call for self-determination (Cuenca-Carlino, 2016).

The SRSD stages of instruction include: (a) develop background knowledge, (b) discuss it, (c) model it, (d) memorize it, (e) support it and (f) independent practice. The purpose of the strategies is to help students explicitly learn the process of writing, gain confidence in their skills, become self-regulated writers, and independently develop high products of writing. The combination of self-determination skills and persuasive writing focuses on a six-step process: (a) making a good decision, (b) applying self-advocacy skills, (c) setting a goal or goals, (d) using self-efficacy, (e) exhibiting problem-solving and self-awareness skills and (f) self- monitoring and self-evaluation (Cuenca-Carlino et al., 2016). SRSD combined with self-determination skills training can be an effective way for involving students in the IEP process, with particular emphasis on students' becoming competent in self-advocating in writing for their transition focused needs. Throughout the process, teachers utilize various instructional strategies.

During the background stage, the teacher explicitly defines and teaches the meaning of self-determination and the skills that compose the concept. As part of the instruction, the teacher also discusses the meaning of the most important self-determined behaviors/skills used when writing and models how to exhibit those behaviors through the writing process by walking the students through examples. The use of mnemonics is utilized during the discussions on persuasive writing with students to assist with learning and retention of the information. Graphic organizers help the students to organize their thoughts prior to writing and the teacher models the creation of an organizer and how to transfer the notes from the graphic organizer into writing a complete essay. Throughout

the process, teachers also make positive statements and give positive direct feedback to students about what they can and are doing as writers. The teacher models how to monitor progress during the writing process and the use of a self-monitoring checklist. The last steps include the teacher utilizing choral responding or response cards with a class to assess the student's independent knowledge of the writing process as well as supporting students in developing topics they would like to write about related to self-advocacy by reviewing their ow IEP's, or the teacher provides the topics to discuss and discuss with the students the importance of each topic for their future. Finally, the teacher facilitates and monitors each student and provides instruction when necessary during independent writing practice time (Cuenca-Carlino et al., 2016). The act of writing gives students an outlet for expressing their wants and needs. When students learn to write in a structured way, they have more time to reflect on what they want to say. When writing is taught to students within the context of self-determination, students internalize that persuasive writing is a powerful tool to advocate for things they need, want, or believe in (Cuenca-Carlino et al., 2016). Students should be able to articulate in writing and speaking, their strengths, interests, and preferences to others, but for many students with disabilities this can be a challenge.

Individuals with disabilities in most situations, are taught self-determination skills directly from special education teachers however, other providers such as speech and language pathologists may also provide instruction. In 2018, Collins and Wolter, reviewed the role of speech language pathologists (SLP) and how they may utilize self-determination strategies to facilitate post-secondary transition while promoting academic success for students with language-based learning disabilities (LLD). The practices

recommended were based upon previous research in area of self-determination (Algozzine et al., 2001; Cuenca-Carlino et al., 2016; Martin et al., 2006; Test et al., 2004; Wagner et al., 2012). SLP's are an integral part of the overarching curriculum for all students in schools including adolescents who require transition planning (Powell, 2018). Students with language-based learning disabilities often need to be taught strategies that will aid them in recognizing their own strengths and limitations, speaking for themselves when they need accommodations, setting appropriate goals, solving problems, regulating their own behaviors, and making informed decisions (Collins & Wolter, 2018), yet self-determination goals are often lacking in the transition goals for students with language-based disabilities.

Based upon the research, SLP's must provide direct instruction and foster conversations with the students focusing on the individual's disability. This can be done through various self-reflection activities such as writing, or journaling (Algozzine et al., 2001). In order to promote participation in the IEP meetings, SLP's should prepare students with LLD by presenting them with a written script so the student can easily and confidently articulate their personal goals, desires, and concerns. The SLP and the student should also role-play a mock IEP meeting in order to prepare the student for the flow of the meeting and the discussions that will occur (Collins & Wolter, 2018). As described prior students can utilize their writing to share their voice and self-advocate (Cuenca-Carlino et al., 2016). SLP's should provide writing strategies through direct instruction, modeling, and independent practice, so the students with LLD can become independent writers (Collins &Wolter, 2018). Models for teaching self-advocacy skills include direct

instruction and participating in programs that promote self-advocacy skills (Tse & Pierson, 2017).

An individual's ability to communicate for themselves and knowing how to make choices and communicate their interests and opinions are a part of self-advocacy skills. Students must be taught choice-making skills in order to allow them to exercise control over their surroundings from multiple service providers (Sparks et al., 2016). Providers can assist and instruct students with disabilities utlizing instructional practices as reviewed, as well as, through collaboration to implement related goals that will facilitate transition success (Collins & Wolter, 2016). This will aid students in making choices about opportunities such as college, or employment post high school.

Choice-Making

Choice-making is a fundamental part of one's life and is necessary to enhance the lives of individuals with disabilities and provide them with opportunities for successful transitions into adulthood (Sparks et al., 2016). Choice-making is a necessary and valued component of everyday life. When individuals make choices, they are seen as independent and autonomous. In order to be an independent self-functioning adult, individuals with disabilities must possess the abilities to make choices when they are presented. Choice-making opportunities must be given to individuals while in the school setting. When denied the right to make choices, individuals with disabilities are prevented from advocating for themselves and achieving desired outcomes (Sparks et al., 2016).

Sparks et al., 2016, conducted a study to examine the effectiveness of choice-making training with six high school students with intellectual disabilities. The purpose was to determine if given choice training, students would make choices selections based

upon their personal preferences. The students were explicitly taught to identify choice-making options through scenarios focused on (a) job choices, (b) hygiene choices and (c) lifestyle choices. The scenarios were utilized to teach the participants that they have choice options in everyday life. The six students were identified as having an intellectual disability and ranged from 16-21 years old. The special education teacher was assigned to teach the students in a self-contained special education setting. They were trained in one session that involved learning how to collect data during the choice-making scenarios, baseline, intervention, and maintenance. The choice-making training consisted of two 30-minute sessions delivered face to face on how to utilize real life scenarios, conduct choice brainstorming and elicit student responses.

The choice-making scenarios embedded real life situations that teenagers face daily. The scenarios were scripted for the teacher. Real life choice situations were identified as (a) making a choice on how to tell a friend that you are going to attend his/her birthday party, (b) making a choice on what and how you will spend your money, and (c) making a choice on what to wear to a job interview. Teachers utilized advanced organizers, modeling, guided practice, independent practice with verbal cues, feedback, and scripted dialogue as instruction strategies (Sparks et al., 2016). The advanced organizer was used to discuss what was going to take place during the training session, the teacher introduced the choice-making session, topic and reviewed the previous days lesson. One component of choice-making was presented with a scenario about a character who had to make a choice. The teacher followed the instructions and script for choice-making training to guide discussion and encourage alternatives choices. Then a new scenario was presented and through guided practice students identified their preferred

choice. Scenarios were read aloud and five visual pictures representing the scenario along with five distractor pictures, were displayed to the participants. The teacher read the scenario and then prompted the participant by discussing whether or not the still picture choice would work. This procedure was followed for all ten pictures. Finally, another scenario and was and pictures displayed, and students independently practiced making a choice and explaining their choices (Sparks et al., 2016).

Each of the participants, after receiving the training improved their choice-making skills. Baselines means ranged from 0% to 40% and treatment means ranged from 51% to 87%. Maintenance of skills varied across the participants but, overall, three of the six participants maintained their choice-making skills up to two weeks post intervention. It was noted that since individuals with intellectual disabilities have difficulty maintaining new concepts in a short period of time, refresher courses prior to maintenance might have been beneficial (Sparks et al., 2016). The results indicate that choice-maker training can be beneficial to individuals with intellectual disabilities in making preferred choices. It can however sometimes be overwhelming for a student with an intellectual disability and teachers must be sure to provide the supports such as verbal/visual prompts and modeling as much as possible (Sparks et al., 2016). Adults make major life choices when it comes to a partner, career preferences, housing or how to spend their money. Choice-making is a fundamental part of everyone's life and is a necessary skill for minor and major life transitions.

For many students with disabilities, the development of self-determination skills is not innate, and they must be taught utilizing evidence-based practices, so that students develop strategies are given opportunities to practice the skills. These strategies can

facilitate students' positive educational and personal experiences and increase opportunities for success in school and beyond. Educators can teach skills associated with self-determination such as goal-setting, self-advocacy/self-awareness, and choice-making through the utilization of various educational interventions and curricula.

Educational Interventions/Curricula

Researchers suggest that self-determination develops over a lifespan as individuals are taught and have opportunities to practice skills leading to greater self-determination across life domains, including academic, social, home and career development (Wehmeyer et al., 2017). In the context of school-based transition planning, educators can use specific interventions or curricula to target self-determination skills development. Many of the curricula were developed in the late 1990's, however, continue to be utilized today in school settings (Shogren et al., 2018; Shogren et al., 2019 c). When implemented with fidelity, EBP's in special education have been shown to meaningfully improve performance of students with disabilities (Torres et al, 2012).

Test et al. (2000) conducted a review of self-determination curricula and utilized the following eight self-determination components in the review process: (a) choice/decision making, (b) goal-setting/attainment, (c) problem-solving, (d) self-evaluation, observation, and reinforcement, (e) self-advocacy, (f) Inclusion of student-directed individualized education programs (IEP), (g) relationships with others, and (h) self-awareness. The researchers identified 60 curricula for teaching self-determination through this review. Although there are strengths and weaknesses to all curriculum options, the common goal was to prepare students with disabilities to be more independent, self-determined adults and achieve more positive post-school outcomes.

Raley et al., (2018) also conducted a review of the existing research of curricula that were developed to provide teachers with content and strategies to promote skills associated with self-determination. The review examined empirical studies of curricula to teach skills associated with self-determination, as described previously, for students with disabilities with an anticipated outcome of enhanced self-determination. Each framework for curriculum enables teachers to support students to set a goal, develop a plan of action to meet the goal, and to self-evaluate to determine if enough progress is being made toward the goal. Five different curricula were identified across seven included studies in the review that demonstrated positive growth in overall self-determination (Raley et al., 2018). Four of the five curricula determined to be EBP's are reviewed in depth below.

The Self-Determined Learning Model of Instruction (SDLMI)

The Self-Determined Learning Model of Instruction (SDLMI) is a model of teaching intended for teacher use to guide and direct instruction to enable students to self-direct learning using a self-regulated problem-solving process (Wehmeyer et al., 2009). The SDLMI was developed to move learning from teacher-directed to students- directed instruction (Mithaug et al., 2003). It consists of three phases: (1) set a goal, (2) take action, (3) adjust the plan or goal. Each phase consists of a problem to be solved by the students through a series of four questions. The student makes choices and decisions in each phase and is responsible for the actions, making the student the causal agent. Corresponding instructional objectives are designed to enable students to identify strengths and needs; communicate preferences, interests, beliefs, and values and to teach them how to prioritize needs. There are specific objectives for all phases, leading to instruction in (1) self-scheduling, (2) self-instruction, (3) antecedent cue regulation, (4)

choice making, (5) goal attainment, (6) problem-solving instruction, (7) decision-making instruction, (8) self-advocacy instruction, (9) assertiveness instruction, (10) communication skills training and (11) self-monitoring (Morgan & Riesen, 2016).

Agran, Blanchard, and Wehmeyer (2000) evaluated the efficacy of the SDLMI as a means for educators to teach students to set and attain transition-related goals and to examine the degree to which students who received instruction using the SDLMI benefited in terms of self-determination and goal orientation outcomes. Nineteen middle and high school students identified with learning disabilities or intellectual disabilities from public schools in the Midwest participated. Students set transition or community-related goals and developed action plans and self-monitoring processes for each goal. During the study, teachers and paraprofessionals collected data on goal progress. The efficacy of the SDLMI was evaluated using a delayed-multiple-baseline design across three groups design that included baseline, training, and post-training phases. Results indicated that students in group one increased frequency of targeted behavior set in their goal from 56% at baseline to 90% at post training, students in group two increased frequency of targeted behavior from 17% at baseline to 100% at post-training, and students in group three increased frequency of targeted behavior from 54% at baseline to 67% at post-training. The summative mean score was 60, indicating that, on average, students exceeded teacher's expectations for achievement of their goals. Overall, 89% of student's goals were at or above the expected level of outcome as rated by their teachers. The SDLMI provided a process by which students with a variety of disabilities gained problem-solving, decision-making, goal setting and self-regulation skills.

Wehmeyer et al., (2012) examined the relationship between the SDLMI and student self-determination. Participants included 312 high school students with intellectual disability or learning disabilities from Kansas, Missouri, and Texas. Researchers collected data using The ARC's Self-Determination Scale (SDS) (Wehmeyer & Kelchner, 1995) and the AIR Self-Determination Scale (Wolman et al., 1994) were administered at three different times over two years to determine changes in self-determination. Results revealed significant increases in self-determination scores on both the AIR and SDS between baseline and the end of year two for students in the treatment group (received intervention utilizing SDLMI year 1 and 2) and the control group (received SDLMI intervention in year 2 and 3 only). The treatment group improved from .00 to .30 units in the AIR and from .00 to .24 units on the SDS. The control group only improved from .16 to .17 units on the AIR and from -.03 to .03 units in the SDS. The control group actually decreased in self-determination scores between year one and two but, increased between year 2 and 3 suggesting that after receiving intervention at the beginning of year 2, the student's development for self-determination improved (Wehmeyer et al., 2012).

Shogren et al., (2019 c) began exploring the utilization of the SDLMI in a statewide model. The statewide implementation occurred over a 1- year period in Rhode Island. The districts across the state agreed to support teachers of transition-age students with intellectual and developmental disabilities using the SDLMI. The teachers participated in professional development and each district identified a SDLMI coach to provide support to teachers. The districts also supported data collection activities to document student self-determination and transition outcomes as well as teacher fidelity of

implementation. Because the implementation of the SDLMI was part of a side-wide initiative, there was less control over the training, recruitment, and selection of staff. Identifying and developing the knowledge, skills, and abilities to the already established staff was the focus.

In the 2015-2016 school year, general information was given to coaches regarding their duties to support the teachers. During the 2016-2017 school year, the researchers began regularly communicating with coaches about supports and data collection via email. The goal was for the research team to regularly share resources and participate in monthly coaches' meetings to enhance their impact with teachers. Prior to implementation, all teachers, including coaches, received a one-day training on SDLMI. Coaches then received monthly professional development to enhance implementation and the coaching model. Coaches supported teachers by observing implementation of the intervention in their classrooms, completing fidelity checklists, and meeting to discuss strengths and areas for improvement. Coach observations of teacher implementation and subsequent feedback occurred at least three times during the year.

Teachers implemented the SDLMI to support students to set individual goals for learning leading to employment outcomes. They supported the students to work through the three phases of SDLMI to set a goal, develop and implement an action plan and evaluate the progress to set and go after at least two goals. Teachers provided instruction utilizing the SDLMI at least 2 times per week and engaged in other curricular activities to support students to take steps towards achieving or modifying their goals. Teachers self-reported on intervention fidelity at three time points during the year, and coaches

conducted the same fidelity assessment after observing each teacher (Shogren et al., 2017).

Fidelity information was collected over the SDLMI implementation. Fidelity data from the first year of implementation showed teachers' self-reported fidelity of implementation ranging between 75.1% and 94.5% (Shogren et al., 2017). Goal attainment scores were collected for 123 students ($M = 47.40$) for the first goal set with the SDLMI and for 83 students ($M = 51.20$) with a second goal. The data suggest that teachers can implement the SDLMI with fidelity and that students attain educationally relevant goals. It also indicates the SDLMI can be implemented statewide with supports (Shogren et al., 2019 b). Given the emphasis in the individuals with Disabilities Education Act Amendments of 1997 (PL 105-17) on active student involvement and engagement in learning, it is important to identify ways in which all students with disabilities, can be actively involved in their transition programs and learning experiences.

STEPS to Self-Determination

STEPS to Self-Determination was developed by Field and Hoffman (1996). It is designed to assist students in identifying goals important to self-determination. The curriculum is designed to be delivered over the course of one 55-minute orientation session, one 6-hour workshop session, and 16 topical sessions of approximately 55 minutes each. Each class session has a topical focus, but several components are woven throughout each session. The curriculum helps students select an appropriate and attainable goal and design the steps and activities needed to reach the goal. Learning takes place both in and out of the classroom. Throughout the sessions, students are urged

to anticipate the results of their planned actions and modify their plans to achieve the desired results (Field & Hoffman, 1996).

The curriculum was initially field tested in high school settings in the U.S. Midwest. The field test consisted of a treatment group that used the *STEPS* curriculum and a control group that did not. A battery of six assessment instruments were developed to measure the behavioral, cognitive, and effective domains of self-determination. To assess the curriculums effectiveness, two instruments were administered to students on a pre- and posttest basis utlizing the Self-Determination Knowledge Scale (SDKS) and the Self-Determination Observation checklist (SDOC). The SDOC is a behavioral observation checklist that may be administered by teachers or other appropriate school personnel. The student is observed for five 1-minute intervals during a class period. Thirty-eight behaviors that have been found to be correlates of self-determination in the classroom are checked if they are present during the time interval, resulting in a frequency count of the available behaviors as the score. The SDKS contains a pretest and a posttest based on the Steps to Self-Determination curriculum. These consist of 30-item structured-response tests designed to assess the student's cognitive knowledge of information and skill of self-determination taught in the curriculum (Hoffman & Field, 1995).

A *t* test between the treatment and control group indicated a significant increase ($p = .002$) in correct responses on the SDKS with an effect size of 1.02. This effect size is considered to be a very large treatment effect. The curriculum would be expected to improve an individual's knowledge of self-determination skills significantly. The effect of a pretest-posttest treatment vs. control group of the effectiveness of the curriculum, as

measured by the SDOC, showed a significant increase (p = .000) in student behaviors that are considered to be correlates of self-determination. This field test showed promising results. It demonstrated that students in high school were able to learn concepts and skills of self-determination and apply it to their daily lives (Hoffman & Field, 1995).

ChoiceMaker

The ChoiceMaker Self-Determination Curriculum is designed to teach students with disabilities the self-determination skills they need to be successful in adult life. The series includes: Take Action, Choose and Take Action, Employment Goals, Choosing Personal Goals, Choosing Education Goals and The Self-Directed IEP (Martin et al, 2006). The Self-Directed IEP is the most frequently utilized section of the curriculum and the most supported through research. The Self-Directed IEP curriculum teaches students to lead their own IEP meetings by teaching them to describe their strengths, preferences, interests, goals, and needs. It teaches the students through six to ten sequential sessions focusing on (a) beginning meeting by stating the purpose, (b) introducing everyone, (c) reviewing past goals and performance, (d) asking for others' feedback, (e) stating your school and transition goals, (f) asking questions if you don't understand, (g) dealing with differences in opinion, (h) stating what support you will need, (i) summarizing your current goals, (j) closing meeting by thanking everyone, and (k) working on IEP goals all year. In addition, there were four instructional tools in the Self-Directed IEP including (a) Self-Directed IEP in Action video, (b) Self-Directed IEP video, (c) Teacher's Manual, and (d) Student Workbook. Evidence-based instructional practices such as video-modeling, mnemonic learning strategies, vocabulary building,

roles playing and reading and writing tasks are utilized through the program (Morgan & Reisen, 2016).

Martin et al., (2004) established the need for teaching students to direct their IEP meetings by examining the perceptions of 1,638 secondary IEP teams' members, including students, from 393 teacher-directed IEP meetings. The number of participants in the IEP meeting ranged from 1-18 with an average of 4.3 participants per meeting. The participants came from junior high schools (25%), middle schools (21%) and high schools (54%). A two-part, 10 item questionnaires was given to each participant. The first part asked the participants to identifying what role they were holding in the IEP meeting and who was attending the meeting. Part two consisted of 10 survey items in which respondents were asked to answer by marking "not at all," "a little," "some" or "a lot."

Students attended 70% of the IEP meetings (277 out of 393), but meaningful participation appeared lacking. Students knew the reasons for the meetings ($p <. 01$), knew what to do at the meetings ($p < .01$), talked at the meetings ($p <. 01$), felt comfortable saying what they thought ($p < .01$), talked about strengths and needs ($p < .01$), understood what was said ($p < .01$), and felt good about the meeting ($p < .01$) less frequently than any other IEP meeting participant. Students reported helping to make the decisions and knowing what to do next less than everyone except the general education teachers. Special education teachers lead the IEP meeting process. This implies that students, although attending their IEP meetings, need to be taught the IEP process, understanding of their disability, IEP terminology and the different roles the participants

play. Students should also be taught the skills to actively participate in their own meetings prior to the IEP meeting taking place (Martin et al., 2004).

Martin, Van Dycke, Christensen, et al. (2006) found that the Self-Directed IEP instructional program, in comparison to a teacher-directed IEP meeting control condition, enabled students to start and lead significantly more IEP meetings, which teachers independently verified through evaluations on the ChoiceMaker Assessment. Direct observations of IEP meetings found that students who received Self-Directed IEP instruction significantly increased talking during their IEP meetings (M = 3.0% of the time in year 1 to M = 12.82% of the time in year 3). Students who are instructed on specific skills to participate effectively in their own transition/IEP meeting, are more likely to put those skills and knowledge to work during the meeting (Wagner et al., 2012).

In 2015 (b), Seong et al., conducted a study focusing on the effects of the Self-Directed IEP Program on self-determination and transition empowerment of adolescents with disabilities. Participants were recruited from 49 schools in 30 school districts in six states (Arkansas, Kansas, Missouri, Nebraska, Oklahoma, and Texas). Students from this sample who were involved in the Self-Directed IEP (Martin, et al., 2006) process or who were in the control group in the study constituted the sample for this examination of the effect of the Self-Directed IEP process. Of the 338 student participants, 143 received instruction using the Self-Directed IEP, and 195 were in the control group and did not receive any intervention to promote self-determination. Students were randomly assigned to a treatment group or a control group by high school campus. Data collection occurred twice, once at baseline and again at the end of the second school year to examine changes

in self-determination and transition empowerment. The results indicated that adolescents with disabilities who received the Self-Directed IEP curriculum showed statistically significant gains on self-determination scores utilizing the AIR Self-Determination Scale over time (*MY1* = 96.04; *MY2* = 99.36). The results support the implementation of the Self-Directed IEP as a means to enhance an individual's level of self-determination (Seong et al., 2015).

Whose Future is it Anyway?

This curriculum, Whose Future is it Anyway (WFA), was developed in 1995 by Wehmeyer and Lawrence. It was designed to assist students in exploring self-awareness and skills related to problem solving, decision-making, goal-setting, and small group communication. The curriculum assumes that (1) students who are educated in planning their future will be more likely to get and stay involved, (2) students of all ability levels can learn planning skills, and (3) students who believe that their voice will be heard will more likely participate in planning and education decisions (Wehmeyer et al., 2004). The curriculum is designed for students aged 14-21 and has six sections; *Getting to Know You, Making Decisions, How to Get What You Need, Goals, Objectives and the Future, Communication, and Thank You, Honorable Chairperson*. The sections are to be delivered over 36 sessions. Students are encouraged to work on one session per week. The materials are student-directed, in which the student has control over the learning. The goal of the program is for students to gain the skill they need to meaningfully participate in their transition process, planning, and meetings (Wehmeyer & Lawrence, 1995).

Lee, Wehmeyer, Palmer, Williams-Diehm, Davies, and Stock (2011) conducted a study of the impact of WFA on self-determination, self-efficacy, and outcome expectancy

for transition planning, and transition planning knowledge and skills for 168 middle school students. The researchers utilized a computer-based reading support program, Rocket Reader, to support the curriculum. The study utilized a randomized trial, control group (n = 82) and an experimental group (n = 86) with pretest and posttest design, but all students, including the control group, received instruction using the WFA. The students in the control group received such instruction traditionally--self-directed with teacher or adult support for reading difficulties—while students in the treatment group received instruction from WFA lessons utilizing Rocket Reader, allowing more independent use of the materials. Among the barriers for many students with disabilities with regard to receiving effective instruction to promote active involvement in transition planning has been their inability to interact with materials, typically print-based, that are designed to teach them these skills. Teachers were invited to participate in a 1-hour initial meeting about the study, which included training on the Whose Future Is It Anyway? (WFA) student-directed transition planning process, which was the intervention to promote student involvement implemented in the study. Teachers in the experimental group were then provided additional teacher training about Student-Directed Transition Planning using Rocket Reader, a cognitively-accessible text reader.

The effectiveness of the student-directed transition planning instruction with (experimental group) and without (control group) access to electronic materials provided in an audio format was measured using multiple measures, including The ARC's Self-Determination Scale, the AIR Self-Determination Scale, the Whose Future Knowledge Scale, and the Self Efficacy and Outcome Expectancy for Educational Planning scale. To measure student self-determination, data from the ARC's Self-Determination Scale and

the AIR Self-Determination were collected. To measure knowledge about transition planning and the degree to which students benefited from instruction utilizing the Whose Future is it Anyway? process, the Whose Future Is It Anyway-Knowledge Test was administered ore-and post-instruction.

Students who participated in the control group obtained a pre-instruction score of 93.01 on the ARC and a post-instruction mean of 96.37. On the AIR, those students obtained a pre-instruction mean of 84.20 and a post-instruction mean of 88.13. The experimental group obtained a pre mean score of 88.86 and a post mean score of 92.60 on the ARC. On the AIR the experimental group obtained a pre mean score of 84.30 and a post mean score of 86.43. Although the results do not indicate a large effect of utlizing Rocket Reader to support the WFA lessons, all students benefited from the use of the WFA curriculum on their overall self-determination scores.

The students in the control group had a mean score of 65.99 on the pre-instruction WFA Knowledge Test and a post-instruction mean score of 76.34. The experimental group had a mean score of 57.42 and a post mean score of 71.92. The Rocket Reader had a significant impact on the students' understating of transition planning as measured by the WFA Knowledge Test. The students in the benefited from the WFA instruction by showing enhanced self-determination, and transition-planning knowledge however, the students who received the additional technology-based support benefited a little bit more than those who did not (Lee at al., 2011).

To further examine the causal relationship between the intervention with WFA and the outcome that students are more self-determined, Wehmeyer et al., (2011) conducted a study. Participants were 493 middle or high school students (including

students in 18-21 services affiliated with or located on high school campuses) receiving special education services across multiple disability categories in school districts in six states. Participants ranged in age from 11.3 to 21.8 years. Teachers were asked to indicate which level of intelligence the student would best fit: within normal limits; mild intellectual disability, or severe/profound intellectual disability. Fifty districts that agreed to participate identified middle and high school campuses to participate. Each campus was then randomly assigned to an "intervention" (received instruction utilizing WFA; *n* = 351) or "control" group (received placebo intervention to promote family involvement; *n* = 142). The intervention consisted of 36 sessions introducing students to the concept of transition and transition planning and enabling students to self-direct instruction. Measures for evaluations included the ARC's Self-Determination Scale, and the AIR Self-Determination Scale.

The individuals in the intervention group on the ARC Self-Determination Scale preintervention scored a mean score of 91.48 and after the intervention obtained a mean score of 96.52. On the AIR Self-Determination scale, preintervention mean was 77.21 and postintervention mean was 79.71. For the control group, the mean score on the ARC preintervention was 98.25 and postintervention was 103.10. On the AIR preintervention mean score was 72.14 and postintervention mean score was 71.92. The results indicate that *Whose Future Is It Anyway* is an effective intervention to promote the self-determination skills of students with disabilities (Wehmeyer et al., 2011).

Researchers have shown that when interventions/curricula supporting self-determination are systemically implemented in schools, changed in student self-determination resulted (Wehmeyer et al., 2012,2013). When teachers provide instruction

and opportunities for the development of self-determination skills, their students engage in self-determined action, thus, contributing to the development of self-determination (Raley et al., 2018). Although just a few curricula were described in this literature review, each one instructs on specific self-determination skills that are applicable to students with various disabilities. The use of assessment and targeted instruction are linked to enhanced school and postschool outcomes (Shogren et al., 2012; Shogren et al., 2015a). However, despite the current research of evidence-based practices, often educators may have difficulties implementing interventions/curricula.

Implementing Evidence-based Practices: Potential Barriers/Limitations

In June of 2010, A National Gateway to Self-Determination (NGSD) was funded by the U.S. Department of Health and Human Services, Administration on Developmental Disabilities to create a practical guide to promoting self-determination (Loman et al, 2010). In the guide, Loman et al., (2010) identified some potential barriers/ limitations to implementing evidence-based practices in teaching self-determination skills. The guide was developed to provide recommendations for educators and to foster research, policy, and systems efforts to expand the role of self-determination in the lives of individuals with disabilities.

Educators attempting to implement EBP's in self-determination may encounter barriers or limitations during the implementation. According to the NGSD some of those barriers or limitations include: (1) individuals preferences changing throughout sessions, (2) students with disabilities lacking the skills necessary to make "safe" decisions that will minimize risk, (3) educators may not feel prepared to provide training on the skills the individuals need, (4) the school day alone may not provide sufficient opportunities for

students with disabilities to engage in/practice the skills and additional settings may be needed for the skills to generalize outside of the school, (5) cultural difference can be overlooked when addressing family involvement within the school setting, (6) schools may be reluctant to incorporate the promotion of self-determination into their general curriculum and it may cut into their time to teach academic skills, and (7) schools and teachers do not have the time to screen and asses the self-determination skills of students (Loman et al., 2010). These factors can make instruction in self-determination a challenge for educators. One specific assessment, intervention, or curricula will not necessarily meet the needs of each one of the students.

Delivering the promise of self-determination will seldom include one practice and will typically require the individualized application of multiple practices to meet the specific needs of each individual. Activities and instruction promoting self-determination might focus on building an individual's capacity to perform action leading to greater self-determination (choice-making, problem-solving, goal-setting, decision-making, etc.) or focusing on modifying the context of the environment in some way to better enable the individual to make things happen in their own lives, or to provide supports that enhance self-determination (Loman et al., 2010; Wehmeyer et al., 2010). Instruction to enable the individuals with disabilities can occur across multiple and various educational settings such as school counseling programs, academic classes, academic support classes (resource support, RTI groups), career preparation classes and/or extra-curricular activities. Some researchers recommend that instruction in self-determination should not be an "add on" but rather, infused throughout the school day so that students are able to see the practical application of the instruction (Bremer et al, 2003). It is assumed from

the research regarding evidence-based practices, that instruction typically occurs in a traditional classroom in a brick and mortar school building, as none of the studies reference an online environment, and all describe schools in traditional settings. However, many students of today do not attend a traditional school and attend an online school.

Online Schools

Definition of Online Learning

Technology has vastly changed the way we communicate, learn, and engage with one another. As a result, the 21st century landscape of education has also changed. Online schools for K-12 settings allow students to complete entire levels of education via the Web. In the case of high school, students are able to earn their diplomas through online school. Online schools offer an organized set of courses leading to the completion of various grades, using the internet as the primary means of communication (Archambault & Crippen, 2009; Barbour, 2017; Dorniden, 2009; Picciano et al., 2012). Online schools have the option of joining large non-profit organizations, develop their courses independently, or being a part of other entities such as an independent school district, a state-sponsored school, or a charter school district. Online schools are mostly sponsored by states or local educational agencies, implementation varies widely including the amount to which students' complete activities via the web (Archambault & Crippen, 2009; Barbour, 2017).

Different implementation models have been developed for online learning. As a result, many new terms have emerged to describe the models such as e-learning, hy-bird courses, and web-based learning (Archambault & Crippen, 2009; Archambault &

Kennedy, 2016). In 2006, Allen and Seaman (date) developed specific definitions of online learning environments:

- *Online*: courses where most or all of the content is delivered online. At least 80% of seat time is replaced by online activity.
- *Blended/hybrid*: courses that blend online and face to face delivery. Between 30 and 79% of the content is delivered online
- *Web-Facilitated*: courses that use web-based technology to facilitate face to face courses. Between 1 and 29% of the content is delivered online

In today's education, a model of full-time online learning also exists for students in grades K-12. (Barbour & Reeves, 2009).

In 2019, the most recent release date of information from the National Center for Education Statistics, 297,712 students were enrolled in an online school in grades K-12 and 15.5% of the populations were students with disabilities. A total of 10.7% of schools were designated as primary schools, 2.8% as middle schools, and 23.8% as high schools, and 63% fell in the category as indicating grade configurations across two or more grade levels (NEPC, 2019). Although enrollment in online schools continues to growth and will likely continue to expand, very little research exists on how online education affects learning at the K-12 level (Corry & Stella, 2012). This lack of data has not prevented many states from expanding this model of education.

Instructional Practices in Online Learning

Many states in the U.S have frozen accountability systems or have had to implement new systems for online schools that do not include an overall rating; 56% of the online schools in the states had available school performance ratings (NECP, 2019).

Currently, 48.5% of those schools received an acceptable performance rating with an on-time (4 years) graduation rate of 50.1% which is lower than the national average of 84% (NEPC, 2019). Online schools appear to lead to poor results (Barbour, 2017; NACSA, 2015), not because of inherit problems with online instruction, but because of poor implementation (Morgan, 2015). The National Center for Education Statistics (2011) found that only 70% of online schools take attendance, 56% monitor log-on activity and 49% monitor time spent online by the students (NCES, 2011). Morgan (2015) believes that this low level of attention to activity and attendance would not likely occur in a traditional brick and mortar school.

The principles of online teaching addressed in the "best practices" literature is similar to those from face to face settings. Best practices for both emphasize content area expertise, communication skills, and instructional design. There has been some adaptation of face to face instruction in online settings (DiPietro et al., 2008). The American Federation of Teachers (Higher Education Program and Council, 2000), Sloan-C (Sloan-C, 2002) and American Distance Education Council (ADEC, 2003) have published recommendations and handbooks for teaching online courses that identify general practices associated with course effectiveness.

The most recently published information by the ADEC (2017) includes the following as characteristics of quality online teaching and learning: (1) fosters meaning-making, (2) moves from knowledge transmission to learner- controlled systems, (3) provides for reciprocal teaching, (4) is learner-centered, (5) encourages active participation, (6) based on higher-level thinking skills, (7) promotes active learning, (8) allows for group collaboration or cooperative learning, (9) provides multiple levels of

interaction and (10) focuses on real-world problem solving for all students in an online learning environment. The ADEC further recommends strategies such as establishing a sense of community, keep the learner engaged, empathize time on task, give prompt feedback and give program assessments for continuous improvement. These provide a basis for understanding instructional effectiveness for online settings, but they do not address the unique skills needed to teach online courses (ADEC, 2017).

A study was conducted in 2008 in that examined what virtual teachers do and what they think about educating students in an online school. Sixteen teachers from the Michigan Virtual School (MVS) were selected to participate in two interviews (DiPietro et al., 2008). The participants had to have a current teaching certificate, be highly qualified in their field of instruction, and have taught at an online school for at least three years. The first interview established the purpose of the study and allowed for participants to ask any questions. The second interview was designed to prompt participants to provide a description of their pedagogical practice in relation to the general strategies they use, their specific use in relation to the content they teach and the use of technology.

The results of this qualitative study indicated that the sixteen teachers felt they went the extra mile to support students, had good virtual classroom management skills (reviewing posts constantly by students), assessed the student's needs, engaged the students with content, made the courses meaningful for the students, provided support, and created a community. Specific strategies included practices such as: altering instruction, trying to address multiple intelligences, just being there for the student, good knowledge of technology, constant communication with the student, logging in at certain

times each day and checking message areas, discussion boards and posting, and sending grades to students (DiPietro, 2008). Teachers in online schools often have unique skills, such as advanced technological skills and the ability to work independently and often in isolation (Hawkins et al., 2012).

In a study designed to focus on educator perceptions on teaching in an online environment, eight teachers were selected to participate in a qualitative study, from Utah's Electronic High School (Hawkins et al., 2012). Semi-structured interviews over a three-month period were conducted. The study suggested that teachers working in online settings feel a sense of alienation. They experienced a sense of disconnection from their students, from fellow teachers and from their traditional ideas of the teaching process. One reason teacher's felt alienated was because of the lack of nonverbal communication. Some teachers reported being less certain about students' understanding of subject matter because they lacked feedback in the form of nonverbal visual cues, such as a puzzled expression on the students face and they felt that was an important part of the teaching component. They also reported the sense of isolation because they lacked opportunities to interact with other teachers (Hawkins et al., 2012). Teachers in online schools are not just teachers, they are also course facilitators, instructional designers, local contacts, mentors, technology coordinators, guidance counselors and at times the administrator (Hawkins et al., 2012)

Increasing student enrollment in online schools has created a need for teachers with adequate preparation in online pedagogy. According to a national survey done in 2012, of online teachers, less than 40% of participants had gone through any professional development training prior to teaching online. The participants had not taught in an

online setting prior to their current setting, and those just entering the field of teaching had all their experience in a traditional brick and mortar setting (Hawkins et al, 2012). Limited research has been done on K-12 teacher preparation for online schools and little is known about the population of educators who teach online (Archambault, 2011).

There has been little peer-reviewed research that has focused on student performance in a K-12 online learning environment. The majority of the literature has been produced by the audit divisions of various departments of education and legislative branches. Much of the literature has not been produced by researchers at all, therefore, there continues to be insufficient evidence of the effectiveness of online schools on student outcomes (Barbour, 2017). There is a need to examine under what conditions online learning can be effective (Federig & Kennedy, 2014).

Instruction with Students with Disabilities in Online Schools

Researchers in the field of special education have identified evidence-based practices that demonstrate positive effects on student performance and outcomes in face to face environments (Cavendish et al., 2017; Haber et al., 2016; Test et al, 2004, 2009 a, b). Students with disabilities may benefit from online instruction as a result of the individualized instruction it creates, allowing them extended time, the use of a variety of multimedia technologies and flexible locations to do the work (Vasquez & Straub, 2012). For students with disabilities who cannot attend traditional schools for various reasons (social difficulties, anxiety, behavior), the flexibility in location is crucial and for students with learning disabilities, varied multimedia technology can be beneficial (Vazquez & Straub, 2012). There is limited knowledge about what strategies are effective in online environments for K-12 students with disabilities.

The National Education Policy Center reported that one in ten students enrolled in a virtual school has a disability, yet little time is invested in this population (Molnar et al, 2013). The consequences of not meeting the needs of students with disabilities include high attrition rates and generally poor achievement (Deshler et al., 2014; Rice & Carter, 2015). The Office of Special Education (OSEP) funded the Center on Online Learning and Students with Disabilities (COLSD) in 2011, to assist with research to make online learning more accessible, engaging, and effective for students with disabilities.

Researchers have learned that teachers who work in online learning environments, with students with disabilities, construct their roles around monitoring schoolwork, enlisting parents as co-monitors, and providing social and emotional support to students and their families (Rice & Carter, 2015). They also discovered that while teachers in online environments receive little initial preparation or support for instructing students with disabilities; they do receive support for relationship building online (Smith et al., 2016). The content of online learning curriculum poses challenges to students with disabilities who have reading difficulties (Greer & Deshler, 2014) and very little research in online learning for students with disabilities has focused on studies of achievement (Greer & Deshler, 2014). There also still remain unanswered questions involving the legality of governing services and instructional delivery such as, how modifications and accommodations are changed in an online environment, how a free appropriate public education and least restrictive environment is represented in an online environment, and what are the best approaches to ensure that progress motioning data are incorporated into curricular, instructional and placement decisions of the IEP (Mallard et al., 2016)

In December of 2016, the Michigan Virtual Learning Institute developed a guide to meeting the needs of students in K-12 online environments (Mallard et al., 2016). When developing courses for students with disabilities, course designers should consider national and state standards, reading demands of required texts, accessibility of content (bandwidth lengths and learner), and types of data that provide information for the range of learners. They also suggested strong professional development for educators at all levels around legalities of IDEA (Mallard et al., 2016). Instructional solutions suggested were providing a face to face virtual experience mimicking the direct instruction needed for a student with a disability utilizing various platforms such as skype or google hangouts and offering text-to-speech (TTS) to assist students with reading difficulties (Greer& Deshler, 2014). No specific practices have been recommended for instructing students with disabilities online, however, the International Association for K-12 Online Learning (*i*NACOL, 2011) has developed standards for all online teachers in grades K-12 (see **Appendix B**).

Educators in an online environment may struggle with their new roles. The responsibilities include: (a) designing digitally enhanced instruction, (b) attempting to integrate EBP's into the digital environment, (c) quickly interpreting a large set of student data, (d) managing and recommending tools for learning, (e) relinquishing some classroom control to the learners, (f) encouraging and designing systems to support student self-regulation and (g) explaining their roles and responsibilities to other stakeholders, particularly parents (Deshler et al., 2014). In the online learning environment, students assume greater self-regulation and take a more active role in their learning. For students with disabilities, self-regulation strategies cannot be presumed to

exist, and many will require specific instruction strategies and supports to be successful that teachers will need to embed in the online instruction (Deshler et al., 2014).

In 2004, Kinash et al., conducted a comprehensive literature review of 43 publications released between 2000 and 2003 that intersected online learning and disability. Of the 43 publications, 22 (51%) presented guidelines on how-to information regarding topics including accessibility, communication tools, instructional design, pedagogy, policy, teaching strategies and Universal Design. Descriptions of products and/ or educational programs accounted for 13 (30%) of the papers. Research was only described in 5 (12%) of the articles and two of the five were unpublished conference presentations and the others were editorials or opinion pieces. No published empirical research on online instruction for students with disabilities was found (Kinash et al., 2004).

In 2012, Vasquez and Straub conducted a literature review to establish any recent changes within the online instruction literature for students with disabilities since 2004. The other purpose was to determine if the existing research base was sufficient to assist educators in the development of effective online programs for students with disabilities or students at risk. Forty-three articles were organized and reviewed. Of the 43 articles, only 6 (14%) were identified as empirical studies. The remining 37 were editorials, rejoinders, and reviews of literature. Five of the articles were found in which researchers used an asynchronous technology (coursework delivered via recorded web, email, and messages) and one article was found using synchronous technology (on-line chatting, videoconferencing). None of the research was done solely in online schools. The participants were in a traditional school and receiving some sort of online instruction, but,

only for a class or period. Since 2012, the majority of the research/articles focusing on students with disabilities and online schools include policy implications, compliance regulations and challenges, accessibility recommendations for online schools and potential barriers of students with disabilities in online schools. There is an extremely limited body of empirical research providing a basis for the effectiveness of online instruction for those with disabilities.

Special Education and the Benefits of Online Schools

Attending a K-12 online school for student with a disability is a choice of placement made by the parent or student, if student is of age (Deshler et al., 2014). The choice for an online environment may be due to multiple reasons or perceived benefits. One of the advantages of online learning is that students with compromised mobility can avoid the challenges of travel and negotiating a school environment and they can design their own study space at home to accommodate their range of motion. If students have limited use of their hands or feet, they can dictate text or email using voice activated programs. Online environments also offer flexibility of schedule and students can map out their own learning time. Working at home at their own pace allows the students to review materials as often as needed. Individuals with social difficulties such as autism, can avoid large classroom and work in familiar comfortable settings. It also removes the pressure of speaking in front of a large group (Martin, 2018). Additional benefits include on-going feedback, greater opportunity for students to control their learning, availability of specialized staff in rural or staff-shortage areas, possible cost savings to families and alternative option for students with significant medical needs that make attendance in

traditional schools difficult or impossible (Martin, 2018). Despite advantages of online learning, students with disabilities still face hurdles.

Special Education and Barriers of Online Schools

Online schools may not be able to meet the unique needs of individuals with disabilities; however, schools cannot arbitrarily deny students with disabilities access to online schools or design a program that in a way will categorically exclude students with disabilities. Online programs will need to be developed to meet individual needs to the best extent possible (Martin, 2018). Students may face barriers such as difficulty navigating the online platform and content, inability to utilize assistive technology with the platform, difficulty utilizing or viewing the computer screen. Students may not be able to comprehend nonverbalized actions and captions may not tell the whole story. Visual aids and assistive technology may require higher bandwidth then the students have a home. Finally, online learning does not account for cultural or linguistic challenges (students may be challenged by chat features) (Holloway & Foley, 2018). Online schools need to develop methods to provide accommodations and deliver instruction as outlined in the students' IEP. Federal law has established principles for quality in traditional brick and mortar schools in IDEA (2004) and students in online schools should be afforded the same protection. Given the lack of research and guidance of evidence-based practices, further research must be established to increase the level of evidence-based online instruction methods and to demonstrate the impact of instruction on students with disabilities (Vasquez & Straub, 2012).

Instructing students with disabilities in self-determination skills in an online setting brings its own barriers and challenges. Since online schools do not often include

direct face to face instruction, it is difficult for teachers to observe an individual's behaviors. Implementing specific curriculum such as SDLMI, might be extremely difficult since interaction and direct instruction do not occur every day in the online environment. There is also very little opportunity for students to practice self-determination skills in the educational setting, and thus limiting practice to the home or other environments. The schools rely upon the parent's ability and understanding to provide opportunities for their child which can greatly impact the students' progress on self-determination skills. Often parents, do not understand what self-determination skills really are and how to support and instruct their child in those specific areas.

Self-determination is a construct composed of many various skills as defined in this literature review. It has also been demonstrated through the literature, that individuals with disabilities who have self-determination skills often have better adult outcomes. These individuals will require supports and instruction in self-determination skills. There are multiple ways of providing that instruction through the use of evidence-based practices. In today's educational world, parents and students have many options for schools that include traditional brick and mortar schools and online schools. Online schools continue to grow in enrollment each year and more and more families of students with disabilities are choosing that setting for their children. Research in the online settings must begin to explore what is actually occurring in online schools and how and if self-determination skills are being taught to those students.

There is limited research identifying specific interventions for students with disabilities in an online school and the effectiveness of those interventions on self-determination skills and positive post-secondary outcomes. Online learning can provide

a practical, workable option for diverse populations of learners, including students with various disabilities. Appropriately supporting students in an online environment requires a great deal of instructional planning and preparation. The added programmatic concerns often require extra levels of consideration, implementation, and evaluation to determine the appropriateness and effectiveness of the online interventions (Deschaine, 2018).

Students attending online schools are to be afforded the same quality of education as students attending traditional brick and mortar schools. IDEA outlines policies and procedures to help students with disabilities to transition from school to work or post-secondary education. It is expected that educators in both settings understand the importance of strong self-determination skills and the effect on positive post school outcomes. Online schools will present different barriers or challenges to instructing students with disabilities than a brick and mortar school and often serve a large number of students with disabilities.

In the past, society viewed individuals with disabilities as different and often incapable of making their own decisions and having control over their own lives. Over the years, these individuals have advocated for themselves and gained support through various laws and social movements. Individuals with disabilities no longer live separately from society and are capable of having control and input in their lives. Developing self-determination skills is essential for all individuals with disabilities in order to empower and enable them to become successful members of the community and live a "typical" life like those without disabilities. Each individual, parent, and educator views self-determination skills from a different perspective. In order for individuals with disabilities to increase and strengthen their self-determination skills, educators must

utilize evidence-based practices and interventions. Although there are barriers and challenges to implementing those practices, educators must continue to forge forward no matter where that education occurs, in a traditional brick and mortar school or in a full-time online school.

The landscape of education has changed greatly over the last twenty years and more and more families are choosing online schools for their students with disabilities. The online environment can be beneficial to students with disabilities and often is appealing to families and students. However, this environment presents it owns challenges and barriers to teaching self-determination skills to individuals with disabilities. The evidence-based practices reviewed previously in the literature all took place in face to face traditional school settings. Although one study did utilize a computer-based reading support program (Lee et al., 2011), many of the other practices (i.e., direct instruction, video-modeling, role-playing) could be utilized in an online environment, although there is no documentation or evidence supporting it. At this time, much is unknown about what special education teachers in online schools understand about self-determination skills and how that impacts their instruction and support for their students.

CHAPTER THREE

RESEACH METHODOLGY AND DATA ANALYSIS

The purpose of this research study was to explore the understanding of self-determination skills and instructional practices by special education teachers in an online setting in grades 9-12. Specifically, this study examined special education practices and views in one public school district. It focused, overall, on how educators in an online school conceptualize and support self-determination in their instruction. The main research questions this study aimed to answer were:

RQ 1: What are special education teachers' understanding of self-determination and its relationship to post-secondary outcomes?

RQ 2: How do special education teachers understand assessment and instruction of self-determination skills to students with disabilities and what challenges do they perceive delivering instruction in an online setting?

The information obtained to answer the research questions in this study can be useful for the participating school district to begin to understand what practices and potential barriers the special education teachers face in an online school specifically related to self-determination skills. This information can then assist with the development of possible strategies to improve instruction and increase positive, post-secondary outcomes. Overall, this study can impact the larger field of special education through

exploration of the utilization of a framework for special education instruction in online schools in the area of self-determination skills.

The purpose of this chapter is to provide an overview of the methodology to be implemented in this study. The overview begins with the conceptual framework and situated knowledge and assumptions of the researcher. It follows with the study design, which includes site and participation criteria and justification. The overview then includes a description of the procedure with possible timelines, instrumentation, and procedures for data collection and analyzation. This chapter also includes the final data collection and analysis conducted. The process used to analyze transcripts from the nine individual interviews conducted to uncover themes is described in detail in this chapter. Deductive coding was utilized, and general codes were initially created based on the interview questions. There were three levels of analysis: (a) open coding, (b) selective coding, and (c) theoretical coding. A data table was created to organize the codes and how they related to the theory of engagement and then to the 5C's of engagement framework. At each level of analysis, constant comparison was used to refine the data further, until themes emerged from the data. Included in the chapter are figures used to present detailed code and theme data.

Conceptual Framework

Instructional designers create online platforms that attempt to be equivalent to face-face instruction (Johnson & Argan, 2002). Online platforms tend to build on traditional views of learning where the primary goal is to transfer information from the instructor to the student (Johnson & Argan, 2002). This is accomplished by providing students with access to information and expecting them to demonstrate their learning

through various activities and exams. The challenge for instructional designers of online programs is to devise ways to create pedagogically sound content delivery over the internet. Online programs need to address a variety of learning styles and provide external forms of motivation for the students (Johnson & Argan, 2002). In order to do this, some suggest online schools must examine their traditional perspectives and adopt a new philosophy of teaching and learning that is appropriate for online instruction (Johnson & Argan, 2002; Repetto et al., 2010).

In 2010, Repetto et al., developed a framework for supporting students with disabilities and students at risk of leaving school before their graduation in both brick and mortar schools and online schools; the 5C's of Student Engagement Framework. This framework is closely tied to Schneiderman's (1994) engagement learning theory. This relatively new learning theory emerged from Schneiderman's experiences teaching in electronic and distance learning environments (Kearsley & Shneiderman, 1998; Schneiderman, 1994). The fundamental idea underlying engagement theory is that students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks (Kearsley & Shneiderman, 1998). It is rooted in the constructivist learning model; learning is an active and not passive endeavor and learning occurs by constructing new ideas and knowledge based upon past and present experiences (Bruner, 1990).

Engaged learning means that all student activities involve active cognitive processes such as creating, problem-solving, reasoning, decision-making and evaluation. Students are intrinsically motivated to learn due to the meaningful nature of the learning environment and activities. The principles of this theory include three components, (1)

establishing learner-learner collaborative teams, (2) encompassing a project-based learning approach and (3) designing an authentic learning environment and authentic tasks (Damoense, 2003). Under the engagement theory of learning, the method of instruction is interactive and generative. Instruction encourages learners to construct and produce meaningful conceptions, solve problems, think critically, develop higher order thinking skills, make decisions, and apply knowledge (Jones et al, 1994). Much like the constructivist theory, the engagement theory emphasizes that learning involves both a cognitive and a social process (Bruner, 1990; Damoense, 2003).

The 5C's of Student Engagement Framework focuses on five keys areas. First, students need to understand and learn how they control their learning and behaviors (control). Second, students need engaging curriculum grounded in effective teaching strategies to support their learning (curriculum). Third, they need to be provided with a safe and supportive climate in which to learn (climate). Fourth, they need to be part of a caring community that values them as people and learners (caring community). Fifth, students need to understand the connection between what they are learning and the skills they need outside the school setting (connection) (Repetto et al., 2013). The theoretical concept of this study will be rooted in this framework and how it directly applies to special education teachers understanding and implementation of self-determination skills and practices. By allowing students to have control over their learning, they begin to engage in the cognitive process as described in the engagement theory. Students become problem-solvers and decision-makers in regard to their own learning and behaviors and are active participants in their learning (Repetto et al., 2010). The supportive climate encourages collaboration among each other and staff. Through an engaging curriculum,

which may include project-based learning, students can socially interact, and the technology begins to become utilized as a communication tool and not just a device. The curriculum should also provide for the real-world experiences (authentic learning tasks) in which students can build upon their past experiences, as well as new experiences in order to make the connections to the outside world.

Control

Students with disabilities need to receive instruction on targeted academic, social, and behavioral interventions that will afford them the knowledge to take control of their learning and behaviors (Cobb et al., 2006). Thoughtful incorporation of evidence-based practices remains fundamental in allowing students to participate actively in controlling their learning behaviors (Estrapla & Reed, 2020; Ferdig & Kennedy, 2014; Palmer et al., 2012). The theme of control can be applied to the online learning environment by ensuring that all students are given access to self-determination training. Through instruction in self-determination skills, students will develop a greater understanding of their role as online students (Federig et al., 2010). As a result, students will enhance their self-awareness and self-advocacy skills, and truly understand their disability and how to speak and advocate for their own needs and supports (Cuenca-Carlino, 2016; IDEA, 2015; Federig & Kennedy, 2014; Sparks et al., 2016). These skills will help students set goals in social, academics and behavioral areas; develop a plan to meet their goals; and evaluate their progress (Cobb et al., 2006; Repetto et al, 2013). The students will become meaningfully engaged in their own learning and processes. As the special education teachers are explaining their instructional practices, reviewing goals on student's IEP's,

and explaining their understanding of the development and importance of self-determination skills in the interviews, this element should be evident.

Curriculum

Students with disabilities experience improved engagement with the curriculum when courses are designed with the students interests and need in mind (Christle et al., 2007). Evidence-based instructional strategies and differentiated instruction must be built into the curriculum to meet the needs of students with disabilities (Burke et al., 2020; Cook & Odom, 2013; Odom et al., 2005; Test et al., 2009 a, b; Repetto et al., 2010). Students need to be challenged to connect, and remain connected, to current learning through inventive and creative academic activities (Bost et al., 2006). The online environment, unlike the traditional brick and mortar can offer a curriculum that is done at "any pace" which will allow every student to build independence by supplying an ample amount of time to master their learning (Repetto et al., 2010). At the same time, collaboration and cooperative learning among students should also be incorporated into the curriculum (Johnson, 1998). The student engagement theory supports this area through the basic principles of creating learner to learner collaborative teams and project-based learning, which is often reflective of initiative and creative instruction. It is expected information supporting this element will become evident in the special education descriptions of a typical day and daily instructional practices and assessments regrading self-determination skills.

Climate

For online schools, a safe and supportive environment can be facilitated by fairly and uniformly enforcing rules and procedures across courses and ensuring they meet

local, state and/or national norms (Liu & Cavanaugh, 2011) for example, compulsory attendance laws. The attendance laws are the same for both general education and special education students in an online school and brick and mortar school settings. It is an effort that engages staff, administrators, students, and families in the process to ensure everyone's needs are met. Online schools often engage parents or "learning coaches" as key players in the students learning by establishing a home climate for learning (Repetto et al., 2013). This home climate can impact an individual with disabilities' progress in gaining self-determination skills and opportunities for practicing those skills. Supporting the students, parents, and staff continues to build a collaborative environment that accepts a diverse population of students and fosters a safe place to learn is an essential component. As the teachers describe challenges/barriers to students gaining self-determination skills in the online environment, the challenges identified will address parental support and the parent's perceptions of the importance of these skills.

Caring Community

Special education and general education literature have stated that students learn best in an environment that acknowledges and values each student as an integral member of a community of learning (Argan et al., 1999; Carter et al., 2013; Christle et al., 2007; Repetto et al., 2010). Each student should be considered one of the most important team members and should always attend meetings during which an educational plan/program is developed, such as an IEP meeting, in order to voice his/her individual needs and interests (Martin et al., 2004, 2006; Repetto et al., 2010; Seong et al., 2015). Learning takes place in environments that knows the needs and goals of each student and fosters a sense of belonging. Individuals with disabilities in online schools require the support of

teachers and parents. Many full-time online schools consider parents/families members to be instrumental in establishing a caring environment conducive to learning, and consider them co-educators (Ferdig & Kennedy, 2014). Peer behaviors and interactions are also valuable. Students need to feel a sense of cohesion and awareness of their peers, both with and without disabilities to foster collaboration amongst each other and positively impact student achievement of post-secondary activities (Abedin et al., 2010). Since online instruction happens outside of a physical traditional classroom setting, ongoing access to academic and technical support for students is also a key to their success (Ferdig & Kennedy, 2014). As the special education teachers describe a typical day or week, this information should be reveled in their responses.

Connection

The primary goal of education for all students is successful integration into the adult world (Ferdig & Kennedy, 2014). Learning needs to be connected to post-secondary goals as well as current goals the students may have. For students with disabilities, this connection can be achieved through evaluating post-secondary goals and developing a transition plan to meet those goals that include the incorporation of self-determination skills as outlined by laws (IDEA, 2004; Repetto et al., 2013). The students must understand why learning self-determination skills is important and be active participants in that learning (i.e., participating in their IEP meetings). Teachers can increase a student's sense of relevance by constantly making connections among the student's current interests, preferences, and goals through the curriculum (Carpenter & Cavanaugh, 2012) and by creating real-world/authentic activities (Damoense, 2003; Carpenter & Cavanaugh, 2012). The special education teachers in this study will describe what

process they utilize when determining IEP goals and which goals they feel incorporate or focus on self-determination and why. This will allow enable me to understand if the special education teachers see the connection between the everyday instruction and impact on the student's post-secondary outcomes.

The theory of engagement supports the 5 C's of Student Engagement framework in multiple ways as described above. Each of the five keys areas focuses on the overall fundamental idea that students should be actively engaged in their own learning through interaction and worthwhile tasks. Students must construct their own meaning from experiences (Bruner, 1990; Kearsley & Shneiderman, 1998; Schneiderman, 1994). By learning the understanding, and perceptions of the current practitioners in the field, effective online practices may begin to emerge for instructing students with disabilities in self-determination skills. Investigating the special education teachers' understanding through the lens of the 5C's of student engagement framework, will allow me to bring structure and theory into the process and help determine if the online schools are utilizing or designing instruction based around a framework for students with disabilities. It is anticipated that through the interview process, and the teacher's descriptions and understanding of self-determination skills and practices, it will be revealed if all or any of the framework is evident. Researching what the teachers do is important but, it is equally important as to begin to get an understanding why teachers choose and engage in practices.

Situated Knowledge and Related Assumptions

I am currently the Director of Special Education in the selected school district. I have a direct relationship to the schools and participants in this study; however, it is not a

supervisory relationship. I have little to no direct contact or interactions with the special education teachers, as I typically have contact only with the special education coordinators in their buildings. Although the special education teachers know of me by name and position in the district, they understand that through the charter school structure they do not report to me and I have no authority over them as teachers in the building. I am viewed as a support and resource for schools and offer general guidelines and procedures. We, as a district, are the authorizers of the schools, however, each school has the autonomy to choose platforms and instructional techniques. The district also maintains the role of the LEA (Local Educational Agency) and supports the schools in regard to students with disabilities. Since joining the district three years ago, virtual schools have been an interest of mine. Data suggest that virtual schools perform very low, particularly in the area of students with disabilities (Credo, 2019). I question why and want to know more information about how I can best support teachers given my current role.

I believe that my experience, knowledge, and understanding of the subject will be a strength to this study. As a previous special education coordinator and teacher, I will be able to relate to the perceived challenges in providing targeted instruction. My knowledge of evidence -based practices and learning through research will assist in making possible recommendations. My relationships with the schools will also be a strength. Although I do not have a direct relationship with the teachers, I do have a strong relationship with each of the coordinators. I will have to spend some time building rapport with the teachers. In order to build that rapport, once I receive an authorized consent from the teacher, I will set up a time to talk by phone to let them know about the study and

process. This will also give me time to get to know them on a one to one basis. Since I am an "outsider," so to speak, this will give me an opportunity to really learn more about their perceived challenges.

As I began my PhD program and started thinking about a possible dissertation, I immediately considered virtual schools and researching their particular challenges. Research has identified self-determination skills as a predictor of positive post-secondary outcomes (Halpern et al, 1995; Wehmeyer & Schwartz, 1998; Powers et al, 2012; Shogren et al, 2015; Test et al., 2009). Schools across the nation are struggling with how to teach students with disabilities these particular skills. I have spent the last six years immersed in research on self-determination and transition through my graduate program. I believe I have a strong understanding of the need for teaching these skills and the research supporting the need. I have also been in the field of special education as a teacher, coordinator and director over the last twenty-five years and believe my own experience and knowledge of teaching students with disabilities will lead to a deeper understanding of the perceived issues and current practices being utilized in the online environment.

It was challenging for me to completely separate myself from my title of Director while conducting this research. The position could potentially influence the amount of information the special education teachers will be willing to share. Given that I have been studying and reading much research on the importance of self-determination skills and teaching students with disabilities, I may have unintentionally judged the participants based on their knowledge level. Since I do not have direct supervision of the special education teachers at the school, I do not believe they will view me as person of power or

of having any impact on their current positions at the schools. As a previous special education teacher, I taught self-determination skills to my students and had great success. I did address self-determination skills with my students such as making choices, asking for help, and taking care of self- needs. I have not taught at the high school level. I have learned a great deal about teaching high school students through my years as a special education coordinator and director. I have also never taught in an online setting. I often look to the coordinators and teachers in the online schools as the experts in the field.

I might expect everyone else who is teaching these skills to do it as I did, and to assign it the same level of importance. Asking questions regarding their own particular experiences and knowledge will assist my understanding of their perspectives. The participants have received professional development, conducted by me with the special educator coordinators in their buildings, and I have the expectation was that it was presented to the teachers, I may be frustrated if teachers are not able to identify some of the self-determination skills and describe how they are teaching them to the students with disabilities. To safeguard against these assumptions, it will be imperative that I build rapport with each special education teacher in order to build trust and get true responses from the participants. Through the semi-structured questions, I will be able to hear each individual's "story" and not my own. I will also include an additional researcher to review the data analysis.

Although my experience, knowledge, and rapport will be a strength, these may also be a weakness of the study. I may, without realizing it, pass judgment on the participants based upon their responses to interview questions. This may lead to frustration on my part as the Director, when considering they perhaps did not listen to the

professional development that was offered. Even though the participants do not view me, or at least I do not think they do, as a supervisor, I am still from the "district" and that in itself can have its own connotations. Building rapport and getting to know them a bit prior to the interview should assist with some of the fears they may have and make them more comfortable. Another weakness will be my lack of familiarity with what instruction in a virtual setting actually looks and feels like. I "sat" in on one virtual class, and I quite honestly could not wrap my head around what was happening and how the students with disabilities were, if they were, actually learning. I have so many questions about this particular setting, since I never taught in one, that maybe I can explore for future research. This is also the reason why I chose to look specifically at online schools for this study.

Study Design: Exploratory Case Study

This qualitative study is designed to investigate and explore the understanding, instructional practices, and potential barriers that special education teachers in grades 9-12 experience in an online school teaching student with disabilities self-determination skills. This study is an exploratory case study of two online schools within a selected school district (Yin, 2018). Each special education teacher will represent one case. The goal of this case design study was to learn the "why" of special education teacher's selection and understanding of self-determination skills, and "how" instruction in self-determination occurs, therefore, a case study is an appropriate type of study (Yin, 2018).

Exploratory research is defined as research used to investigate a problem which has not been studied or thoroughly investigated in the past. It is conducted to gain a better understanding of the existing problem, but usually does not lead to a conclusive

result (Yin, 2018). This type of case study was chosen in order for me to gain familiarity with the special education teachers understanding of self-determination skills, assesments and instructional practices in the online setting in order to acquire insight and begin to establish priorities. The purpose was not to prove if the participants were necessarily doing things "right or wrong", according to the literature or theory, but to develop a deeper understanding of their perspectives and perceptions of self-determination skills as guided through the theorical framework of the 5 C's of Student Engagement Theory. The exploratory case study allowed for close collaboration between the participants and enabled them to tell their stories and describe their views and perceptions of self-determination skills through the primary research method of semi-structured interviews. The interviews were very interactive and open-ended. The questions did not give an option of just "yes" or "no", but they required complete answers and lots of dialogue and conversation. Exploratory case study data collection often includes collection methods such as multiple interviews in order to get a rich and thick picture of what of why and how as well as to gather all the data needed for analysis (Yin, 2018).

Qualitative interviews represent conversations in which a researcher guides a participant in an extended dialogue (Rubin & Rubin, 2012). Participants in qualitative interviews are free to respond as they wish and provide as much detail and background as they are comfortable with. A benefit of a qualitative interview is that, unlike a fixed survey, questions may be modified to match the knowledge, experience, or comfort level of the participant (Rubin & Rubin, 2012). The purpose of interviewing is to find out what is in and on someone else's mind. The purpose of open-ended interviewing is not to put ideas in someone's mind (for example, the interviewer's knowledge of self-

determination) but to access the perspective of the person being interviewed (Patton, 2002). Questions utilized within the interviews component of this dissertation were thoughtfully and carefully developed. They were designed to probe, but not lead the participants, in an effort to garner honest and authentic responses. In this research, two interviews were conducted with each participant. The first interview provided opportunities to learn about the participants and hear their stories and their perceptions and understanding of self-determination skills. The second interview allowed for follow-up and clarification from the first interview if needed, as well as exploring new areas or topics that arose from the discussion. Each session lasted approximately 45-60 minutes in order to afford time for depth of responses, but not demand an overwhelming amount of time away from the participants' day and instruction.

This research adopts an exploratory case study approach that enabled a mixture of qualitative research techniques to be incorporated into the overall research design. These included individual semi-structured interviews, and documentary review of IEP goals and lesson plans. Gathering data via a mixture of methods facilitated the collection of a more holistic and rich data set as the focus was more on quality and richness of information rather than quantity. The ability to triangulate data by using a mixture of methods is seen to be a main advantage (Johnson & Onwuegbuzie, 2004) and can enhance the credibility of this study (Robson, 2011).

In keeping with the structure of exploratory case study, the first interview included questions that asked the participants to describe their educational and teaching background. I also inquired about what drew them to the online setting. They were further asked to describe a "typical day". This process allowed the participants to tell

their story and further develop a rapport with me (Yin, 2018). This interview continued with additional questions surrounding their basic understanding of self-determination skills. Interview two focused on the participants instructional practices and assessment practices. This was also the time when we reviewed specific IEP goals and lesson plans. Within qualitative research, an overall goal is to collect rich data (Lofland & Lofland, 1984). The semi-structured format and two interview sessions allowed for follow up or additional questions to be generated based upon the participants responses, if needed, to gather as much data as possible. It also allowed for clarification and verification of participants responses to the questions which is a common strategy in exploratory case study.

The topic self-determination instruction specific to online settings has not been explored within this particular district. As discussed below, the district can be considered an exemplary district in regard to the professional development that has been provided to the schools, including professional development specifically on self-determination that I developed, as the Director of Special Education. I have provided background knowledge and instructional practices specifically in the area of self-determination. This research study should lead to a deeper understanding of what is currently happening with self-determination instruction in online schools and potential explanations as to why or why it is not occurring. A thorough and detailed conversation through interviews with special education teachers lead to a complete understanding of what is occurring in these particular schools in this district. This study aimed to take an in-depth and exploratory look into this particular district's online schools. The results are not intended to pinpoint if these particular teachers are or are not instructing students with disabilities in self-

determination skills properly, but rather to explore and establish a connection between the literature and current practices of self-determination skills in online schools.

Site Selection, Criteria and Justification

The selected school district is only one of eighty-one public school districts across the state. Included in the district's portfolio are brick and mortar schools as well as online schools. Currently, there are nine public online schools across the state and two of those are located within the district. Two particular online schools, Virtual School #1, and Virtual School #2 in the district, are the specific sites that were chosen for this study. Currently, as the Director of Special Education, I have access to the two virtual schools within the district. There are only two authorizers of public online schools in the state. These two virtual schools serve a wide variety of students with disabilities among their populations in the high school setting. Below is a description of the district's and schools' populations, graduation rate and current performance level as issued by the South Carolina Department of Education.

According to the most recent data (SC2019 State Report Cards), the district is the fastest improving school district, based on improvements in test scores and graduation rates, in the state over the last five years. Across all areas, including graduation rate, gains in ELA, Math and End of Course Exams at High School, the district has made large improvements in growth since 2015. Overall, 23.6% of the schools located within the district were rated as "Excellent", 25.5% were rated as "Good", 23.6% as "Average", 14.5% as "Below Average" and only 12.7% as "Unsatisfactory." The graduation rate over the last 5 years has increased from 51.0% in 2016 to 72.3% in 2019. The district stands out in the state as an authorizer of public school and is clearly finding success

within its schools as schools continue to improve post-secondary outcomes as evidenced by improved test scores and graduation rates.

Virtual school #1 school is currently rated as "below average" at the high school level. The school has a total population, grades k-12, of about 5,500 students. As of the most recent special education child count data for 2019 collected by the District, there are 216 students with disabilities in grades 9-12 out of approximately 1,750. The breakdown of disabilities can be found in **Appendix C**. Virtual school #1 has a graduation rate of 61% which is lower than the state average of 81% however, over the last 5 years, this has improved from less than 50% of the population graduating (Public School Review, 2019). Despite its current rating, enrollment continues to increase each year, growing from approximately 4,500 students in 2018 to approximately 5500 currently and has increased graduation rates and test scores. Virtual school #1 is a K-12 full time online school.

Virtual School #2 is currently rated as "unsatisfactory." It only serves students in grades 9-12 with a total population of about 400 students. Among those students, 36 are identified as students with disabilities, according to the most recent special education child count collected by the District. The breakdown of disabilities is located in **Appendix C.** Virtual school #2 has a graduation rate of 52.6% but has increased this from 30.0% four years ago. Virtual school #1 keeps its overall enrollment steady from year to year, but this is due to their charter. As part of the charter, the school has set an enrollment limit. Virtual school #2 is a full-time online school serving students in grades prek-12, although this study focuses only on students in grades 9-12 and has also demonstrated increases in test scores and graduation rates.

The special education teachers at both schools are given professional development annually in best practices. The district can be considered exemplary in regard to the professional development in teaching self-determination skills. I reached out directly to multiple Special Education Directors via email across the same state; a total of eight districts (10% of districts in the state) were contacted; and each one indicated they have not provided any professional development specifically in the area of self-determination skills, or related instruction to the special educators in their respective districts. Included in those eight school districts was the only other authorizer of public online schools in the selected state.

For the schools in this study, a module in teaching self-determination was offered, to each school in the district by the school's special education coordinator. The coordinators were trained by the district, specifically this researcher, via a webinar in the early fall of 2019. The 60 minute webinar was recorded and placed on the district's special education support site for teachers and coordinators to review at any time. The professional development in self-determination focused on SDLMI and student participation in IEP meetings. Therefore, all of the participants interviewed for this study have had exposure to at least the self-determination module presented through the district, in addition to relevant content received through their preservice training programs or in-service training received in other school settings. All of the teachers and coordinators have access to a special education support website which also includes high leverage practices resources in all academic areas, collaboration and communication, behavior management, and transition/self-determination as well as recorded webinars.

Participation Selection, Criterion and Justification

The participants of this study were the special education teachers at each online school. Participants were included on a voluntary basis. This group of participants was expected to be small, as there is a total of 10 special education teachers at both schools, so this allowed for accessing the in-depth knowledge and experience that this research was aiming to review. The interviews were conducted one at a time with the researcher. The only criterion utilized was that the special education teachers taught students with disabilities in grades 9-12 in one of the online schools.

Virtual school #1 employs eight full time special education teachers at the high school level. Each of the teachers has been at the school for at least one year and serves a caseload of students with disabilities ranging from 8 to 33 students. Each teacher has a variety of students with disabilities on their caseloads, they are not assigned to teach just one specific disability. The students' disabilities include emotional disability (n = 6), learning disability/other health impairments (n = 124), autism (n = 26), deaf/hearing impairment (n = 5), intellectual disability (mild) (n = 1) multiple disability (n = 3), traumatic brain injury *(*n = 3), and speech and language impairment (n = 3). The school does offer a continuum of special education services: 134 students spend 80% or more of their day with a general education teacher, 3 spend 79% to 40% of their day with general education teacher, and 34 spend less than 40% of their day with a general education teacher.

Virtual school #2 employs two full time special education teachers at the high school level. Each teacher has a caseload of 12 to 24 students and serves students across different disabilities. The disabilities served include emotional disability (n =1), learning

disability/ other health impairment (n = 24), hearing impaired (n = 1), traumatic brain injury (n = 1), autism (n = 7) and multiple disability (n = 2). The school offers a limited continuum of services, and 35 of the students with disabilities spend 80% or more of their day with a general education teacher and 1 spends 79% to 40 % of their day with a general education teacher. The limited continuum is not due to the school's unwillingness to serve students who spend less than 40% of their day in the general education setting, at this time, no students with disabilities requiring that level of support are currently enrolled.

Procedure

A request for participation was emailed to each special education teacher in grades 9-12 at each location (see **Appendix D**). Once the researcher received confirmation from volunteers, the informed consent was sent to each participant (see **Appendix E**). Teachers were informed that participation included two interviews, an examination of several teacher-selected IEPs and lesson plans, and the opportunity for a third interview, upon request. In order to obtain the names and contact information for each special education teacher at the schools, I reached out directly to the Special Education Coordinators. After the list was obtained (sent via email), an email was sent to each individual teacher requesting their participation in the study. This also included an option of setting up a call to discuss any questions they may have prior to sending the Informed Consent. A response was received from all 9 participants originally indicating a willingness to participate, none of the participants requested and additional call. After the confirmations were received via email, the Informed Consent was sent and once returned, individual virtual interviews were scheduled via Microsoft Teams. Due to

COVID-19, none of the participants were comfortable meeting face to face. At the end of the first interview, the second interview was scheduled utilizing the same platform. At least 2 weeks was given in-between the interviews to allow the participants time to review IEP's and lesson plans. Participant 4 did schedule a second interview however, sent an email asking for a rescheduled time. After multiple attempts to reach the participant with no response, I reached out to the Special Education Coordinator who indicated she could not complete due to personal reasons and had taken time off from work. During the first interview, aside from basic questions about experience and background, each participant was asked to "tell their story" of what appealed to them about teaching in an online school and what a typical day in their teaching life looked like.

Each interview was scheduled individually and conducted virtually using Microsoft Teams. In this setting, the participants and I shared our cameras, and we were able to see each other. The interviews were recorded through Teams and then downloaded into Sonix. Sonix transcribed the video content into written transcripts. The first set of interviews was scheduled via email with each participant and at the end the second interview was scheduled. The second interviews were scheduled no earlier than two weeks from the first in order to give the participants time to gather and review student IEP goals and lesson plans. The interviews averaged 45 -60 minutes in length each.

During the first and second interview, the prepared questions were utilized to allow for some structure to the process (see **Appendix F and G**). The second semi-structured interview further delved into the special education teachers' understanding of

self-determination skills by "walking through" three IEP's they selected as representative samples of IEPs that include self-determination goals, and associated lesson plans. I had electronic access to the IEP's via our IEP system, ENRICH, and the special education teachers were asked to email me their plans prior to the second interview. I did not review the IEP's prior to our scheduled interview. The IEP's were individually selected by each special education teacher as ones that they felt specifically addressed self-determination skills. The associated lesson plans the teachers presented were expected to support the instruction of the identified self-determination skills per the IEP's. By allowing the special education teachers to select three IEP's and lesson plans, it should have further illustrated their understanding and interpretation of self-determination skills, and what instruction supports the development of the skills. This eliminated the possibility of specifically identifying what skills/instruction I was looking for and allowed them to present it to me. If teachers wanted to continue to explore the topic, or if additional clarification benefited my understanding of the teachers' comments, an additional, informal, third interview was conducted at my request or the request of the participant. A third interview was not conducted with any of the participants.

Instrumentation Development

The semi-structured interview questions were developed based upon the research conducted in this study and then tied back to the original research questions (see **Appendix H**). Prior to conducting the nine interviews, two pilot interviews were conducted virtually with two special education teachers in different online schools utlizing Microsoft Teams. The purpose was to ensure the interview questions were clear and unbiased. The information gathered from the pilot interviews was not utilized during

the data analysis but utilized for purposes of refining the interview questions. The questions were also sent to a peer reviewer via email, as well to ensure unbiased and clarity. Small grammatical changes were made to the initial questions for clarity (see **Appendix I** and **Appendix J**). The same questions were asked of each participant and then compared and coded for themes. The last open-ended question was developed to ensure that participants are given the opportunity to express any other thoughts that may not have been expressed in their previous answers.

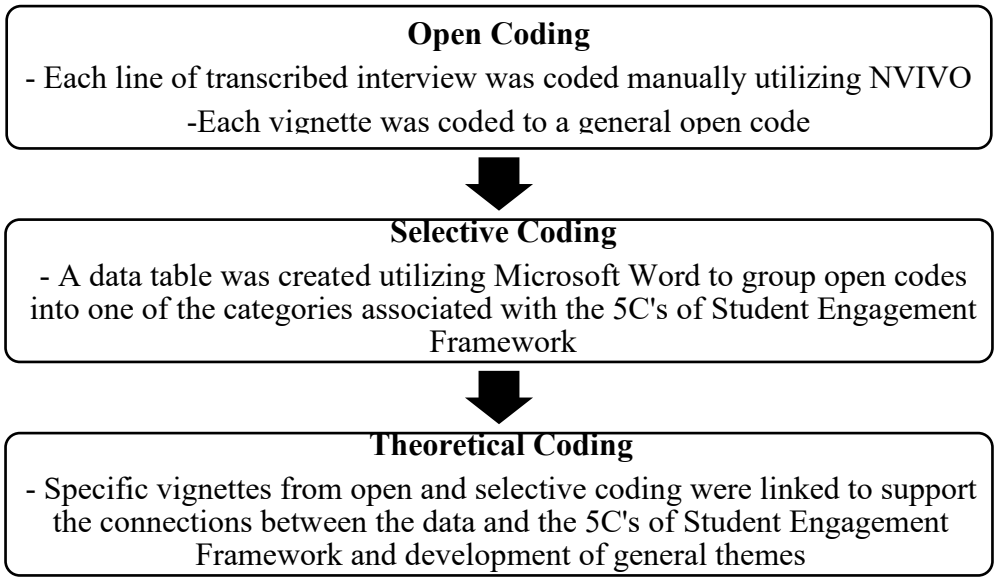
Data Collection and Analysis

The method of analysis was based on techniques of open coding: coding data, using a constant comparative method, and data synthesis and analysis (Tie et al., 2019). The data was also constantly viewed through the lens of the 5 C's Framework of Student Engagement (Repetto et al., 2010). In this study, analysis began by coding the data of the purposively selected participants, after the first interview. All interviews were coded using NVIVO during open coding. The interviews were analyzed after each one, allowing analysis time before moving on to the next participant. As I began reviewing the transcripts and coding, I also reflected upon areas where I may have asked for further clarification or expansion on the participants answers. In each ensuing interview, then, I at times asked for further clarification or additional information, if needed. The majority of the interviews however, addressed the already developed questions.

I initially coded the transcripts for initial codes based upon words and terms the participants utilized in their responses. Each interview was again coded manually, including the introductory and descriptive information provided in the interview, using the software, and then compared to the initial coding completed during the interview

collection, this process was done for both sets of interviews. Coding the interviews again, aided in the constant comparative analysis techniques. This process allowed me to remain consistent in emphasizing key points during coding. The open coding results included nine initial general codes: collaboration, benefits, barriers, application, assessment, instruction, knowledge, goals, and engagement.

Open coding was utilized in the first phase of data analysis which included a line-by-line coding in which concepts and key phrases stated by the participants. This allowed the data to be broken down into conceptual components that were reportedly present in the data. In the next analysis phase, selective coding, I searched to find categories merging from the initial codes that correlated to the five categories of the 5C's of Student Engagement Framework. A data table was created, and vignettes were added as support to the connection to the framework (see **Appendix K).** *Figure 1* includes the summary of the data and analysis process for open, selective, and theoretical coding.



*Figur*e *3.1*. Data Analysis Process

The constant comparison of data sets allowed me to form categories across the participants interview responses. Once the large categories were identified general themes emerged and developed and tied to the data. A timeline of activities and data analysis can be found in **Appendix L**.

Although the same questions were asked of every participant, the semi-structured interview format allowed for open-ended responses and encouraged a rich two-way conversation as supported through the exploratory case study structure (Yin, 2018), The participants were very eager to share their stories and thoughts. It allowed me to gain a true picture of what is occurring in these particular online schools with students with disabilities and self-determination through what appeared to be honest and transparent responses from each participant. The participants openness to the questions was noted as a concern in my situated knowledge and assumptions however, this was not evident in any of the interviews. One participant requested the interview questions ahead of time to ensure they understood the questions as English was not the participant's primary language. The data was constantly reviewed to ensure that the information was supporting the original research questions.

To validate the data, upon completion of the interviews, each participant was sent a copy of the transcript for member checks (Birt et al., 2016). Member checking, or participant/respondent validation was utilized to explore the credibility, and accuracy, of the results (Birt et al., 2016). The transcripts were returned to the participants to ensure their accuracy. This allowed me to check my accuracy of the data but, also that it was representative of the participants' perspectives. Each participant was given the opportunity to identify areas or lines of the transcript that are not accurate. The goal was

to make sure that I accurately reflected what they stated during the interviews, prior to analyzing. If there was a discrepancy with the transcripts, I shared the actual recording of the interview with the participant as well as the transcript again to make sure that nothing was missed or transcribed inaccurately. No corrections were needed to the transcripts. The participants only verified the accuracy of the transcripts. They were not sent the information to verify the analysis of the data.

Trustworthiness

In order to ensure trustworthiness was embedded throughout the data collection, each participant was sent a copy of interview transcript for the review for member checking. This was done after each set of interviews. The participants were asked to review the transcripts to verify the accuracy of what was written was what they had said and intended. Participant 6 and I did talk after she reviewed the first and second interview transcripts to make sure, due to her broken English at times, I captured her thoughts and responses accurately. No changes were made to her responses after our conversations. The other participants did not request further clarification and agreed the transcripts accurately reflected their responses. Writing constant analytic memos that reflected on my subjectivity and positionality throughout the research process assisted in ensuring that, as the researcher, I did not place my own subjectivity on the process or results. This process supported my portrayal of the data as reflective of their intentions (Birt et al., 2016). This was to ensure what the participant stated was captured accurately prior to coding and analysis. Additionally, during the second interview, participants were asked to clarify statements, as needed ,as part of the member checking. For example, participant 3 was asked to clarify further and expand on how she created a collaborative environment

in the second interview due to limited information given in the first. The data was further triangulated through the review of IEP goals and lesson plans.

A peer researcher review was conducted by an individual who had received a PhD in Special Education and had experience with qualitative research and coding. This individual was electronically sent the "field notebook" that included the recorded six interviews (3 complete first and second), written transcripts, development of codes, charts, and tables along with the final code/data document (Glense, 2016). In order to keep the documents and process organized, everything was stored on a private google drive. He was also sent the methods section as well, to review and provide background information for the study. Once the peer reviewer completed their review of the transcripts and development of codes and themes that I sent, we scheduled a time to meet and discuss. Providing the peer reviewer with the field notebook, allowed for transparency in the data and analyzation process to assist with ensuring accuracy and validity of the data. "If there were disagreements in the coding, we relistened to the recording together and then coded separately again and compare for those specific disagreements in the data analyzation. The inter-rater reliability rate should be at least 66.67% (2/3) in order to be considered reliable results (Madill et al., 2000). Based on the peer review no changes were made or recommended to the analysis procedures or results and we had 100% agreement of the initial codes and connections to the framework." Based on the peer review no changes were made or recommended to the analysis procedures or results. We had established agreement of the initial codes and connections to the framework. Further conversation revolved around the general themes and support found in the participants responses. Originally, I had placed almost all the direct

responses in the data table, it was very extensive, and the peer reviewer recommended I narrow the focus on the data that really supported the theme. There was agreement on the match of the overall themes and supporting vignettes. This was the only verification of analysis that was completed in this study. Based upon the member check, peer review process and triangulation of the data, the findings of this exploratory case study should be considered trustworthy and valid.

Ethical Issues

There were no ethical issues concerns during this study. All participants were informed regarding this study and its purpose and well as exactly what their participation entailed. Participants were also given the opportunity to withdraw without penalty at any time. Each participant was required to sign and informed consent prior to participating.

Risks and Factors

Participation in this study did noy place any potential risk to the individuals. The participants benefited from explaining their challenges and understanding of self-determination skills and potentially learn strategies to overcome challenges and improve instruction.

CHAPTER FOUR

RESULTS

This chapter contains the results of the process conducted to answer the research questions:

RQ 1: What are special education teachers' understanding of self-determination and its relationship to post-secondary outcomes?

RQ 2: How do special education teachers understand assessment and instruction of self-determination skills to students with disabilities and what challenges do they perceive delivering instruction in an online setting?

A detailed description of the participants and settings is presented in this chapter to provide context for the results obtained through interviews and document reviews. All the data was collected in the individual interviews. The results of this exploratory study revealed the following eleven themes consistent with both of these particular online settings. Online environments provide flexibility and also limit distractions to students with disabilities allowing students to attend school from a comfortable location, often at home, and complete work on their own timeframe. Special education teachers in the online environment realize and emphasize the importance of building a collaborative environment between students, parents, and general education teachers. Self-

determination is referred to as life skill activities such as completing job applications, and not skills related to self-determination as reviewed in the literature, according to the participants. IEP goals focus on compliance in the online environment and are written to support student work completion and attending school there is a lack of connection for special educations students and real word applications in order to apply their learning. Overall, student engagement is viewed primary as attendance rather than active participation in instruction. The special education teachers are not utlizing evidence-based practices or formal self-determination assessments when instructing their students with disabilities in self-determination skills. Many are utilizing informal or anecdotal records to determine a student's self-determination skill needs and strengths. Parents hinder student's independence through their role in the online environment as the learning coach. Finally, online regulations foster barriers to learning for students with disabilities due to the general polices and instructional program of the virtual school. Each of these themes is supported through the participants responses to the semi-structured interview questions and previous literature review. Throughout the discussions of the findings of both research questions, the themes will be expanded upon through the lens of the engagement theory and connection to the 5C's of the Student Engagement Framework (control, climate, curriculum, caring community, and connection) as supported though the literature.

Participants

Nine participants were individually interviewed for this study. All the participants taught in either Virtual School #1 or Virtual School #2. Once they agreed to participate, the Informed Consent was sent via email and interviews were scheduled once I received

their signed consent form. There were originally ten participants, however, one participant took maternity leave and was unavailable to be interviewed. Two interviews were conducted with each participant, except for one (Participant 4) who did not continue after the first interview due to personal reasons. **Appendix M** indicates the participants demographics. All of the participants have had experience in both an online school and a brick and mortar school.

Participant One

This participant first taught for six months in a high school math inclusion classroom in a brick and mortar school immediate upon graduating. Afterwards, she went back to the school in which she student taught, as a high school academic support teacher, for two years. Currently she is in her fifth year at the online school and teaches special education students in eleventh and twelfth grade. There are 26 students on her caseload which includes students with Other Health Impairment (7), Specific Learning Disability (12), Autism (2), Emotional Disability (2), Traumatic Brain Injury (1), Multiple Disabilities (1), and Speech/Language Disability (1). At the time of switching from brick and mortar to online, she really just wanted to "try something new." In the interview, she indicated that she was "tired of fighting for kids' attention in a brick and mortar school and was over competing with cell phones." A typical day consists of "lots of emails, conversations with students and reaching out to content area teachers." She instructs all her special education students directly only once a week for an hour, in a small group, in a life skills class in which she teaches the students transition skills. She also teaches a learning support math class each week for one hour and holds open office hours twice a week for one hour each. The remainder of her time is spent progress

monitoring students, participating in staff and department meetings, working on IEP's, and holding IEP meetings.

Participant Two

This teacher began her career in 2002, as a high school resource teacher, and after three years transferred to an elementary school as a resource teacher for grades k-3. After three years there, she took a break from teaching and did mission work for a year. Eventually she came back and taught for a year in middle school and was ready to leave the teaching profession altogether. She had become tired of "school politics" in the brick and mortar and really felt she could not effectively teach students in a resource setting. There never seemed to be a "good system." A friend of hers who was teaching at the virtual school encouraged her to apply there and she has been at the virtual school now for five years as a special education teacher for ninth and tenth graders. Her current caseload includes 33 students with Autism (5), Deaf and Hard of Hearing (1), Multiple Disabilities (1), Other Health Impairment (11), and Specific Learning Disability (15). Typically, her day is "lots of phone calls and email responses with kids." She directly teaches her students three hours a week in English/Language Arts, in three small groups consisting of no more than eleven students per group. About two hours week is spent in office hours so, students can "drop in" for any support they may need. During that time direct instruction does not occur. The time is spent answering students' questions about other subjects and/or getting assistance with work. The remainder of her time is spent progress monitoring students, participating in staff and department meetings, working on IEP's, and holding IEP meetings.

Participant Three

The first eleven years of this participant's career were spent as a ninth-grade special education resource teacher in a brick and mortar school. She has been in the online school for four years teaching special educations students in ninth grade. When she first began looking at the online school she questioned if it was a "real job." She was unhappy in the brick and mortar environment she was in and "made the switch." A typical day varies for this participant depending on the day. Currently, she has 8 students on her caseload that includes students with Other Health Impairment (3), Specific Learning Disability (2), Autism (2) and Multiple Disabilities (1). She holds an individually scheduled session for all of her students twice a week for one hour each and then has a scheduled inclusion session with the Algebra teacher once per week for an hour each session, which all her students attend. Twice a week she has scheduled department and staff meetings and the remainder is spent on phone calls, emails, progress monitoring and IEP related tasks. She usually starts her day about "7:30 am and finishes at 3:30 pm and occasionally will work two or three hours past that, but that is not every day".

Participant Four

This participant changed careers from working in human resources to becoming a special education teacher. She has now been teaching for sixteen years and three of those years have been at the online school. The online school appealed to her because of the flexibility to work from home after she adopted a child. She taught in a very large brick and mortar district and the administration, according to her, was "very controlling and very picky about how things were done, and it made it impossible to do any of your IEP

work at all during the day. I was spending much of my time at home and weekends doing that work just to keep up with the requirements." She currently works with eleventh and twelfth grade special education students. Her current caseload consists of 8 students with Other Health Impairments (3), Specific Learning Disability (4) and Speech/language Impairment (1). Her day consists of "checking web-mails and phone calls." Once a week she teaches her students directly in transition skills, as a group for an hour, and then holds office hours twice a week, with each session lasting an hour. She schedules phone calls twice a day to reach out to students and parents. Her open time is spent attending school related meetings, progress monitoring and prepping for/and holding IEP meetings.

Participant Five

This participant taught four years as a middle school self-contained special education teacher and later taught high school special education academic support to ninth graders. She "looped up" with those students after the first year and remained their special education teacher for their remaining three years of high school. Currently, she has been in the online school for two years and is working with tenth graders as a learning support special education teacher for intermediate algebra. Her caseload includes 28 students with Autism (5), Emotional Disabilities (2), Other Health Impairment (12), and Specific Learning Disability (9). The online school appealed to her for the flexibility for her to be available to her own children. When working in a brick and mortar school, she devoted a lot of her time to her students and even at times was a "custodial parent" to some and often would pick students up if they missed their bus. As a single mom, the online school is a "better environment and can't imagine working anywhere else." According to her, "it's the first time in fifteen years, I feel appreciated as an educator and

supported." Her day starts with taking her own kids to school and then checking emails. She has a group learning support live lesson once a week for 45 to 60 minutes, with all the students on her caseload focusing on remediation of academic skills. Collaboration with the general education teacher occurs daily to ensure she is on pace with the general education class. In between that she progress-monitors students in the ninth and tenth grade with the other learning support teachers.

Participant Six

Originally from India, this participant has taught in both India and the United States. All of her college and education was done in India. While in India, she worked in a brick and mortar school as a self-contained special education teacher for high school students prior to moving to the United States and joining the online school. She currently works with eleventh and twelfth grade special education students as a resource teacher. The caseload consists of 24 students with Autism (4), Deaf and Hard of Hearing (1), Emotional Disability (1), Multiple Disabilities (1), Other Health Impairment (5) and Specific Learning Disability (12). She described the appeal to the online school as the ability to, "get quality time to spend one on one with her students in an online school system." There are also fewer behavioral issues to deal with, she feels, in the online school, so her instructional time is not "given up," to handle a situation. Her students also have a greater attendance rate in the online school then she experienced in the brick and mortar school. Every day she has her students check in with her to let her know what is happening in their classes and what work they have to complete and submit. This is anywhere from two to three hours per day. The remainder of her time is spent meeting with content teachers or participating in the content classes for support for her special

education students. She does not provide any direct or live instruction to any of her students. IEP meetings and other virous meetings consume the remainder of her day. She did also note that some of her day is spent after a typical school day, after eight o'clock in the evening to support seven or eight or her students who work full time jobs during the day.

Participant Seven

This participant has been teaching in the online setting for five years and is working with ninth grade students with disabilities in a resource setting. Prior to that, she taught in an elementary school as a special education resource teacher working with students with learning disabilities and intellectual disabilities. The appeal of the online setting was job security. She finds that it has been "less stress knowing no matter where I live or move in the state, I have a job." According to her, it has been a "big change from a brick and mortar school", in that it allows for flexibility and a balance between her home life and work life. She also feels that she knows her students and families better, as compared to in the brick and mortar setting because of "constant communication via phone calls". She is currently the case manager of 16 students with Intellectual Disabilities – mild (1), Autism (7), Emotional Disability (2), Other Health Impairment (8), Specific Learning Disability (12), Speech/Language Impairment (1), and Traumatic Brain Injury (2). Each Wednesday and Friday, she teaches a group live lesson to all her students, for 30 to 45 minutes, focusing on remediation of academic skills. She also works with the English One general education teacher to support her students in multiple small group break-out sessions supporting specific lessons and assignments, two to three times a week for 30 to 60 minutes. Once a month, she schedules individual sessions for

an hour each, with each of her students to review any assignments/projects they are struggling with or need time completing. Typically, each day, she checks emails, responds to parents' questions via email or calls and talks with her students via phone or text. During the times she is not teaching or working with students, there are staff meetings, department meetings, time for IEP planning, and preparation for upcoming meetings.

Participant Eight

This participant has had thirteen years in an online setting, and eight years in a brick and mortar school; five as an administrator and three as a special education teacher. She began her career in a middle school in the inner city working with students with emotional disabilities and remained there for three years. After that, she moved to an online school in Ohio for seven years and was a high school special education teacher. She then moved to South Carolina and worked in a brick and mortar school as an assistant principal for five years. After having her daughter, she began working for the current online school as a special education support teacher for high school students and has been there for the last six years. Currently she is the case manager of 31 students with Autism (4), Deaf and Hard of Hearing (1), Other Health Impairment (6), and Specific Learning Disabilities (20). Given her experience in virtual and brick and mortar, the biggest appeal to her for returning to the online setting was the ability to focus on teaching. She stated, "the biggest thing is your focus is not on classroom management as much. You're able to focus and you can teach!" Each morning she checks her emails and gets her live lesson room open and makes sure everything is ready. According to her, "there is typically a task or two in my email of something we need to watch and mark off

that we have watched so, I complete those in the morning." After that, she holds a group live lesson session daily in the morning and afternoon, in two small groups with about 15 students per group and teaches a lesson focusing on ELA or Math. The students are grouped based upon the instructional needs and may not always be in the same group each day. The students are grouped according to their areas of need (ELA/Math). Some students may attend both sessions while others may only attend one. Each hour time block is also used for supporting the students on any classwork, projects or assignments that need to be completed. On days that she does not have trainings or meetings, she does her "logging" and does progress monitoring and any IEP drafting or preparation that needs to occur.

Participant Nine

This participant began her career as a high school special education resource teacher in a brick and mortar school and continued for one year. Currently she is in her sixth year as a high school special education teacher working with ninth and tenth graders in the online school. During her first year of teaching, she found out that she was expecting and wanted to be able to be home or closer to her child. Her original position at her current school was as an academic coach and she held this position for one year. The school then expanded their special education department, and she was moved into her current role as a special education teacher and has been in this position for the last four years. There is a total of 12 students on her caseload with Autism (3), Other Health Impairment (2), Multiple Disabilities (1), Orthopedic Impairment (1), and Specific Learning Disabilities (5). In her school, she is required to hold office hours for a minimum of two hours per day, one hour in the am and on hour in the pm. Since there is

no live teaching in her school, the remainder of her day is spent "texting, calling, emailing both parents and students, working one on one with students to progress monitor, attending any school trainings and meetings and working on IEP documents and/or holding IEP meetings".

It is important to first understand the different online settings offered between the two online schools selected for this study. Online schools allow students to complete their entire levels of education via the web. Specifically, high school students can earn their diplomas through an online school. According to the literature there are various models developed and implemented in online schools, such as e-learning, hybrid courses, and web-based learning including both direct and in-direct instruction (Archambault & Crippen, 2009; Barbour, 2017). The findings of this study indicated a major difference between these two particular schools that can impact the students with disabilities learning, development, and practice of self-determination skills. It was revealed through the interviews that one school offers some direct or live instruction to their students with disabilities throughout the week and school day. The other school offered no direct or live instruction for any of the students with disabilities and the special education teachers are just checking in with each one of them. This lack of instruction can certainly have an impact on student outcomes. Just as Barbour in 2017 indicated, the poor results in online schools can be attributed in part to poor implementation practices. In order for students to learn self-determination skills, they must be taught those skills and the lack of instruction questions the efficacy and effectiveness of the online setting overall.

Some of the participants do work directly with general education teachers in an "inclusion" type of virtual classroom. When asked about teaching specific self-

determination skills/transition skills, two of the participants indicated that specific time was allotted in the schedules to teach those skills. It was done through the small group live lessons and/or individual sessions. *Table One* compares the two school's models of instruction.

Table 4.1. Instructional Model Comparison

School	Participants	Model(s) of Instruction	Self-Determination/Transition Instruction
Virtual School #1	1,2,3,4,5,7,8	Small group sessions, live lessons, individual check-ins	Two, out of seven teachers, have scheduled "life skills/transition skills" instruction each week
Virtual School #2	6,9	Individual check-in sessions, no live lessons	No direct instruction or scheduled time

Analysis/Discussion of Findings

Influence of Online schools

Since each of the participants had experience in both traditional brick and mortar schools and online schools, I felt it was important to understand the participants views and practices regarding two broad topics: benefits and environment. In order to ascertain general information and perceptions regarding teaching in an online school, each participant was asked to describe benefits they felt an online setting offers students with disabilities, and how they create a collaborative/supportive environment with the students, parents, and other teachers for their students with disabilities. This allowed me to keep with the structure of exploratory case study, apply my conceptual framework, and

gave participants the opportunity to share their stories as an online special education teacher. The first five questions in the first interview were asked to prompt the discussion. Through the interviews , which are consistent with exploratory case study, I was able to capture the complexity of the participants daily teaching lives. This gave me an in-depth view and understanding of life as a special education teacher in an online setting.

According to Martin (2018), the online environment offers various benefits such as flexibility for students to map out their own learning time and allows them time to review material as often as needed. The online environment can eliminate challenges physically for students such as traveling between classes and negotiating a school environment or distractions from other peers in the traditional brick and mortar classroom (Deshler et al., 2014). Repetto et al, (2010) supported that students need to be a part of a caring community and be provided with a safe supportive climate in which to learn. Many of the participants also indicated why online schools were beneficial to them as teachers and to their students with disabilities.

Three major themes arose from the teachers' narratives regarding online schools and students with disabilities after data analyses across all participants: (1) online schools offer students with disabilities flexibility, (2) online schools limit external distractions in the "classroom", and (3) building collaborative communities is important. These themes all tie directly into Schneiderman's (1994) basic principles of the engagement learning theory. In order to begin to establish collaborative teams or focus on a project-based learning approach, the teachers must first begin to know their students, families and any other individuals involved with the students with disabilities (Damonese, 2003). The

"trust" and understanding of each individual student is essential for the special education teachers in the online environment. They do not see the students every day in a classroom, so it can often take longer to build rapport. Given that parents or "learning coaches" are also highly involved in the online setting, the teachers must ensure they have constant and frequent communication and conversations with those individuals. The flexibility the parents have to connect with the teachers encourages the collaboration. The communication between stakeholders; students, parents, and general education teachers, can help ensure that the students with disabilities are engaged in learning and do not fall through the cracks.

Online Schools Offer Flexibility and Limit "Classroom" Distractions

According to the participating teachers, and supporting the literature, the online environment allows the students to complete work at their own pace (Martin, 2018). Unlike in a brick and mortar school, *"*if a student needs to spend a little more time in their math classes, they can, and if they want to submit to lessons every day for English and finish their English class in two weeks, they can" (Participant 8). "They have more opportunities to work at their own pace than they did in the brick and mortar school." (Participant 6). Participant 9 stated, "We offer flexibility because our school is open. Twenty-four/seven, you know, they can get on and do work at two o'clock in the morning if they'd like to." Finally, Participant 2 reported, "I think it's a lot more conducive and flexible, we want students to be successful rather than just complete this task and give grade."

Everyday classroom distractions such as students/adults coming and going from the special education classroom, noises other students make, talking or behavior of other

students can impact a student's daily performance in school in a brick and mortar school, according to the participants. In the online environment many of these distractions are eliminated since the students work often at home with no other classmates in the room. Participant 4 described the online setting as a benefit to her students with disabilities by calling it "perfect" since there are no other kids physically in the same environment with them while they are working. Participant 1 indicated, "Well, I think it takes a lot of obstacles that they face when they're in the brick and mortar setting out of the way, so behavior, distractions, relationships." Lastly Participant 3 described the environment for her particular students in this way, "All the distractions are gone, they're in their home, they can have their rituals set up, they can control their environment."

Building Collaborative Communities is Important

In the responses of participants from both schools, building collaborative relationships with students (classroom community), parents and other teachers within the building was important, however, their descriptions of these collaborative relationships were limited in scope. None of the participants indicated attempting to build relationships or include outside agencies such as Voc Rehab, DDSN, or transition specialists as part of their practices. In the online setting, relationships with the general education teachers were the focus, not with administrators or other professionals within their schools. Building collaborative relationships in an online setting has challenges that differ from a traditional brick and mortar school.

Building a classroom community in an online school can be a challenge as the special education teachers often don't physically see the students as they do in a brick and mortar school. The special education students in both these particular online schools

are not required to utilize cameras and show themselves if they choose not to. The teachers in the schools found that to be very challenging as sometimes you can see a student is struggling or understands material through their body language and facial expressions. Getting to know the students, not just "behind a computer screen," means having "meaningful conversations with the students and finding out what they do outside of school and why they chose the online setting", according to Participant 1. "I spend a lot of time, particularly in the first of the year, getting to know them, what they're interested in, just getting to know them as people, which is easy to do in brick and mortar, but it's a little more challenging online" (Participant 4). The students have to know that "I'm human too and I've made mistakes, I spend a lot of time just talking to the students in the beginning of the year to get to know them." (Participant 9). Two of the participants integrate learning about the students into lessons to foster a collaborative community within the classroom. Participant 2 stated, "so, we play a lot of games, ask them things about themselves. They create all about me information, and then I try to use that in the lessons**."** Participant 5 indicated, "we always start off every class with fun polls with the kids to get them talking and chatting and saying hello. We try to do some fun activities where they send us a picture and we do like a highlight spotlight of students." According to the special education teachers in the online setting, they must be deliberate and focused on building their supportive environment for the students, by getting to know the students and integrating activities into lessons, since they do not see or interact with the students each day face to face.

To assist in the collaboration for parents and teachers, the participants noted the online setting offers parents greater flexibility when meeting with the teachers. The

parents work, or family schedules can be accommodated in order for that parents to meet or attend an IEP meeting. Additionally, in an online setting, parents may actually be a part of the "classroom" environment. In fact, according to Participant 2, parents are often more involved in their student's education in the online setting because, "with parents being a part of processes and the flexibility of attending meetings virtually, it does not affect their jobs. You know, they have access full time to their student's grade books and communication, so they're in the loop as much as they want to be." Since the teachers are not bound to traditional school hours, they can also work and talk with parents outside a typical school day. Participant 3 tells her parents, "I'm here to help you help your child, I can meet you at 7:00pm if you want me to go through some things that could help you help your child. I have met with parents after school hours because they're like, you know, I'm working. He or she is at home. And I try to log in from work and I try to call him and make sure they're there working. But I have to wait till I get home." Participant 9 stated she meets with parents at a time that is convenient for them because, "meeting with the parents at a time that is convenient to them, even if at night, allows them time to share about their students, struggles they are seeing and really makes the parents feel a part of the process." This is a challenge for the special education teachers in the online setting because it causes them to work beyond typical hours, into the evening, and can impact their own personal lives, according to the participants.

In a traditional brick and mortar school, teachers constantly see each other, share coffee in the teachers' lounge or talk in-between classes. In the online setting, the teachers work in isolation away from each other, often at home and typically only see one another via a computer screen. They may talk on the phone but, very little to no actual

physical face to face interaction occurs. This can make creating a collaborative environment very challenging. In order to build that environment, Participant 3 states, she is, “very transparent, so that the general education teachers know exactly what I'm doing.” She also makes sure to always “take and ask for the general education teachers’ constructive feedback and ideas about instruction and students.” Communication regularly with the general education teachers occurs in both schools. Participant 1 indicated she has a “great relationship with the gen ed teachers, basically just staying in constant communication, my “door” is always open, and I meet with them whenever they request it.” Participant 9 said, “All my teachers know by name the kids with the disability and what help they need to be provided. They know their accommodations. We talk about the student’s what kind of disabilities they have and why they are posting, why they are not posting, almost daily. I haven't seen this kind of caring for the students in a brick and mortar school.” Virtual School #1 uses a virtual ticket system they created in which all the teachers have access to at the school. The teachers search a student and leave comments, update progress or express concerns about the student that then goes to each of the teachers directly tied to the student’s schedule. According to Participant 2, it “allows for quick and current information regarding the students for all the teachers to stay in contact with one another.”

These themes are supported through the 5 C’s of student Engagement Framework that indicates learning takes place in environments that address the needs and goals of each students and foster a sense of belonging (Martin, 2018). Both special education and general education literature support students learning in an environment that acknowledges and values each of them (students, parents, and general education teachers)

as an integral member of the community (Argan et al., 1999; Carter et al., 2013; Christle et al., 2007; Repetto et al., 2010). Since teachers and students are working together outside a traditional classroom, the special education teachers report often spending a significant amount of time building relationships.

However, the community appears to be in a very limited scope, based on the participants' responses. The teachers are ensuring that constant communication occurs with the students, parents, and general education teachers and in some cases, activities are included in live instruction that incorporate students sharing information about themselves to build the classroom community. Parents often play a large role in the education of their students and the online setting can offer flexibility and allow them to participate and be more a part of the team than in a traditional brick and mortar setting (Deschaine, 2018). Special education teachers are not, however, reaching out to other critical groups, such as guidance counselors and/or career and technical education teachers, or outside agencies to support their students with disabilities in the development of self-determination/transition.

RQ 1: What are special education teachers' understanding of self-determination and its relationship to post-secondary outcomes?

To explore and gain a better understanding of the special education teachers' understanding of self-determination and its relationship to post-secondary outcomes, six questions in the interview process focused on these topics. I asked questions directed to the participants' definition of self-determination (question 5), particular self-determination skills needed prior to graduation that will impact the student's positive post-secondary outcomes (question 6), and real-world opportunities provided for the

students to practice self-determination skills (question 8) in the first interview. The participants were asked specifically in the second interview where they learned about self-determination skills and practices as an added question, and what topics focusing on self-determination would they like included in professional development opportunities (question 7). Three themes emerged as a result of the data analysis, (1) life skills are interpreted as representing self-determination, (2) IEP goals focus on compliance in the online setting, and (3) educational experiences lack connection to real world applications. These themes are discussed and explored further in this section. It should be noted that there is no difference in the themes across the two virtual schools. All the participants, regardless of school, shared similar responses.

Self-Determination Defined as Life Skills

Although self-determination has been described in many ways in the literature, across all the definitions, the same core characteristics are evident; problem-solving, goal-setting, decision- making, choice-making and self-advocacy, are all skills that students with disabilities must obtain (Martin & Marshall, 1995; Shogren et al., 2015 b, 2016). Self-determined people are active participants in their own lives (Martin & Marshall, 1995; Shogren et al., 2015 b, 2016). Self-determined individuals acquire behaviors such as awareness of personal preferences, interest and strengths, the ability to differentiate between wants and needs, the ability to take action when needed, ability to set and work toward goals, ability to self-regulate behavior and the ability to use communication skills such as compromise, negotiation, and persuasion to reach goals (Field et al., 1994). The participants were asked to "define" self-determination skills as they understood the term. Three of the participants (33%) used specific terms commonly

associated with self-determination. Participants 6 and 3 mentioned "problem-solving and self-advocacy." These three participants identified components of self-determination and were able to define and give further detail and demonstrate their understanding of the word. For example, Participant 2 defined it as, "getting them to become more independent and more responsible for themselves in helping them to recognize that they may not know what they want to do after high school, but they can still have goals today to prepare them for it and the importance of them trying on their own and knowing when to reach out for help." The remaining six participants (56%) defined self-determination as specific academic tasks or behaviors the students needed to know such as writing a resume, composing an email or social etiquette. This finding is not consistent with the studies reviewed in the literature suggesting that special education teachers are familiar with the idea of self-determination and concepts related to self-determination (Argan, 1999; Cater et al., 2008, 2013 Grigal et al., 2003; Wehmeyer et al., 2000a).

Teachers need to possess the knowledge and skills in order to facilitate the acquisition of self-determination skills in students (Thom et al., 2002). The responses indicated that over half of these particular special education teachers did not have knowledge of common skills associated with self-determination, while others did. Those teachers that did not have and understanding of self-determination skills, defined self-determination as a specific life skill. For example, Participant 1 stated, "oh, gosh, they need to be able to write. I mean, they need to be able to if it's filling out a job application, real life skills they will need. If it's replying to an email, like submitting a resume they need to know how to do." Participant 9 further explained it as "a lot of executive functioning skills and life skills like time management." Additionally, Participant 5

viewed self-determination as social etiquette, “I mean, basically, I mean, etiquette, like even social media etiquette, like be careful about how you're representing yourself, make sure you choose an appropriate dress for yourself-life skills.” Participant 2 defined self-determination skills as “completing their work and submitting on time.” In order to successful instruct their students with disabilities in self-determination skills, it is imperative the teachers understand the concept themselves. A focus on self-determination will provide students with disabilities one more tool they need to become independent, productive, and integrated citizens and to achieve self-sufficiency (Ticha et al., 2018). Completing life skills activities such as filling out a job application or responding to an email, will not develop nor are they considered self-determination skills.

As reviewed in the literature, self-determination for individuals is knowing and believing in him/herself, knowing what he/she wants their future to be and how to make plans to achieve that future, and knowing what supports he/she will need to take control of their life (Wehmeyer et al, 2000). Only a few of the participants did appear to have a complete understanding of the traditional definition of self-determination skills. These participants had the most years teaching in the online setting (5,6 and 13 years) and were veteran teachers with at least nine years overall teaching experience (9, 18 and 21 years). This level of experience may be related to their understanding of common skills related to self-determination. One of these participants, Participant 2, defined self-determined students as ones who know how to “advocate for themselves.” Participant 6 agreed, and stated, “I would definitely say one hundred percent self-advocacy, and especially if they're moving to a post-secondary track.” Finally, two of the participants also identified problem-solving as part of their definition of self-determination. Participant 8 responded

by stating, “It's always like self-advocacy, goal setting and attainment. And I would say problem solving.” Participant 3 simply stated, “You know, problem solving covers all the areas.” When questioned further and asked to give examples of those skills such as self-advocacy, the participants indicated things such as asking for help from a teacher, discussing the need for extra time to complete an assignment or talking to a teacher about a situation that is happening and how it is impacting them at school. All the participants were in agreement that every student needed to learn self-determination skills or life-skills as it was sometimes referred, prior to graduation in order to be successful.

There was a clear distinction between the participants that did not understand what self-determination skills are as defined in the literature and perceived the skills as life skill activities, filling out applications or dressing appropriately and those that did understand the traditional definition such as self-advocacy and goal-setting as defined in the literature. Although, the literature reviewed in this study indicates that, in general, special education teachers do have an understanding of self-determination (Argan, 1999; Cater et al., 2008, 2013 Grigal et al., 2003; Wehmeyer et al., 2000a), the results indicate the opposite for this particular group of online special education teachers, in that the majority did not understand the traditional definition of self-determination skills as presented in this study. It should be noted that the special education teachers are teaching valuable skills that students need (life skills) however, there appears to be a disconnect between the literature regarding self-determination and the practices currently occurring in the online setting. This could be due to the limited case study size selected for this study and that it did not also include special education teachers in a brick and mortar school setting. The participants’ misunderstanding of the traditional concept of self-

determination impacted their responses to questions focusing on assessment and instructional practices. Based upon the overall lack of understanding of common skills associated with self-determination, as reviewed in this study, the current practices, including IEP goals, correlate to the misinterpretation by the participants.

IEP Goals Focus on Compliance

The literature indicates that self-determination predicts employment, community access and participation, positive transition outcomes, including higher levels of independent living and the development of positive social relationships (Martorell at al., 2008; Shogren et al., 2015 a; Shogren & Shaw, 2016; Wehmeyer & Palmer, 2003). It also can lead to an increased quality of life and life satisfaction (Lachapelle et al., 2005; Norta et al, 2007). IDEA (2004), also requires that students, starting at age 16, must have the opportunity to provide input towards their own goals and transition objectives based upon their own preferences, self-perceived needs, and interests. When reviewing specific IEP goals presented by the participants, a basic understanding of self-determination skills, this was not evident in the IEP goals and plans they developed for their students with disabilities. Goals identified by participants as representative of self-determination goals, focused mainly around attending live lessons and completing work or assignments.

Upon completion of the first interview, participants were asked to review their IEP's and identify at least three specific goals they felt addressed specific self-determination skills. Two weeks between interviews was provided in order to allow the teachers the time to review. The teachers were not asked to send me their IEP goals, but to have them readily available for us to discuss. I went into the ENRICH IEP system utilized to review the specific students' goals along with the teachers as our discussion

occurred. Every student had at least one goal focusing on attending live lessons and completing work. Other goals including reaching out to the general education teachers when assistance was needed. Two goals identified specific skills such as eye-contact and maintaining conversations during face-to-face interactions or creating a self-monitoring checklist for daily living and school activities. See **Appendix N** for samples of IEP goals from each participant. Based on the IEP goals presented, as a whole, the participants are not writing goals that address self-determination skills, as they described when asked about self-determination and skills. Across both schools, the general theme exposed was that teachers are utlizing goals focused on compliance rather than specific self-determination skills. It was noted that despite being in two different schools, much of the same language was utilized in all the IEP goals. Based upon the goals, it is difficult to determine what skills are being taught to the students. Only one participant (8) cited skill-specific goals (12%) while the remainder of the goals focused on attendance and work completion (88%). *Table Two* shows samples of the similarities between the school's IEP goals.

Table 4.2. Sample Comparison of IEP Goals

Virtual School #1	**Virtual School #2**
Compliance Goals	
By the end of the IEP, given direct instruction or indirect instruction student A will increase the daily attendance rate for all three classes from fifty nine percent to eighty five percent as measured by the attendance log.	By the end of the IEP given coaching, Student A will increase his attendance rate from 45 percent to 90 percent as measured by the attendance log.

By the end of the IEP ___ will reach out to their teachers once a week as opposed to like a baseline of zero as measured by teacher logs.	By the end of the IEP given direct or indirect instruction, student C will check in with his teacher increasing from 75 percentage to 90 percent of the time as measured by teacher logs.
By the end of the IEP, ____will have no more than five overdue lessons, that's evidenced by a review of their grade book.	By the end of the IEP, given direct or indirect instruction, student D will increase the rate of submissions from 30 percentage to 85 percent as measured by the grade book.
Self-Determination (Life) Skill Specific Goals	
By the end of the IEP, the student will be able to create self-monitoring checklists and schedules for daily living and school activities, as measured by at least two self-monitoring checklists or schedules created per year and submitted to a special education teacher. The student will demonstrate improved social skills by using when using a webcam by maintaining eye contact during Face-To-Face interactions, staying on topic, using appropriate topic discussions and responses, and showing an interest in peer.	

The focus on compliance in the individual student goals is not supported through the 5C's Framework or student engagement theory. Both state that the students should be meaningfully and actively a part of their education and goals (Repetto et al., 2010; Schneiderman, 1994). The IEP goals should afford the students control of their learning. Goals should be focused on targeted academic, behavioral, social and transition skills that is supported through instruction (Repetto et al., 2010). As a result, the students should enhance their own self-determination skills and become meaningfully engaged in their

learning (Cobb et al., 2006; Repetto et al., 2013). In the examples provided the goals focused on increasing the student's daily attendance rate or decreasing the number of overdue lessons but did not target specific skills needed to develop self-determination skills. Goals such as focusing on making a choice between different course options or describing their disability and how it impacts them in the classroom and what accommodations/modifications they require are examples of specific self-determination skills that could be addressed in the IEP's.

Lack of Connection to Real World Application

According to Ferdig and Kennedy (2014), the primary goal of education for all students is successful integration in the adult world. Learning needs to be connected to the student's post-secondary goals. Providing students with real-world applications is a way in which the teachers can connect, or make the connection as described in the 5C's Framework, to their learning and the implications the learned information has on their individual futures. These real-world opportunities can also show how well the special education teachers connect their understanding of self-determination skills and the effect or impact the skills have upon the students in a world outside of the classroom. Many students with disabilities are not able to transfer skills demonstrated using simulated materials and they do not see the connection to their real world (reference). The participants overall indicated the majority of the opportunities to reflect real-life experiences were done through the use of teacher created scenarios, rather than actual real-life opportunities, or even simulations. For example, Participant 3 described how she offers real-world opportunities as, "I will give them scenarios like real life scenarios, like let's pretend this is our career for the day. Sometimes it can be an issue with a co-

worker or an issue with a manager or an issue within yourself. How could we deal with this? So, we give these pretend scenarios that are real life." Through group discussions, Participant 2 embeds scenarios and guides the discussion focusing on "what do you think this person should do in this situation?"

Another way the teachers indicated the connection is made for students is through various activities or supports they provide. For example, Participant 9 stated, "we have gotten kids in touch with military recruiters and tried to help facilitate conversations with the with military recruiters**."** Others relied on a student's outside job to create the opportunity (Participant 1). It was noted the schools did not have any involvement or participation with the student's employment. Students who desired to work, obtained their jobs independently. Although, some of the teachers did arrange social gatherings, such as field trips, or pizza parties in the park on Fridays regularly, due to the current COVID-19 pandemic, those were not occurring currently. Although, it was not clear from the participants responses, that social gatherings were ever used as a means of teaching specific skills in real-life situations and that any direct instruction occurred during those times. Often it was not even the special education teacher who attended the field trips. These results indicate the theme that although the special education teachers appear to understand the connection and the importance of real-world opportunities, it is not occurring in the online setting. Since the students live throughout the state, the "hubs" the schools create for these activities are still often too far away from where the students reside for the students to participate in group activities. Neither instruction nor skill practice was specifically designed to take place in the natural environment.

The previous results indicate that special education teachers do not appear to understand what self-determination means, and there was no evidence those skills were being taught. The IEP goals reflected compliance (work completion and attendance) and not self-determination skills goals. There was a lack of real-world connections for students with disabilities in instruction. The teachers are not designing and providing an authentic learning environment and authentic tasks as indicated by the engagement theory (Jones et al., 1994). Creating real-world/authentic activities and connections can increase the student's connection and transfer of self-determination skills after high school (Carpenter & Cavanaugh, 2012; Damoense, 2003). The lack of connection and opportunities, for these two online schools, can assist in explaining the online schools lack of positive post-secondary outcomes for their students with disabilities. Many reasons are explained in the literature for special education teachers' difficulties focusing on self-determination skills such as lack of time, focus on other academic areas and lack of teacher preparation (Carter et al, 2008, 2013; Grigal et al., 2003; Plotner & Simonsen, 2018; Plotner et al., 2015; Wehmeyer et al., 2000).

The participants (100%) indicated a lack of training in any of the college preparation programs they attended. In order to understand the importance of self-determination and its impact on post-secondary outcomes, special education teachers must first be taught through various sources, the research and information regarding self-determination skills. According to Plotner et al., in 2015, the need for trained professional to provide quality instruction, planning and services for students with disabilities is essential to positive post-secondary outcomes. The participants in this study, much like in the literature (Argan et al., 1999; Grigal et al., 2003, Mazzotti & Plotner, 2016; Plotner et

al., 2015; Plotner & Simonsen, 2018; Plotner, Trach & Strauaser, 2012) indicated that their knowledge of self-determination was mainly from their own research and interest. Much like their students, it is difficult to ask an individual to transfer or demonstrate skills when they do not understand or have had instruction in the skills themselves.

When asked about future professional development, all participants responded that anything related to self-determination, specifically applying instruction to a virtual setting, would be beneficial at the high school level and how to translate that into a real-world application after they graduate. The participants did indicate they reviewed the self-determination training that was provided by the current district; however, it had been almost a year since the training and this study, and the training did not reflect concepts specifically related to teaching those skills to students in an online setting. Many of them indicated they had not remembered exactly what the training covered but, they would be sure to go back and review it again. It will be important for me to review this training each year to ensure that all the special education teachers in the district are educated on self-determination skills and instruction. Unfortunately, the current pandemic has forced the teachers to place focus on the mental health of their students during this time. It was noted though during the interviews and discussions, participants indicated they would like to learn more however, time and other responsibilities were a noted barrier.

RQ 2: How do special education teachers understand assessment and instruction of self-determination skills to students with disabilities and what challenges do they perceive delivering instruction in an online setting?

Six questions in the interviews addressed this research question. In interview one participants were directly asked to describe the barriers and challenges for both them and

the students encountered in the online setting (questions 8 and 9). In the second interview, they were asked to discuss their process for assessment (question 3), lesson planning (question 4), adaption of instruction in the online setting (question 5) and how the instruction might be different in a traditional brick and mortar setting (question 6). The findings for this research question resulted in five overall themes: (1) engagement is viewed primarily as attendance, (2) formal self-determination assessment is not utilized, (3) evidence-based practices are not utilized, (4) parents hinder independence and (5) online regulations foster barriers. Overall, the results indicate while the special education teachers are attempting to engage the students with disabilities in multiple ways, once the students are engaged, specific instruction in self-determination skill is greatly lacking and, in many cases, non-existent. The participants described perceived challenges/barriers to both their instruction and the students' ability to learn the skills.

Engagement is Viewed Primarily as Attendance

According to Schneiderman (1994) and his student engagement theory, students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks. Student engagement must occur in any setting in order for instruction to be effective. Learning is an active endeavor and not a passive one (Bruner, 1990). For example, active student participation can be accomplished by providing the students with opportunities to actively respond and providing immediate feedback to the students. Active participation ensures that each student gains ownerships of concepts and skills. Also, students must receive immediate corrective feedback when they make errors, be given an opportunity to correct it and then the teacher should come back and check for

their understanding to keep the students engaged and attentive in their learning (Fuchs & Fuchs, 1995). The 5 C's Framework supports this theory in the component of control.

The students need to be meaningfully engaged in their learning and learning processes in order to truly understand their disability and how to speak and advocate for their own needs (Federig & Kennedy, 2014; Sparks et al., 2016). Prior to assessing and teaching students with disabilities self-determination skills in the online setting, it was important for me to first understand how the special education teachers are actively engaging their students in learning and how it might differ from a traditional brick and mortar setting. In order for the students with disabilities to acquire self-determination skills, they must first be actively engaged in their learning. The participants reported using various ways to encourage the participation and understanding of their students with disabilities in these two particular schools.

One way the participants reported encouraging engagement was material incentives. In one of the online settings, students have the opportunity to earn money for attending school, or meeting goals on tests such as the ACT or End of Course exams. Participant 9 stated, "our school also, too, pays kids to attend school, so if they get perfect attendance for a month, they earn twenty-five-dollar checks each semester. If they may meet a certain goal on their EOC or their ACT they get checks, they get paid. They have an opportunity to make like five hundred dollars a year here." Another participant indicated that students are given "participation incentives" such as gift certificates, or iPod ear buds. At the end of each semester, any student that has 100% attendance is placed in the drawing and the prizes are mailed to the students' homes (Participant 2). Other incentives included goodies bags with t-shirts, pins, or sunglasses as well as

utlizing music the students have chosen at the beginning of a live lesson. Only one participant indicated that student engagement was not “difficult” in the online setting and there was no difference between getting students engaged in the online setting versus a brick and mortar setting. The key to getting her students involved is about praise and encouragement according to Participant 3, “well, the number one thing I do is just praise and not giving up, not being frustrated when I know they're frustrated and sometimes I just continue to encourage them and finding something positive.”

In order to address attendance issues, all the participants indicated that they become “nags” to the students and parents. This includes calling students and parents, texting students and parents and emailing both until eventually, according to Participant 7, “they are like, oh, let me just do this or answer so they will leave me alone!” Participant 1 indicated, “the virtual teachers is that we just become nags and we text them and we call them, and we text mom and we text dad and whoever until eventually like, oh my gosh, she's going to stop if I call.”

Although the special education teachers do appear to relate engagement primarily to attendance, three participants noted some instructional activities they do to attempt to engage the students in the instruction. For example, Participant 4 stated, “we've got a Google Slide activity for study skills, like what's the word I'm looking for - scavenger hunt kind of activity where I have the kids going to breakout rooms. They explore different study strategies and then they come back, and they talk to me about what their group talked about, which ones they use the most often, what would be the most helpful for them.” The other participant that discussed an instructional strategy was Participant 1, she indicated “we also try to do a game review games like once a month to get the kids

kind of cooperating together." Finally, in order to individualize the instruction, Participant 8 stated, "I would say as far as self-determination instruction, a lot of times that ends up being individualized. So, for those kids, we typically just have a one-on-one scheduled time every week where they have to call or show up to lesson."

In both a traditional brick and mortar school and online school, engaging students with disabilities can be a challenge. Increasing interaction and a deeper understanding of material and lessons can be a challenge unique to each teacher, especially when teaching students with a wide range of disabilities as these selected special education teachers are required (Weiser, 2014). The results of this piece do not indicate that special education teachers in the online setting necessarily do anything different then in a traditional school, but that the strategies appear to be extreme, such as paying the students directly. Just as in brick and mortar schools, with some student's attendance can be an issue, but in the online setting it appears easier for the students to not attend due to the limited number of face-to-face interactions. Each of these particular online schools, do have polices developed for all students regarding attendance requirements. It is noted that the emphasis on participation and attendance is overwhelmingly interpreted as participation. The teachers were not directly asked if that was different from their interpretation of engagement when teaching in a brick and mortar setting. The idea that the special education teachers view engagement as attendance could be due to the lack of direct face to face instruction of self-determination skills. As the literature supports, in order to be a self-determined, the individuals must also be an active participant in their lives and learning (Shogren et al., 2015). Unfortunately, engagement continues to remain to be a challenge for both these online settings, despite the efforts and cost of incentives.

Formal Self-Determination Assessment is Not Utilized

Assessment is a key component to designing and implementing any instructional program including self-determination skills. Assessment can be seen as a problem-solving process that involves many ways of collecting information about the student (Swanson & Watson, 1989). The assessments are utilized to identify areas weaknesses and to target instruction at those weakness, as well as to monitor and evaluate progress. The literature supports the use of two primary formal assessment tools over the last twenty-five years, that are still utilized in many settings today: *ARC* Self-Determination Scale and the *AIR* Self-Determination Assessment (Wehmeyer & Kelchner, 1995; Wolman et al., 1994). Each tool measures distinct aspects of self-determination. The findings of this study indicate that currently, the special education teachers in the selected online schools are not utlizing either of these assessments or any formal assessments to assist in their targeted instruction.

None of the participants identified or indicated any formal or standardized assessments used to assess specific self-determination skills, however, all of them but one, identified informal assessments they currently used. Participant 5, when asked about assessment tools stated, “I have not utilized any. I'm not aware of any that we use.” In order to assess the goals focused on attendance and work completion, much of the assessments and data collection focused on informal assessments such as checking student communication logs with general education teachers, review of grade books and submission logs, attendance logs and teacher observations. For example, Participant 1 stated her data collection consists, of “grade book and review of their communication log.” Assessment of the goals that Participant 7 felt were geared towards self-

determination included, “the student logs, whether or not they attended or didn't attend, and web mails to see if they initiated a conversation with their teachers.”

Aside from the items above in many of the response, the special education teachers referred to observations as an assessment tool. Typically, in special education, gathering information often includes direct observation of the student (Swanson & Watson, 1989). “Yes, first thing that we use for assessment is the content teacher observation and the special education teacher observation “(Participant 3). Participant 8 had goals focused on self-determination instruction in her IEP’s and stated, “So, I have teacher observations like frequency data, but also, we use Google forms a lot, so their caretaker would need to be involved in filling out that as far as what they observe from home. I would say those are the main two ways of assessing those goals.” In addition, Participant 9 indicated “I can gauge the students’ progress fairly easily based solely off of my interactions with my kids.” Finally, Participant 5 utilizes “a couple free executive functioning skills like rating scales that I send home and have the student do a self-rating scale and the parent does one too.” All of these particular special education teachers indicated they are not assessing their students utilizing a standard formal assessment tool as reviewed in the literature, however, they are utilizing some informal tools such as observation, frequency charts and/or rating scales to assess their perceived student’s self-determination skills.

According to the 5 C’s Framework, students with disabilities experience improved engagement when the courses are designed with the students interests and needs and that begins with the assessment of those areas (Christle et al., 2007). In order to design the courses, assessments, formal and informal, must occur. Traditional

assessments such as the ARC or AIR would actually not match the skills that these particular teachers indicate are being taught or identified in the IEP goals. The results of those traditional assessments might only indicate that the students were not developing self-determination skills and they continued to have deficits in those skill areas. At the very least, using traditional self-determination assessments might provide needed feedback to teachers that what they were doing in the classroom was not supporting self-determination, so that they could reflect on the appropriateness of their instruction. As the student engagement theory states, students must be engaged in learning activities through worthwhile task, and the lack of formal self-determination assessment can certainly impact the special education teacher's ability to make a task or instruction worthwhile to the students (Kearsley & Schneiderman, 1999).

Evidence-Based Practices Are Not Utilized for Instruction in Self-Determination

Educators have a variety of evidence-based curriculum available to them for teaching their students with disabilities self-determination skills. When implemented with fidelity, the EBP's in special education have shown to improve performance with students with disabilities and positive post-secondary outcomes (Torres et al., 2012). The literature in this study reviewed four different curricula: Self-Determined Learning Model of Instruction (Wehmeyer et al., 2009), STEPS to Self-Determination (Field & Hoffman, 1996), Choice Maker (Martin et al., 2004), and Whose Future is it Anyway (Wehmeyer & Lawrence, 1995). The research supports these particular curricula, although developed years ago, and their use when teaching students with disabilities self-determination skill (Raley et al., 2018). The 5 C's framework also includes the utilization of evidence-based practices and the importance of evidence-based instructional strategies and differentiated

instruction meeting built into the curriculum to meet the needs of students with disabilities. It further explains that the students need to be challenged to connect to current learning through inventive and creative academic tasks (Bost et al., 2006). Without the implementation of evidence-based practices, student's positive post-secondary outcomes will be impacted (Burke et al., 2020; Cook & Odom, 2013; Odom et al., 2005; Test et al., 2009 a, b; Repetto et al., 2010). Each participant was asked to submit samples of lesson plans that supported the development of the identified self-determination skills as indicated by the student's IEP's. None of the participants were able to send or produce these.

It was revealed that in both of these particular online settings, lesson plans are not required to be maintained or shown to their administration. Statements such as "we don't keep lesson plans" or "we write outlines of plans sometimes but, don't have to turn anything in." (Participants 1 and 9). Participant 2 stated, "we did write lesson plans for a while but, our coordinator thought we had a better use of our time, so as long as we were covering the material it was ok." Additionally, Participant 1 indicated she does write lesson plans however they are just "kept in a folder and no one reviews them." When asked for a sample though, she was unable to provide me with one. In fact, Participant 2 specifically stated, "Well, instruction can look differently for different students, but we don't really write lesson plans."

The special education teachers are trusted to provide the instruction their students needed and could keep lesson plans or an outline of instruction and none of these participants had either to share. One participant did send a copy of a PowerPoint lesson she created to teach all of her students note-taking skills. Instruction was developed for

skills and topics that were not connected to a clear curriculum. I did not question further in regard to adhering instruction to the SC Standards, however it is stated in each school's general instructional plan for all students, all teachers will teach grade level standards. It may be assumed then that although these teachers are not utilizing a specific self-determination curriculum as described in the literature, they are teaching grade level standards to their students with disabilities. Regardless of what they are teaching, it was not possible to ascertain what specific instructional practices were used, or how student progress was evaluated, with the information provided from the participants.

When asked what, if any, curriculum, or program they are utlizing to teach self-determination skills, it was again noted that none of these particular teachers are implementing any specific one. It is assumed, based upon both schools' instructional framework that students with disabilities are being taught SC Standards per their school's overall educational plan for all students. Participant 5 stated, "I access resources already kind of put together on teachers' pay teachers. So that's where I've gotten my curriculum, from no specific standardized curriculum, just teachers' pay teachers." It appears the instruction is based upon a topic chosen by the special education teacher, whether it is related to the student's self-determination needs or not. Participant 3 described instruction in self-determination skills as, "we do a lot of just going through and walking through a lesson together, walking through how to look at a teacher's message board or when there are open office hours, how to how to write an email." This could be viewed as guided practice and modeling. Given that Virtual school #2 has no live teaching, Participant 6 indicated her instruction is based upon what students send her and that the students, "have to send me their weekly plans on Monday and they have to let me know, keep me

posted on the accomplishments on Friday." In addition, Participant 9, also from Virtual school #2, reflected on her instruction and stated, "I make them go through their student desk with me. I show them how to submit documents. They do it. They let me know. I'll go back and check it, make sure that I can access the link that they're shared. And if it if it is perfect, we move on to the next class, do the same thing for all their classes." Again, the strategy could be considered guided practice. It appeared that Participant 1 also provided some modeling for her students. She described a particular activity: "we did like a fictional activity like we were going to do a science project. And I had these lists of tasks and we decided if they were things that had to be done or things that were just kind of fun that we could do or things that needed to be done but could be put off to later. I modeled how to think it through."

Self-determination skills, as defined by the participants, are taught as needed, using teacher-made materials and not evidence-based practices. Those who do emphasize self-determination do not provide any specific instruction. It is noted that each of these participants had access to the professional development module provided by the current district in which the definition of self-determination skills and importance to students with disabilities was review as well as, various instructional programs such as student led IEP meetings and SDLMI. However, it appears from the results, the participants have not implemented any of the examples reviewed in training. The 5 C's Framework of Engagement and the student engagement theory support valid assessments and the implementation of evidence-based practices. Evidence-based instructional practices and differentiated learning must be built into the curriculum to meet the needs of students with disabilities (Burke et al., 2020; Cook & Odom, 2013; Odom et al., 2005; Test et al.,

2009 a, b; Repetto et al., 2010). Students need to be challenged to connect, and remain connected, to current learning through inventive and creative academic activities (Bost et al., 2006). Because most of the skills described as self-determination skills by participants are better described as learning strategies (note taking) or simply transition skills (time-management), the teachers involved do not use evidence-based practices for teaching self-determination skills. A few teachers (Participants 3, 9 and 1) did suggest some use of general evidence-based practices (modeling, guided instruction) for these skills. It should be noted that these general evidence-based practices were not just isolated to one virtual school. Even though Virtual school #2 does not have live lessons, based on the response some practices are being utilized during the one-on-one scheduled time with the students. The lack of any evidence-based instructional techniques or curriculums as reviewed in the literature, can contribute to the students with disabilities lack of self-determination skills and positive post-secondary outcomes.

Parents Hinder Independence

Parental support and family involvement are critical in the development of self-determination skills for individuals with disabilities (Abery, 1994; Field & Hoffman, 1994; Grigal et al, 2003; Lachapelle et al., 2005; Shogren et al., 2016; Wehmeyer, 1996). Creating a caring community is a key area in the 5 C's Framework and parents are a part of that community (Reppetto et al., 2010). Parents often presented a challenge for the teachers and students in teaching and student acquisition of self-determination skills. In the online setting, a parent or another adult agrees to be the students "learning coach" and be the main support for them. Often at times, the parents may speak for the student in regard to their student's skills. Parental support and family involvement are recognized

by many stakeholders as a critical factor in the development of self-determination for individuals with disabilities (Abery, 1994; Field & Hoffman, 1994; Grigal et al, 2003; Lachapelle et al., 2005; Shogren et al., 2016; Wehmeyer, 1996)**.** The success of self-determination instruction and the opportunities an individual is given to practice self-determination skills can depend greatly on parents' views of its appropriateness and desirability. However, it is important that parents begin to step away from their students in order to respect their child's autonomy and development of self-determination skills (Grigal et al., 2003). The learner autonomy will increase the capacity and confidence of the student and encourage them to take control of their own learning. This is an extreme challenge in the online setting since the parents often at time become the teacher for their students. Stepping away, although essential, may not be easy for the parents.

According to Participant 8, "the hard part with the virtual school, is our kids typically have a learning coach right beside them that's heavily involved. So, it's hard to determine how much of it is their self-determination and how much of it is their learning coach that's determined to help them." Parents will often speak for their students in the online setting, according to Participant 7, "I have a lot of parents who will reach out to me and they'll say, well, you know, he doesn't like to talk on the phone, or he doesn't like to do this, or he doesn't like to do that" as a justification for lack of participation in lessons. The extensive parent or "learning coach" involvement for many of the students with disabilities is a barrier that is extremely difficult for the special education teachers in these online settings to overcome and was a theme throughout both schools. Parents can hinder the student's independent performance in both schools. It can be difficult, according to the participants to determine what skills the student needs and what skills

the parent think the student needs. Participant 9 specifically stated, “I have parents that want to do everything for their student, like they're the ones that call me and tell me what their student is struggling with in and outside of school. They're the ones that email me.” Finally, Participant 1 said that, “Parents often help their students too much and we can’t determine if it is the student struggling or the parent.”

According to the 5 C’s Framework and student engagement theory, students need to take control of their own learning and be actively engaged. By allowing the students to have control over their learning, they begin to become problem-solvers and decision-makers in their own learning, not their parents (Repetto et al., 2010). If the parents become too overly involved, their students will not be given an opportunity to gain that control. Although, the parents are an important part of the collaborative community as described earlier, they need to be careful not to become the only voice for their student. Special education and general education literature have stated that students learn best in an environment that acknowledges and values each student as an integral member of a community of learning (Argan et al., 1999; Carter et al., 2013; Christle et al., 2007; Repetto et al., 2010).

It can be hard for the special education teachers to determine what self-determination the students actually have and what self-determination skills are those of the parents due to the extensive support the parents provide. Parents will often also “speak” for their students instead of the students speaking for themselves. The “learning coach” is a barrier in the online schools and can impact the student’s outcomes. Since little of the instruction online directly occurs between the teachers and the students in these settings, it is extremely challenging for the special education teachers to properly

assess and instruct their students with disabilities in any targeted self-determination skills they may require for a successful transition after high school.

Online Regulations Foster Barriers

Online schools can foster a safe and supportive environment by enforcing rules and procedures that ensure they met local, state and/or national norms as described in the 5 C's Framework component of climate (Liu & Cavanaugh, 20110). Polices in the online environment are essential so that the students have a clear understanding of what is expected from them, as well as what they can except from the teachers. Clear expectations and regulations can provide a safe and secure environment as supported through the 5 C's Framework. (Repetto et al., 2010). These procedures and policies can include things such as compulsory attendance laws, technology requirements, behavior expectations and classroom participation requirements (cameras vs. so cameras). Although though no specific research studies have been conducted regarding the use if cameras and its benefits or barriers, a survey was collected that included 790 K-12 online teachers and three quarters indicated that cameras should be kept on. (EdWeek Research Center, 2020). The students can easily become unengaged and not be involved in their learning, like the theory of engagement supports, if they are not required to show themselves like in a traditional classroom. In fact, one of the concerns for Participant 3 is that "students can definitely hide for a while in the virtual setting and unfortunately, they can have long enough to the point that when it's recognized it's too late."

The virtual setting itself is an area that the teachers indicated was a barrier. In both of these online settings, students do not have to show their cameras when in classes and unless their learning coach is right with them, it is a very independent setting. Some

students with disabilities may struggle with the independence according to the participants. “maintaining their focus and them actually participating, is a challenge. But I can't go to a student's house and make them log on to the computer at a certain time,” according to Participant 1. Participant 6 stated, “I’m not sitting right next to them and can’t see them, so I can’t see what they are doing. So, it makes things a little more challenging.” Finally, Participant 2 summed her concerns up by indicating, “I've had to adapt. It’s hard not seeing the kids everyday face to face or even on camera. I’ve really had to try to come to terms with it.”

As reviewed in the literature, only about 70% of online schools take attendance, 56% monitor log-on activity and 49% monitor time spent online by the students (NES, 2011). The lack of physical seeing the teachers everyday can impact the student’s ability to comprehend nonverbal actions and information presented by the teacher (Holloway & Foley, 2018). In the same respect, it also eliminates the teacher’s abilities for them to directly observe an individual’s student’s behavior’s either for management reason or to see if they student appears to be understanding the information through nonverbal expressions (Holloway & Foley, 2018). Students with disabilities may not be comfortable with sharing their camera and according to Participant 9, “nine times out of ten, my kids will not get on camera. And that is fine if that is something that they don't like to do. I'm not going to push it as long as they're ready to learn.” Since it is not required for students to actually utilize their computer cameras, as neither schools’ regulations require any students to utilize cameras during instruction, this barrier is almost impossible for the teachers to overcome according to the participants. It should be noted that only one

participant indicated that she did not "see any barriers in the online school" (Participant 8).

Results Summary

The themes that emerged from this study revealed that some of the principles and ideas of the 5C's of Student Engagement Framework (control, curriculum, climate, caring community, and connection) and the student engagement theory are evident in these two virtual schools. As described in the themes above, the schools do demonstrate evidence of creating a caring community and climate through their current practices. The special education teachers are focusing on getting to know their students and parents. They are communicating with the general education teachers frequently to support their student success. Both the 5 C's Framework and literature support that students need to learn in in an environment that not only addresses the need and goals of each students, but one that acknowledges and values each of them (students, parents, and general education teachers) as an important member of the community (Argan et al., 1999; Carter et al., 2013; Christle et al., 2007; Martin, 2018; Repetto et al., 2010). The limited outreach to only those three groups and not additional providers and supports can impact their students with disabilities outcomes. Students are offered flexibility and are free from typical classroom distractions, unlike in a brick and mortar school. It allows them to work at their own pace (Martin, 2018). The flexibility allows the students to control their own learning, however, they do not appear to have much voice in the learning. This is evidenced by the special education teachers lack curriculum and connection for the students and understanding of self-determination skills.

In order to teach self-determination skills, the teachers first need to acquire the knowledge and skills in order to instruct the students (Thom et al., 2002). This study revealed that less than half of the participants understood the traditional definition of self-determination, which is in contradiction to the literature presented (Argan, 1999; Cater et al., 2008, 2013 Grigal et al., 2003; Wehmeyer et al., 2000a). The lack of understanding impacts the teacher's ability to instruct the student in self-determination skills and to use evidence-based practices for assessment and instruction. The special education teachers identified a few generic evidence-based strategies such as modeling and guided practice, however that was not consistent across the participants or isolated to one specific virtual school. There was no evidence or indication that the teachers are utilizing any specific curriculum or additional evidence-based practices in self-determination, as reviewed in the literature, in their instruction. This is a direct contradiction to the 5 C's Framework of Engagement which supports the use of evidence-based practices and differentiated instruction to meet the needs of the students (Repetto et al., 2010). To further support the lack of instructional practices, when reviewing the IEP goals, it was evident the goals are focused on compliance (work completion and attendance) and not primarily on self-determination skills. No information indicating the students input on their own goals and transition plan was included in the IEP's as required by IDEA (IDEA, 2004). This could be an indication of a systematic failure of the online schools generally in providing instruction to students with disabilities.

The teachers are assessing the students through teacher-made assessments and observation. No formal assessments and gathering the student's preferences and interests are conducted, limiting the types of data collected which directly impact instruction and

planning. This also limits the student's abilities to become active participants of their own learning and understand their own self-determination skills (control). Formal assessments as reviewed in this study would not reveal for these particular students the needs or growth in self-determination skills, due to the lack of instruction, it indicates that courses/programs/instruction are not designed based on the students interests and needs as supported through the literature (Christle et al., 2007). In addition, the lack of connection to real world activities does not allow the students opportunities to practice and demonstrate self-determination skills and can negatively impact their positive post-secondary outcomes, as supported through the literature.

The primary goal of education of all students, should be successful integration into the real world (Ferdig & Kennedy, 2014). Students with disabilities often have a difficult time transferring skills taught through a simulated situation verse a real-world experience (Ferdig & Kennedy, 2014). It was further indicated from the findings that online school polices, including parents as learning coaches and lack of requirement for cameras. Students need to have control of their learning in order to begin to develop self-determination skills, and often the parents inhibit that development by being overly involved and speaking for their students (Repetto et al., 2010). Although online polices can support in the providing a safe climate, as reviewed in the 5 C's Framework of Engagement, it also impacts the teacher's abilities to directly observe the students and provide a similar educational experience a student would receive in a traditional face to face brick and mortar school. Overall, based on the results and analysis, it can be determined that students with disabilities are not adequately being taught self-determination skills in either of these selected online settings.

None of the findings in this research study were a surprise to me overall. Based upon my experience and interaction with online schools since beginning my current role as Director of Special Education, I have had concerns regarding the knowledge base of the high school special education teachers and lack of evidence-based practices utilized with the special education students in the area of self-determination in the online setting. It did surprise me that one of the schools offers no direct or live instruction and they pay their students essentially for attending school. Given our current national pandemic of COVID-19, I do believe that online schools are going to continue to draw large enrollment numbers, especially with students with disabilities, and feel that it is part of my responsibility to continue to support the special education teachers in development of their knowledge and practices to obtain stronger and positive post-secondary outcomes.

CHAPTER FIVE

DISCUSSION

The purpose of this dissertation is to better understand the instruction of students with disabilities in self-determination, in an online setting, from high school special education teachers. The research questions that guided this exploratory case study were: (1) What are special education teachers' understanding of self-determination and its relationship to post-secondary outcomes, (2) How do special education teachers understand assessment and instruction of self-determination skills to students with disabilities and what challenges do they perceive delivering instruction in an online setting? In order to support high school special education teachers' instruction for their students with disabilities and affect positive post-secondary outcomes, it is important to begin with an understanding of current teacher knowledge and practice, and how they align with evidence-based practices. When special education teachers apply evidence-based practices in self-determination, students with disabilities are likely to have improved post-secondary outcomes (Halpern et al, 1995; Powers et al, 2012; Wehmeyer & Schwartz, 1998).

This study's research questions, the methodology choices, and the data analysis informed my thoughts on overarching implications to the field and suggestions for future research. Throughout the results chapter, general themes were identified and viewed through the lens of student engagement theory (Schneiderman, 1994) and the 5 C's of

Student Engagement Framework (Repetto et al., 2010). The results were additionally tied to the supporting literature presented in this dissertation. The purpose of this chapter is to summarize this study, discuss limitations of the study, implications for practices, and directions for future research.

Summary of Study

The theoretical concept of this study was rooted in the 5 C's of Student Engagement Framework (Repetto et al., 2010) supported through the student engagement theory (Schneiderman, 1994). I related these theories and framework directly to the special education teachers understanding and implementation of self-determination skills and practices. The framework allowed me to analyze the data in a cohesive way and begin to see relationships among the data and framework. The relationships focused on the teachers understanding of self-determination skills, student outcomes and the online instructional format.

Teachers Understanding of Self-Determination Skills

Through the lens of the framework, a relationship was evident among the data and the need for control and curriculum. Providing evidence-based practices is fundamental to ensuring that all students are afforded self-determination training. The instruction will allow students to develop a better understanding of their role as an online student (Federig et al., 2010). This ultimately will assist students in understanding their disabilities and how to speak and advocate for themselves. It will also develop additional self-determination skills such as goal-setting and problem-solving. The students become meaning fully engaged and begin to have control over their own learning and needs (Repetto et al., 2010). In order for the students to begin to understand self-determination

and gain that control, the teachers must also have the understanding and target their instruction on those needs.

Special education teachers must fully understand self-determination skills and associated instructional practices. Without a basic understanding of the concept, teachers will not be able to present and plan appropriate instruction, implement curriculum, or assess students skills in the area. The results of this study indicated that majority of the teachers in these schools, do not have an understanding of self-determination however, they believe they do. They also perceive the instruction and assessments methods they are currently practicing, address their students self-determination needs. They are teaching essential life skills but, not skills commonly associated with self-determination. Despite the professional development training provided by the District, it was clear the teachers were not fully knowledgeable on the topic.

In order to instruct students in self-determination skills, teachers must first assess the students self-determination skills. The teachers felt the informal assessments practices they were utilizing were doing just that. However, the assessments were focusing on what they perceived as self-determination skills (work completion, attendance, manners) not truly self-determination skills as defined in the literature. Curriculum, according to the framework, includes designing programs with the students' needs and interests in mind (Burke et al., 2020). The data reveled the teachers were not conducting any formal assessments that focused specifically on self-determination skills. It was noted that throughout the teachers day, a good deal of time is spent progress monitoring and assessing the students however, that appeared to be mainly in core

academic areas. The lack of assessment is related directly to the lack of appropriate self-determination curriculum and practices.

During the interviews, the teachers also indicated that very little of their time is actually spent instructing the students each day. Although online schools have the ability to offer the students a curriculum that is done at "any pace", the students must still be challenged to connect, and remain connected through inventive and creative academic activities (Bost et al., 2006). Since the students are not required to actively engage in their learning, the online schools force the students to become very independent and work on their own, without the scaffolding of direct instruction or feedback. The lack of use of evidence-based instructional practices, including assessment and curriculum, in self-determination may certainly impact the students post-secondary outcomes.

Student Outcomes

Historically, individuals with disabilities have been viewed by many as incapable of achieving positive post-secondary outcomes, such as obtaining gainful employment or attending a post-secondary institution (Gill, 2017). That view has changed greatly over the last decade and society is realizing that, among other skills, students with disabilities can develop self-determination skills in order to gain control over their own lives and have a better quality of life as an adult. A student's education should result in a successful integration into the adult world. Their learning and transition plan needs to be directly tied and connected to their post-secondary goals which includes self-determination skills (IDEA, 2004; Repetto et al., 2013).

Teachers can provide opportunities for the students to make connections, as referred to in the framework, by allowing the students to practice self-determination skills

in real-world situations. Opportunities such as participating in their IEP meetings, will enable the students to continue to be active participants in their learning and begin to make that connection of self-advocacy and the impact on their lives. Students should have input on their educational plan and goals. This does not appear to be occurring in the online schools selected for this study. IEP goals focused primarily on compliance of students such as completing work and attending school. This begins to question if online schools are actually providing a FAPE to their students with disabilities.

The lack of opportunities and appropriate IEP goal development focused on self-determination may impact the student's outcomes. Educators, students, and their communities need to continue to support the development of self-determination skills in students with disabilities. Integrating real opportunities for students to practice the skills with support is essential to positive outcomes. A cohesive IEP plan needs to be developed that includes specific self-determination skills. Students can be involved in many aspects of their learning and must be given the opportunity to develop their own voice.

Online Instructional Format

Parents now frequently have the option of enrolling their children in online schools (Deshler et al., 2014). Since the COVID-19 pandemic has emerged, and online instruction has become more prevalent, it has become even more essential that collaboration with parents, teachers and other providers occur in educational planning and delivery. Building a caring community and safe supportive environment are two components of the 5 C's framework that are occurring in the online schools. Online teachers in the two settings, however, are building a limited community and only including students, parents, and general education teachers at this time.

Transition practices literature recognizes that educators, service providers, and families must work together to help students develop their skills and abilities, provide services and supports, and develop opportunities through which students can apply those abilities (Kohler & Field, 2003). Building school and community teams, is not only supported through the 5 C's framework (caring community) but also builds capacity to better serve students' transition needs. In order for true collaboration to occur and strong caring communities to be fully developed, coordinated opportunities with outside providers such as VOC Rehab or DDSN should be included. This will allow additional opportunities for students to engage in real-world applications of skills. Collaboration, more than phone calls and emails, must occur between special education and general education teachers in which teachers are planning targeted instruction together. Additional providers must also be a part of the collaboration including therapists, administrators, guidance counselors and/or transition specialists. In the current structure of these online schools, although teachers are attempting to create a caring environment, it was noted as a challenge for the teachers.

The participants believe the online school does provide a safe and supportive environment across settings, reflecting an emphasis of the Student Engagement Framework. However, some of the procedures and policies in the participants' schools reportedly caused barriers for both the teachers and students. The lack of requirement for students to show themselves during instruction and increased parent involvement in the online educational process can make it difficult for the teachers to know their students true self-determination strengths and needs. Direct observation of students reactions, behaviors or understanding of instruction cannot be accomplished if there is no face to

face interactions between the teachers and the students. The parents can also hinder the independence of the students and impact their ability to fully develop self-determination skills.

The results of this study imply that students with disabilities in the selected settings are not exposed to or receiving adequate instruction in self-determination skills. By analyzing the data and continual reflection through the 5 C's of Student Engagement Framework, it allowed me to bring structure to the data and develop relationships across multiple areas. Each individual component of framework brought great value to this study by affording me the opportunity to break down specific areas of instruction and practice and thoroughly analyze what is occurring in these schools at this time. This framework can be utilized in online settings by providing a basic structure for educators by identifying those specific areas that impact student engagement and to keep the students truly engaged in school and their learning. I believe it also gave me a true picture and understanding of what these special education teachers understand about self-determination skills and instructional practices. My own biases and concerns initially discussed appeared to be unfounded in this study. The teachers appeared to be very open and transparent about what is occurring in their classrooms, and freely discussed their views regarding self-determination. Online schools will continue to be a part of the educational system across the nation, and students with disabilities will continue to enroll. Self-determination skills will also continue to remain to be a strong predictor of post-secondary outcomes (Gragoudas, 2014; Test et al., 2009 a; Test et al., 2009 b) as reviewed throughout this study, and even online students with disabilities must be taught the skills.

Limitations of the Study

The findings of this study should be viewed in light of some limitations. Those limitations include my own bias and assumptions regarding the selected district and schools as well as, my own knowledge base of self-determination skills and instructional practices. Additionally, the basic fundamental structure of special education instruction in the online schools may have hindered my ability to fully explore this topic. Consequently, the findings may not reflect practices and perceptions in other online setting across other districts within the state, or in states across the nation.

Previously in this study, I discussed my own situated knowledge and related assumptions. As the current Director of Special Education within the selected district, I was concerned that my already developed relationships with the selected schools and background knowledge of self-determination and instruction, may influence my unbiased analysis of the results. I would like to think the special education teachers think of me as an "outside" support and not directly involved with the day to day instruction and running of the school, however they may have viewed me as directly involved with all aspects of the school including instruction. Although, in my current position, I do not interact with the special education teachers directly, I do interact with the school's Special Education Coordinator's frequently. These two particular school coordinators talked with me at least once a month individually and then attended multiple trainings and webinars throughout the school year. Any information that I shared with them was then shared with their teachers.

All the teacher's know of me by title in the selected district, and as a result, this may have indirectly influenced the teachers participation in the study and responses. The

special education teachers may have felt they needed to participate in this study, even if they had no knowledge of self-determination skills and evidence-based practices, because as the Director, I was conducting it. They could have felt there would be repercussions if they did not participate, although I have no supervisory authority over them. This may have made the participants nervous about their personal knowledge base. Some may have done their own research on the topic prior to the scheduled interview in order to feel prepared. None of the participants indicated they had conducted additional research prior to our interviews, nor did I directly ask the participants, this was only my assumption.

I did spend time prior to the interviews attempting to getting to know the participants though an informal conversation with each one of them about the study and process. However, even though I felt as if a good rapport was built with each individual, I may not have been viewed as an "outsider" as I had originally thought. I also may have assumed that each special education teacher reviewed and recalled all the information I presented in the 60 minute training on self-determination, and they all were starting with, at a minimum, the same base knowledge. I had not taken into account the significant amount of time, one year, between the professional development and this study. Although the training module is posted on the support site, the special education teachers may not visit that site frequently.

My knowledge on the subject of self- determination is due to the significant amount of time I have spent researching and writing about self-determination skills and online settings over the last six years. Inadvertently, I may have assumed that all the participants had also spent time learning about the subject and they were implementing whatever they had learned, despite that each indicated they had not previously taken any

courses in self-determination skills in their teacher preparation programs. As a former special education teacher, I often followed that exact practice (research on my own and then implement) but realize that not everyone does. Given the current COVID-19 pandemic and all the changes these special education teachers have had to face while this study was conducted, furthering their own learning and education on the topic may not have been a priority. My assumptions that the teachers did further their knowledge base may have affected how I perceived their responses to the questions regarding instruction in self-determination skills. None of the participants indicated they had conducted additional research prior to the interviews.

Finally, the fundamental structure of special education instruction in the online schools that was revealed through the results of the study, certainly may have impacted my ability to fully explore the subject. Special education teachers in these two settings are not required to keep lesson plans and IEP's do not appear to be individualized to student's strengths, needs and interests. The lack of direct face to face instruction, even if through the computer, greatly limited the teachers from implementing evidence-based practices in self-determination to their students. The literature does not specifically indicate recommended practices are specific to a traditional brick and mortar school, however it can be assumed, and these practices may not be effective in an online setting.

Implications for the Field

This study began to address the current gap in research specifically focusing on self-determination skills and instructional practices in an online high school setting. This was accomplished through direct one on one interviews with current special education teachers working in the field. I was able to investigate the selected participants

understanding of self-determination and the current instructional practices they implement with students with a variety of disabilities. I believe the results of this study not only contribute to the literature in the field but also have direct implications for educators, district/administrative staff, and teacher preparation.

Educators

As K-12 online learning continues to grow for all student populations, so should the knowledge of evidence-based practices that relate to teaching students with diverse learning needs, including students with disabilities. While online teachers are expected to provide high-quality instruction to all students, there are additional federally-mandated responsibilities through the Individuals with Disabilities Education Act (IDEA, 2004) that impact teacher's responsibilities. A clear implication of these results is that special education teachers in online schools may need to evaluate the current practices and involve students in creating equitable online learning environments to encourage choice and voice in their instruction and online learning process.

Another implication for educators is that teachers may need to view self-determination skills as critical for students as basic reading, writing and math skills. They need to be prepared to teach the students the self-determination skills they need to achieve positive outcomes ad described in this study. This will require spending time attending professional development or conferences focusing on self-determination skills. The teachers also need to become experts in curriculum and assessment practices utilized and implement them in their classrooms. Just learning about practices is not enough and direct implementation must occur in order for students with disabilities in the online settings to receive the education to which they are entitled.

Since parents are an integral part of the students education in the setting, parent involvement is key (Vasquez &Straub), a final implication of the results indicate that online school educators may need to support the parent learning coaches through continuous opportunities to participate in parent training workshops. Parents in the online setting report spending a great deal of time each day working with their students, even though they have not been prepared to provide the kinds of special education services and supports as mandated in the IEP (Burdette & Greer, 2014). The training should further expand parents' understanding of their child, and further enhance their knowledge of what interventions and practices can best serve the self-determination needs of their child. The parents play the role of teacher with their students and need to be as prepared as the teachers are in instructing their students in self-determination skills.

Responsibility for students with disabilities includes being accountable for things within their control. As children grow, they should gradually gain responsibility for more aspects of their lives and develop self-determination skills. As reviewed in this study, this prepares the students to be independent in their own lives. The extensive parent role in the online environment directly conflicts with this view and may impact the student's development of self-determination skills. Students may begin to believe that they have no control over their learning and independence at school because their parents are extremely involved in online learning and in some cases do everything for them. Educators need to know how to support the parents and transition them from the role of advocate for their students, to a new role of supporting and encouraging their students independence. This will require training for the teachers and the parents.

District/Administrative Staff: Leadership

Despite the demand and accessibility of online education, especially during the COVID-19 pandemic, this educational setting remains controversial. Some argue that online learning is not a perfect substitute for the face to face learning that occurs in traditional brick and mortar schools (Barbour, 2017). Instructional practices or requirements appear to be different among online schools. Teachers are not required to provide direct/live instruction in both settings and students are not to use their cameras based upon the school's general policies and procedures. Although it is nice that students and families have a choice in their educational settings, the lack of consistent practices when delivering instruction can directly affect the student's performance and outcomes. The results of this study implicates that the two online schools procedures and regulations can be creating barriers for all teachers in the setting.

The National Standards for Quality Teaching (NACSA, 2015) addresses quality online teaching. Those standards include items such as knowing the diversity needs of students and incorporating accommodations into the online environments, it was not clear through the findings that the special education teachers in these settings follow those guidelines. These particular teachers did not discuss or mention accommodating students and the legal requirements per IDEA or the NACSA standards in the online setting (IDEA, 2004; NACSA, 2015). The question arises if these online schools meet the required guidelines per the laws. The implication for district/administrative staff to ensure that teachers are following the legal requirements in the online setting was evident.

The recommended evidenced-based practices in this study imply direct face to face direct instruction in order for the students to develop self-determination skills and

the teachers to monitor their progress appropriately and effectively. There appears to be a lack of accountability regarding provision of FAPE and general special education legal requirements per IDEA (IDEA, 2004) in these particular online settings for the teachers. None of the participants create lesson plans nor are they required to develop them. Although not asked specifically in the interview, none of the participants discussed how they are evaluated or observed by the administration. It was not investigated if these schools have different practices for evaluating their special education teachers. This implies that districts and/or administrative staff in the online school should develop accountability practices that support effective instruction and progress monitoring in self-determination skills.

Districts often view special education compliance regulations and polices as a hierarchy that begins with the federal government. It then trickles down to each state which flows to each district within the state and finally to the individual schools within the district. Although all districts must follow federal and state guidelines, districts have the authority to require more of their schools in the area of special education polices and regulations. *Figure 5.1* below depicts the flow of polices beginning with the federal government and ending with individual schools.

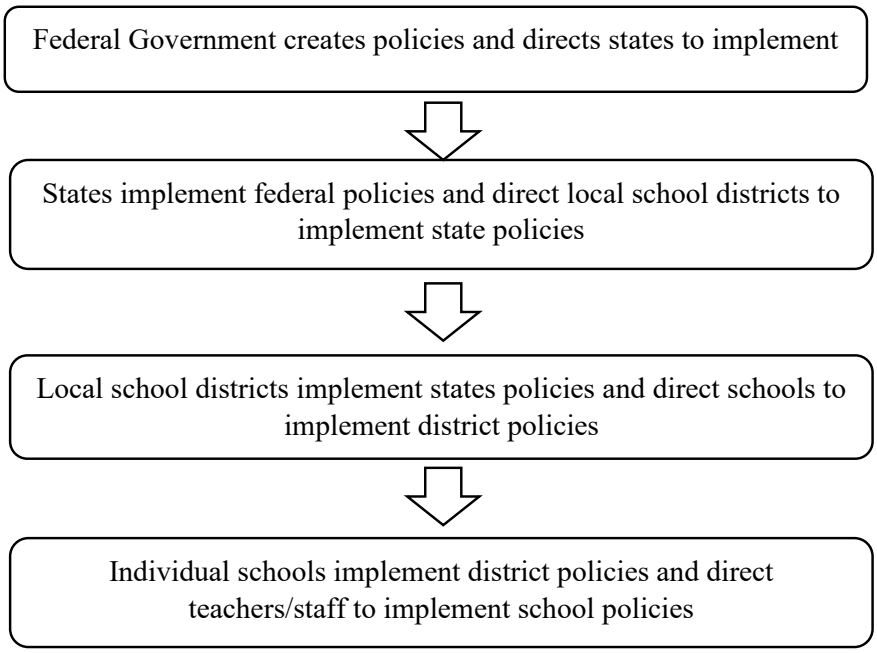


Figure 5.1. Hierarchy of policy creation and implementation

As the Director of Special Education, I have the ability to directly impact policy at the district level. I can create accountability measures specifically for the district. For example, I can require school leaders to utilize a certain rubric when they observe the special education teachers that includes a review of lesson plans and documentation that verifies students are receiving FAPE per their IEP. I could also provide a template of questions that school leaders can utilize when interviewing potential special education teachers. This can directly assist them in finding candidates who have experience and understanding of teaching students with disabilities self-determination skills. Additionally, to assist with training and supporting the special education teachers, I can continue to provide high quality professional development focusing on areas such as IEP development and implementation.

The implication of accountability could also lead to a "new vision" regarding online schools. As a District leader I can have a direct impact. Using the data from this

study as a foundation, it seems an online classroom should look like a place where teachers are facilitators and students are actively engaged and interacting with one another - a place where students are comfortable and safe and still challenged to learn. Students would show themselves on camera and live instruction would occur frequently throughout the day. Although a lot of the work for students would continue to remain independent, there would be class sessions scheduled for each subject and special education support, much like found in brick and mortar schools. Conversation and discussion would occur between students and teachers. Group work can be done through the use of virtual breakout rooms where the instructor has the ability to pop in out of the rooms to keep groups on track and check for understanding. Special education and general education teachers would also work collaboratively in inclusion classrooms. Planning together would be scheduled frequently. I do believe that online settings are needed, however, we must research how to improve their student outcomes and effectively instruct not only students with disabilities but, all students.

Teacher Preparation

Teacher preparation focusing on self -determination skills has been minimal (Smith et al., 2016). Professional development in the areas of instruction and preparation, may be the primary mechanism by which teachers learn to teach students with disabilities online in the area of self-determination. The findings of this study suggest that special education teachers have a continued need to develop an understanding of self-determination skills and instructional practices associated with self-determination skill development.

Self-determination and evidenced-based practices for student with disabilities have been around for more than twenty years. As illustrated in this study we as educators and researchers are continuing to discuss the same practices and very little implementation has currently occurred in schools, including online schools (Burke et al., 2020; Cook & Odom, 2013; Test et al., 2009 a, b). This study did not investigate if the lack of knowledge represented in this sample was particular to special education teachers in an online setting, however, one could assume that special education teachers across all settings, virtual and brick and mortar, continue to struggle, as all of the participants were originally teachers in brick and mortar schools. Little research has suggested what professional development might look like in an online format to improve teaching, learning, and the implementation of an IEP developed under the Individuals with Disabilities Rehabilitation Act (IDEA, 2004).

The results of this study uncovered an implication that all teachers need to be adequately prepared in the necessary areas of self-determination instruction, as reviewed in the literature, in order for students to obtain positive outcomes. The focus of professional development at both the school, district and national level should include transition skills which also includes self-determination skills (Shorgren et al., 2015;Thoma et al., 2002). Although the participating district in this study did provide professional development related to self-determination, it was noted that much time (one year) passed between the professional development and this study. The special education teachers had not remembered much of the content and reported they had not had time to go back and review the training through the support site due to the COVID -19 pandemic and other immediate issues and concerns with their students. The pandemic may have

also resulted in teachers teaching at levels in which they have had no professional development or training. For example, if the school needed a secondary teacher in special education and the only choice was a special education teacher with elementary experience, that teacher may not have received any additional training or support but unilaterally moved into a position. As the Director of Special Education in this district, it is my responsibility to ensure exemplary professional development continues to occur and that the high school students with disabilities in our online schools, receive a high-quality education focused on evidence-based practices.

It is clear in the laws and literature that self-determination should be an integral part of a student's transition plan and positive post-secondary outcomes (Carter et al, 2008, 2013; Grigal et al., 2003; IDEA, 2004; Plotner & Simonsen, 2018; Plotner et al., 2015; Wehmeyer et al., 2000). The lack of teacher preparation and subsequent professional development support for online learning undercuts the intentions of IDEA (2004) which directs schools to provide K-12 students with a Free Appropriate Education in the Least Restrictive Environment possible. An important implication of this study indicates districts should continue to support online teachers through additional training and access to content frequently. The events of the recent year have created a surge of traditional brick and mortar schools quickly becoming online schools without any proper training or professional development. This has brought online education to the forefront of education and the proper supports must be in place for the schools to be successful.

Directions for Future Research

Federal statutes protect students with disabilities as a population who are supposed to be included in society to the greatest extent possible and are entailed to a free

appropriate public education, a mandate that includes online learning**.** The expansion of online schools appears to be growing each year. The online school can be uniquely positioned to accommodate and meet the needs of students with disabilities (Rose & Blomeyer, 2007; Vasquez & Straub, 2012). Future research needs to be focused on three specific areas, (1) online instructional practices, (2) planning for self-determination instruction and (3) self-determination instruction in an online setting.

Online Instructional Practices

Online schools offer benefits to all students, including the ability to work at their own pace and access school from anywhere, including their homes. It allows the students the flexibility to complete entire levels of education , K-12, and earn their high school diploma (Barbour, 2017). Limited empirical research has focused on student performance in an online setting. Much of the research has been conducted by state departments of education or state legislatures focusing solely on standardized test results (Archambault, 2011). The reviews of online learning have failed to provide sufficient evidence demonstrating the effectiveness of online school on student outcomes (Barbour, 2017).

The increasingly popularity of online settings for families continues to create a need for teachers to be adequately prepared in online pedagogy. As the results of this study revealed, there is no standard implementation model across the two online schools. Teachers in an online school need to possess skills such as advanced technological skills and the ability to work independently and often in isolation from other teachers (Hawkins et al., 2012). ADEC (2017) and NACSA (2015) have both created quality characteristics and standards for online teaching however, there continues to be very little research on

K-12 teacher preparation for online schools (Archambault, 2011). In order to improve student outcomes for all students, online teachers, like all teachers need to be experts in effective instructional practices. Further research should address instructional delivery practices and requirements, and teacher preparation requirements of all teachers in an online school. Suggested topics might include evidence-based instructional practices, implementation of curriculum and formal assessment practices across all grade levels. This can be accomplished though professional development/training conducted by the district and/or teacher college preparation programs.

Planning for Self-Determination Instruction

Research and regulations continue to support the importance of instructing students' with disabilities self-determination skills in any educational setting. Self-determination skills in students can lead to positive post-secondary outcomes such as job employment (Wehmeyer et al., 2003, 2010). The literature supports the use of interventions/curriculum focused on self-determination and its effectiveness in promoting or enhancing skills (problem-solving. choice-making. goals-setting and attainment, self-management, self-advocacy, and self-knowledge in students with disabilities (Burke et al., 2020). In a school setting, typically it is the special education teacher who provides the instruction in self-determination skills for the students.

However, many students require additional supports from other service providers such as occupational therapist, physical therapists, speech therapists and/or school counselors. Each has an impact on the students' instructional program and outcomes. In order to best prepare the students with disabilities for life after school, additional research should be conducted specifically focusing on evidenced-based practices/interventions that

these additional service providers can utilize in order to support the development of self-determination skills. The literature focusing on self-determination is often limited to students with specific disabilities such as intellectual disabilities or emotional/ behavioral disorders (Cuenca- Carlino et al., 2016). There is a need for further research in effective practices for teaching students with a variety of disabilities self-determination skills to all service providers in any educational setting and the impact on post-secondary outcomes.

Self-Determination Instruction in An Online Setting

There remain unanswered questions regarding the instructional delivery practices and requirements and what the best approaches are effective to ensure students with disabilities are provided with FAPE in the online setting (Mallard et al., 2016). The results of this study clearly indicated that many of the special education teachers in the selected online settings did not have an understanding of self-determination skills nor are they providing evidence-based practices when instructing their students in perceived self-determination skills. Appropriately supporting the needs of students with disabilities in an online setting requires a great deal of planning and preparation and may differ from the needs of students in a traditional brick and mortar setting. For example, extensive parent involvement and training, overcoming online structure barriers (no cameras, no live instruction) and effective assessment practices may take additional planning/ preparation. We still don't know if or how this can be done effectively – to achieve the same result you might get in a brick and mortar classroom. The added programmatic barriers of online schools, as mentioned in this study, may require additional levels of consideration, implementation, and evaluation to determine the appropriateness and effectiveness of the online interventions (Deschaine, 2018).

This exploratory case study attempted to be one of the first in the field to begin to unravel online special education teachers understanding of self-determination and how that has impacted their instruction and support of their students with disabilities. Research should continue to explore and gain a deeper understanding of special education teachers perceptions and instructional practices across additional online schools, not just only with high school teachers but also with early childhood and elementary teachers. Specific instructional activities such as curricula, assessments, IEP goal writing and lesson planning focused on self-determination skills specially geared towards online setting should also be researched. Students attending online schools are to be afforded the same quality of education and opportunities as students attending brick and mortar schools as outlined by IDEA (2004) and the results of this study indicate the students in these two schools are not being provided with instruction in self-determination skills.

In the midst of a global pandemic, the work specific to the field of online learning has never been more relevant or important. Both general education and special education teachers are faced with the difficult challenge of working to continue to provide online learning opportunities for their students. Parents are realizing the many challenges of the teacher and the importance of the role as they step in to fill that gap. Schools and districts continue to adjust, adapt, try new approaches and figure out what works best. These already established online settings have had the unique advantage for the education of their students to continue as "normal" during the crisis. It is imperative that continued support and training for everyone in the online schools continue to be researched and developed. Despite the hope of the current pandemic ending and life going back to

“normal”, I believe that many school districts will continue to have full online schools as part of their district.

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APPENDIX A

FEDERAL LAWS SUPPORTING SELF-DETERMINATION

Table A.1 Federal Laws Supporting Self-Determination

Year	Title	Description of Act
1978	Rehabilitation Acts Amendments	Title VII, created comprehensive services for independent living centers and operations of the centers.
1983	Rehabilitation Acts Amendments	Mandated that each state has a Client Assistance Project (CAP).
1986	Rehabilitation Acts Amendments	Created customer control for Independent Living Center Boards and created work programs.
1988	Air Carrier Access Act	Provided for equal access on airlines.
1988	Civil Rights Restoration Act	Any organization or corporation receiving federal funds must not discriminate.
1998	Fair Housing Act Amendments	Prohibits discrimination in housing and mandates architectural universal design.
1990	Americans with Disabilities Act	Creates broad civil rights protections.
1990	Individuals with Disabilities Act of 1990	Requires students 16 or older to be invited to attend their IEP meeting.

1994	School to Work Opportunities Act	Promoted job training and self-determination for all.
1994	Goals 2000 Act	By the year 2000, all children in America will start school ready to learn, high school graduation rate will increase to at least 90%, every student in grades 4,8 and 12 will demonstrate competency in ELA, Math, Science, foreign languages, Civics and Government, the arts, History and Geography in every school in America, every school in America will be free of drugs, violence and the unauthorized presence of firearms and alcohol, teachers will have access to professional development and every school will promote partnerships that will increase parent involvement and participation.

APPENDIX B

NATIONAL STANDARDS FOR QUALITY ONLINE TEACHING, VERSION 2

(NACSA, 2015)

Standard A - The online teacher knows the primary concepts and structures of effective online instruction and is able to create learning experiences to enable student success.

Standard B - The online teacher understands and is able to use a range of technologies, both existing and emerging, that effectively support student learning and engagement in the online environment.

Standard C - The online teacher plans, designs, and incorporates strategies to encourage active learning, application, interaction, participation, and collaboration in the online environment.

Standard D - The online teacher promotes student success through clear expectations, prompt responses, and regular feedback.

Standard E - The online teacher models, guides, and encourages legal, ethical, and safe behavior related to technology use.

Standard F - The online teacher is cognizant of the diversity of student academic needs and incorporates accommodations into the online environment.

Standard G - The online teacher demonstrates competencies in creating and implementing assessments in online learning environments in ways that ensure validity and reliability of the instruments and procedures.

Standard H - The online teacher develops and delivers assessments, projects, and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of the learning goals.

Standard I - The online teacher demonstrates competency in using data from assessments and other data sources to modify content and to guide student learning.

Standard J - The online teacher interacts in a professional effective manner with colleagues, parents, and other members of the community to support students' success.

Standard K - The online teacher arranges media and content to help students and teachers transfer knowledge most effectively in the online environment.

APPENDIX C

DISABILITY BREAKDOWN

Table C.1 Disability Breakdown

School	Disability	Number of Students	Lest Restrictive Environment	Number of Students
Virtual School #1	Emotional Disability	6	80% or more of the day in the general education classroom	134
	Learning Disabled/Other Health Impairment	124	79% to 40% of day in the general education classroom	3
	Autism	26	Less than 40% of the day in the general education classroom	34
	Deaf/ Hard of Hearing Impairment	5		
	Intellectual Disability (mild)	1		
	Multiple Disability	3		
	Traumatic Brain Injury	3		
	Speech/Language Impairment	3		
Virtual School #2	Emotional Disability	1	80% or more of the day in the general education classroom	35

	Learning Disabled/Other Health Impairment	24	79% to 40% of day in the general education classroom	1
	Deaf/Hard of Hearing Impaired	1		
	Orthopedic Impairment	1		
	Autism	7		
	Multiple Disability	2		

APPENDIX D

CONTACT EMAIL/REQUEST FOR PARTICIPATION

Subject Line: Teacher Interview Participation Request

Dear [Insert Teacher's Name],

I am currently a graduate student enrolled at the University of South Carolina and working on the completion of my PhD in special education. I am seeking your assistance in participation of a research study to examine teaching high school students with disabilities self-determination skills in an online environment. As a current high school teacher in an online school, you are in an ideal position to give valuable feedback and firsthand information from your perspective. Your participation in this research study is voluntary and no compensation will be given for your participation.

The interview takes about 45- 60 minutes and is very informal and will be conducted virtually unless you are comfortable meeting face to face during the current COVID-19 pandemic. I am simply trying to capture your thoughts and perspectives as a special education teacher in an online environment. A second interview will be scheduled (about 45- 60 mins as well), if you are willing, to further discuss your understanding of how self-determination skills are evident in a sample of current student IEP's and associated lesson plans. Your responses to the questions will be kept confidential. Each interview will be assigned a number code to help ensure that personal identifiers are not reveled during the analysis and write up of findings. Upon your request, a possible informal third interview maybe scheduled for further clarification and questions.

If you are willing to participate, please email a day and time that suits you and we will schedule a one-to-one interview. A link for the virtual interview will be sent or I will travel to a mutually agreed upon location.

If you have any questions, please reach out.

My contact information is:

Laura Simmons

(803) 603-9721

lsimmons@sccharter.org

Thank you for your participation!

APPENDIX E

INFORMED CONSENT

Title of Research: Fostering Self-Determination Skills Among High School Students with Disabilities in an Online Environment

Principle Researcher, Affiliation and Contact Information:

Researcher: Laura Simmons

(803) 603-9721

lsimmons@sccharter.org

Institutional Contact: Kathleen Marshall Ph.D., Faculty Advisor

kathleen@mailbox.sc.edu

University of South Carolina

Description of the Research:

As students move through school toward adulthood, they are expected to assume a greater responsibility for managing their own behavior, to be a key player in planning for their future and to become increasingly independent. These skills often have to be explicitly taught to students with disabilities. Today, there are many options for school for students and families such as, traditional brick and mortar and virtual or full-time online schools. The number of online schools has grown in the last ten to fifteen years and many families are choosing that platform for their students with disabilities. Self-determination is important for all individuals, including students with disabilities. Skills such as problem-solving, goal setting and decision making, enable students to gain greater responsibility and control over their own lives. Individuals with disabilities have indicated that having more control over lives, instead of someone else making decisions for and about them, is very important to their own self-esteem and self-worth. Special education research has further shown that students with disabilities who left school more self-determined were more than twice as likely as their peers who were not self-determined. Given the growth of online schools and the enrollment of students with disabilities on the rise in these settings, teaching self-determination skills to students in this setting have not been explored or researched.

Subject Participation: When you volunteer to participate in the research, a scheduled one-to-one structured interview will be scheduled between yourself and the primary

researcher. The interview will be recorded for the use of analysis. Your responses and recording will be kept confidential, and each interviewed will be assigned a number code to help ensure that personal identifiers are not reveled during the analysis and write up of findings.

Potential Risks and Discomforts:

There are no known risks for participation.

Potential Benefits:

Individuals who participate in this study will be contributing to a research area that has not been explored or investigated at this time. It will also possibly lead to recommendations and strategies for teaching students with disabilities self-determination skills specifically in online schools.

Confidentiality:

All information taken from this study will be number coded to protect any personally identifying information of the participant. The researcher will keep all recordings and data collected in a secure location in the researcher's office. Once that data has been fully analyzed and the research has concluded, I will store audio and data in a secure location after the completion for one year, after which all files will be destroyed.

Authorization:

By signing this form, you authorize the use and disclosure of the following information for this research: *I authorize the use of my interview responses and findings during the course of this study for education and/or presentation purposes.*

Compensation:

Participants will not be compensated for participation in this study.

Voluntary Participation and Authorization:

Your decision to participate in this study is completely voluntary. If you decide not to participate in this study, it will not affect your current teaching position or status.

Withdrawal from the study and/or withdrawal of authorization:

If you decide to participate in this study, you may withdraw from your participation at any time without penalty.

Cost:

There will be no cost for participating in this study. All travel for interviews will be incurred by the researcher and will be conducted at an agreed upon location between the two parties. The researcher will travel to the location where the participant is located.

I voluntarily agree to participate in this research study.

□ Yes

□ No

I understand that I will be given a copy of this signed Consent Form.

Name of Participant (print): _____

Signature: _____

Date: _____

APPENDIX F

INTERVIEW QUESTIONS: FIRST INTERVIEW

1. Tell me about your teaching and educational background.
2. How did you become involved in an online school? Have you ever taught in a brick and mortar school?

3. What does a typical day look like and what benefits do you feel the online school offers your students with disabilities?

4. Tell me how you create a collaborative/supportive environment for your students with disabilities?

5. When you hear the term "self-determination skills" what comes to your mind? Are there particular skills that you feel students need prior to graduating high school? Why or why not?

6. What barriers or challenges do you feel your students with disabilities encounter in the online school when learning self-determination skills?

7. What barriers or challenges do you feel impact your instruction to your students with disabilities in self-determination skills? How have you overcome those barriers/challenges?

8. Tell me what if any, real-world opportunities do you offer or support your students in to practice self-determination skills? How do you actively engage your students in these opportunities?

9. Would you be willing to participate in a second interview and provide three IEP's in which the identified skills are included and instructional lesson plans that you have developed to support the development of those skills?

10. Do you have any additional comments or items that have not been addressed?

APPENDIX G

INTERVIEW QUESTIONS: SECOND INTERVIEW

1. Let us look at the IEP's you chose, tell me why you choose these particular students.

2. What goals specifically address self-determination skills on the student's IEP's?

3. What was your process for assessing your students' current functioning in self-determination skills? Do you have access to or prefer any particular assessment tools?

4. How did you plan your instruction to meet, and address identified self-determination skills and weaknesses? Are the students a part of the instructional planning process? Walk me through your lesson plans you have chosen.

5. How have you had to adapt or change your instruction in the self-determination skills for these particular students? Were any of the adaptions made specifically due to the online setting?

6. Do you think it would be different if you were teaching these skills in a brick and mortar school? Why or why not?

7. Where did you learn about self-determination skills and practices?

8. Are there specific topics focusing on self-determination that you would like to see included in professional development opportunities through the district?

9. Do you have any additional comments or items that you would like to discuss or have not been addressed that maybe addressed through an additional informal session?

APPENDIX H

RESEARCH QUESTIONS/INTERVIEW ITEM ALIGNMENT

Table H.1 Research Questions/Interview Item Alignment

Research Question	Interview Questions (First Interview)	Interview Questions (Second Interview)	Citation
RQ1: What are special education teachers' understanding of self-determination and its relationship to post-secondary outcomes?	6,7,10	1,2	Abery, B. & Stancliffe, R. Wehmeyer, M. 1996; Burke et al., 2020; Chi-Chou et al., 2017; Deci & Ryan, 1985, 2017; Field & Hoffman, 1994; Garrel & Granlund, 2018; IDEA, 2004; Jones, 2012; Palmer, S., Shorgen, K., Williams-Diehm, K., & Soukup, J., 2010; Powers et al., 2012; Shogren et al, 2015, 2017, 2018, 2019; Test et al., 2009; Ward, M.J., 1996; Wehmeyer, 1995Wehmeyer, M. L. & Schwartz, M., 1997; Wehmeyer et al., 2010; Wehmeyer & Abrey, 2013

RQ2: How do special education teachers understand assessment and instruction of self-determination skills to students with disabilities and what challenges do they perceive delivering instruction in an online setting?	8,9	3,4,5,6,7	Argan et al., 2000; Burke et al., 2020; Burrows, 2003; Cavendish et al, 2017; Chi-Chou et al., 2017; Field & Hoffman, 1994; Garrel & Granlund, 2018; Jones, 2012; Loman et al, 2010; Martin et al, 2004; Raley et al.,2018; Shogren et al.,2015, 2017, 2019; Vazquez& Straub, 2012; Wagner et al, 2012

APPENDIX I

FINAL INTERVIEW QUESTIONS : FIRST INTERVIEW

1. Tell me about your teaching and educational background.

2. What appealed to you about teaching in an online school? How has this experience compared to teaching in a brick and mortar school?

3. What does a typical day look like teaching online?

4. What benefits do you feel the online school offers your students with disabilities?

5. Describe how you create a collaborative/supportive environment for your students with disabilities.

6. When you hear the term "self-determination skills" what comes to your mind?

7. Which particular self-determination skills do you feel students need prior to graduating high school?

8. Describe the barriers or challenges that your students with disabilities encounter in the online school when learning self-determination skills.

9. Describe the barriers or challenges that you feel impact your ability to teach your students self-determination skills in an online setting. How have you overcome these barriers/challenges?

10. Describe any real-world opportunities that you offer for your students in to practice self-determination skills. How do you actively engage your students in these opportunities in an online setting?

11. Would you be willing to participate in a second interview and provide three IEP's in which the identified skills are included and instructional lesson plans that you have developed to support the development of those skills?

12. What additional comments or concepts have not been addressed in this interview that you feel would contribute to this study?

APPENDIX J

FINAL INTERVIEW QUESTIONS : SECOND INTERVIEW

1. When looking at the IEP's you chose, tell me why you selected these particular students.

2. Which goals specifically address self-determination skills on the students' IEP's?

3. Describe the process you used for assessing your students' current functioning in self-determination skills. Please describe your level of access or preference for any particular assessment or tools.

4. Describe the lesson plans you chosen from start to finish. How did you plan your instruction to meet, and address identified self-determination skills and weaknesses? How were students utilized as part of the instructional planning process?

5. How have you had to adapt or change your instruction in teaching self-determination skills for these particular students? Describe any adaptions made specifically due to the online setting.

6. How would teaching these skills be different if you were providing instruction in a brick and mortar school?

7. Which specific topics focusing on self-determination would like to see included in professional development opportunities through the district?

8. What additional comments or concepts would you like to discuss that have not been addressed in this interview; that you feel would contribute to this study?

APPENDIX K

DATA/CODES TABLE

Table K.1 Data/Codes Table

Initial Codes	5 C's - Theme/connections	General Theme	Support/Data
Collaboration	Caring community/climate - students	Building collaborative community is important-limited in scope	"Actually, having meaningful conversations with them, finding out kind of what they do outside of school, finding out why they're here." "And so, I spend a lot of time, particularly in the first of the year, getting to know them, what they're interested in, just getting to know them as people." **"**So, we play a lot of games, ask them things about themselves. They create all about me information, and then I try to use that in the lesson**."** **"**We always start off every class with fun polls with the kids to get them talking and chatting and saying hello. We try to do some fun activities where they send us a picture and we do like a highlight spotlight of students. " **"**I'm human too and I've made mistakes, I spend a lot of time just talking to the students in the beginning of the year to get to know them."

Collaboration	Caring community/climate - parents	Building collaborative community is important- flexibility to meet with teachers- limited in scope	"Meeting with the parents at a time that is convent to them, even if at night allows them time to share about their students, struggles they are seeing and really makes the parents feel a part of the process." "You know, they have access full time to their student's grade books and communication, so they're in the loop as much as they want to be." "I have met with parents after school hours because they're like, you know, I'm working. He's he or she is at home. And I try to log in from work and I try to call him and make sure they're there working. But I have to wait till I get home and so, I'll offer to say, well, I can meet you at 7:00 if you want me to go through some things that could help you help your child."
Collaboration	Caring community/climate – other teachers	Building collaborative community is important- limited in scope	"With a collaboration with the gen ed teachers and just being very transparent, transparent so that they know exactly what I'm doing. I take and ask for the general education teachers' constructive feedback and ideas about instruction and students."

			"I have a great relationship with the gen ed teachers, basically just staying in constant communication, my "door" is always open, and I meet with them whenever they request it " "We use an IA ticket system, so if I have students that are kind of on everybody's radar for one reason or another, we use that system to update progress, any concerns that we have. It allows for quick and current information regarding the students for all the teachers to stay in contact with one another." "All my teachers know by name the kids with the disability and what help they need to be provided. They know their accommodations. We talk about the student's what kind of disabilities they have and why they are posting, why they are not posting, almost daily. I haven't seen this kind of caring for the students in a brick and mortar school."
Benefits	Control – Benefits for SWD	Flexibility and less external distractions for SWD	"We offer flexibility because our school is open. Twenty four - seven, you know, they can get on and do work at two o'clock in the morning if they'd like to." "That they have more opportunities to work at their own pace than they did in the brick and mortar school." "So, all of the classes are self-paced. So, if a student needs to spend a little more time in their math classes, they can " "I think it's a lot more conducive and flexible, we want students to be successful rather than just complete this task and give grade."

			"Well, I think it takes a lot of obstacles that they face when they're in the brick and mortar setting out of the way, so behavior, distractions, relationships." "All the distractions are gone, they're in their home, they can have their rituals set up, they can control their environment."
Benefits	Control – Barriers for SWD/teaching online	Face many different instructional challenges	"Our accountability at home, like someone at home that's helping kind of model." "I would say there are some barriers in learning those skills just because of the virtual setting. Parents often help their students too much and we can't determine if it is the student struggling or the parent." "Maintaining their focus and them actually participating, because when you're actually with them in person, they might not be paying attention, but they're physically there." "They can definitely hide for a while in the virtual setting and unfortunately, they can have long enough to the point that when it's recognized and they are put on a truancy plan and are eventually withdrawn, then they're already so far behind that even." "I don't see any barriers in an online school." "Not having any, little to no interaction with them and not seeing them, and I'm not at their home, so I can't see them in my

			classroom every day, they can make that choice to attend or not." "I think is just trying to get them to follow through with what we're doing is a little bit harder." "But I'm not sitting right beside them and can't see them, so I can't see what they're doing. So, I think that makes it a little more challenging. So, I have to be more proactive in checking behind them, calling parents, calling them." "Mom can help them at home, and I can always tell those kinds of things. So, there's a little bit of a difference there. It really just depends on how much the learning coaches are helping at home for me to be able to notice those kinds of things." "So online, it's a lot harder because I can't physically see them because nine times out of ten, my kids will not get on camera. And that's fine if that's if that's something that they don't like to do. I'm not going to push it as long as they're ready to learn. Fine. So, I'm not I'm not going to fight with them over that. " "I have parents that want to do everything for their student, like they're the ones that call me and tell me what their student is struggling with in and outside of school. i. They're the ones that email me."
Barriers	Control- Overcoming Barriers	Face many different instructional challenges	"So, the hard part is with the virtual school, our kids that do the best typically have a learning coach right beside them that's heavily involved. So, it's hard to determine how much of it is their self-determination and how much of it is their learning

			coach that's determined to help them. So that can be difficult to gauge." "I think we do a ton of modeling in our live lessons, modeling those skills, we kind of have agreed upon a procedure for reinforcing them as much as we can without direct contact with students." "We went to bat for 11th and 12th graders to get credit for their learning support as what we call it, their learning support class." "I get the nag until they're like, oh, let me just thought that this was going to leave me alone?" "I think it's just having an honest conversation with them. I think most of them mean well, I don't think they want to." "I've had to adapt. It's hard not seeing the kids everyday face to face or even on camera. I've really had to try to come to terms with, it."
Application	Connections- real world experiences	Lack of connections to the real world	"We have a couple of kids that have internships, and so they're getting that and then they can kind of come back and share." "So, the closest thing to that that I can think of is like different scenarios, like we would provide a real-life scenario and then. All right, what would what do you think this person should do in this situation and kind of facilitate group discussions in that way?" "No, well, unfortunately, I just can't think of any "

			"So, I will give them scenarios like real life scenarios, like let's pretend this is our career for the day. " "I would say we always had social gatherings on Fridays once a month, which is called pizza at the park." "It's a lot different now with COVID, but we usually have we have a team that does field trips, so their job is to do field trips, but they're in hubs and not everybody lives close to a hub." "We have service learning. So, if a student currently has a job, they can apply for the service-learning class and make money and get high school credit at the same time." "We have gotten kids in touch with military recruiters and tried to help facilitate conversations with the with military recruiters." "So, before all of this COVID-19 stuff happened, we were taking a trip every month and I would always, always, always I would beg my kids, please, please come out. I'm going to be at this field trip. Please come out, see me so that, you know, we can see each other and, you know, get to know each other a little bit better versus having a computer screen between us and my kids would come out in droves."
Knowledge	Connections – Understanding SD skills	Self-determination knowledge of specific skills	"Oh, gosh, they need to be able to write. I mean, they need to be able to if it's filling out a job application, real life skills they will

			need. Replying to an opening via email, like submitting a resume." "I mean, basically, I mean, etiquette, like even social media etiquette, like be careful about how you're representing yourself, make sure you choose an appropriate dress for yourself-life skills." "A lot of executive functioning skills and life skills like time management." "Advocate for themselves." "Getting them to become more independent and more responsible for themselves in helping them to recognize that they may not know what they want to do after high school, but they can still have goals today to prepare them for it and the importance of them trying on their own and knowing when to reach out for help and not just automatically sending a webmail or even worse, just sitting at their desk, overwhelmed, not knowing how to move on. And so, then they get 15 lessons behind." "I would definitely say one hundred percent self-advocacy, and especially if they're moving to a post-secondary track." "It's always like self-advocacy, goal setting and attainment. And I would say problem solving." "You know, problem solving covers all the areas." "Completing their work and submitting on time."

Assessment Instruction Goals	Curriculum – IEP goals	IEP goals focus on compliance- refer to as life skills	"We have I mean, goals like if a student is overdue in lessons that they will by the end of the IEP, have like no more than five overdue lessons, that's evidenced by a review of their grade book." "By the end of the IEP, after additional instruction in organization and study skills, the student will attend two live lessons per week from a baseline of one live lesson per week on three out of four consecutive weeks as measured by the student's log." "By the end of the IEP, given direct instruction or indirect instruction student A will increase the daily attendance rate for all three classes from fifty nine percent to eighty five percent as measured by the attendance log. OK, and goal number two will be similar to this by the end of the IEP, given direct or indirect instruction, student B will increase the overall lesson submission completion rate from 13 percent to 80 percent as measured by course logs." "Student C will check in with his teacher increasing from seventy-five percentage to 90 percent of the time as measured by teacher logs. And one more, by the end of the IEP, given direct or indirect instruction, student D will increase the rate of submissions from 30 percent age to eighty five percent as measured by the attendance logs." "I mean, some that I guess do affect it would be self-advocacy as far as just reaching out to teachers and asking for assistance,

			less in completion goals, just not being farther behind than because, as you know, ours is pretty open ended." "I'm attending live lessons once a week from a baseline of once a month, reaching out to their teachers once a week as opposed to like a baseline of zero." "So self-advocacy skills as his first goal, and it's after additional instruction and self-advocacy, he will reach out to his teachers when he needs help and attend live lessons two times weekly from a baseline of one time weekly as measured by student log on three out of four consecutive weeks." "Another one is improved social skills by using it's a rubric using webcam and also eye contact during Face-To-Face interactions, staying on topic, using appropriate topic discussions and responses and showing an interest in peer." "It's by the end of the IEP given coaching, Student A will increase his attendance rate from forty five percent to 90 percent as measured by the attendance log. And that was one of his organization, study skills and transition skills, OK. And then the next one was, the next one was by the end of the IEP, given coaching, Student B, we'll check in with this teacher increasing from 75 percent of the time to 90 percent of the time, as measured by teacher logs". "And so, we typically we see these goals given to specifically seniors who kind of have not necessarily attendance issues, but they need to increase their attendance in order to graduate, which kind of reads into the self-determination."

Assessment Instruction Goals	Curriculum – instructional practices/EBP	Lack of instructional focus on self-determination skills	"A lot of that is just through check ins." "We did like a fictional activity like we were going to do a science project. And I had these lists of tasks and we decided if they were things that had to be done or things that were just kind of fun that we could do or things that needed to be done but could be put off to later. I modeled how to think it through." "We do a lot of just going through and walking through a lesson together, walking through how to look at a teacher's message board or when there are open office hours, how to how to write an email." "It really depends. Now I meet with them all one on one, and we talk about it together one on one, it's more involvement in the parents as far as goals". "Students have to send me their weekly plans on Monday and they have to let me know, keep me posted on the accomplishments on Friday." "I make them go through their student desk with me. I show them how to submit documents. They do it. They let me know. I'll go back and check it, make sure that I can access the link that they're shared. And if it if it is perfect, we move on to the next class, do the same thing for all their classes."
Assessment Instruction Goals	Curriculum - Assessment	Formal self-determination assessments are not	"It's a lot of it is their grade book and review of their communication log."

		administered- informal assessments are utilized	"I look at their log a lot. We have to log everything that they do at our school. Anywhere they send text message, they send lists, and they attend or don't attend." "So, a lot of times what we do is we look at the assignments in the coursework that we're getting from the students, and then we've got data that shows their grades like the average grades for all of their classes. And how are they doing on quick checks? How are they doing on quizzes? How are they doing on tests?" "Yes, first thing that we use is the content teacher observation and the special education teacher observation." "Primarily, I look in the student logs, too, because, I mean, as the teachers record attendance, whether or not they attended or didn't attend, and I look at their web mails to see if they initiated a conversation with their teachers, that kind of stuff." "So, I have teacher observations like frequency data, but also, we use Google forms a lot, so their caretaker would need to be involved in filling out that as far as what they observe from home. I would say those are the main two ways of assessing those goals." "I use a couple free executive functioning skills like rating scales that I send home and have the student do a self-rating scale and the parent does one too." "I can gauge the students' progress fairly easily based solely off of my interactions with my kids, if I think that they're going to advocate for themselves because, you know, I have kids who

			are very shy who don't want to come in and meet with me. I have kids who would much rather just text me."
Engagement	Climate – student engagement	Engagement is mainly equated to attendance	"This year, we have incorporated our participation incentive. So, if students are in the lab lesson and they're actively participating, then their name is put in a drawing at the end of each quarter for a prize like a tangible prize that will mailed to their house. Yeah, that is helped with attendance and participation." "Well, the number one thing I do is just praise and not giving up, not being frustrated when I know they're frustrated and sometimes I am to just continue to encourage them and finding something positive. It may be hard to find a positive or the silver lining in a situation, but there is always a silver lining that you can find if you have the desire to dig deep enough." "So, I don't see engagement is the difficulty in an online school. It's a game to me personally. There is no change in teaching." "So, one of the things that I started doing in maybe mid last year in my classroom, like life lessons, so will do check ins like, OK, put up your green check if you're here. If they don't put up a green check to show me that they're there, will remove them from class. They can come right back in. But it's basically like, sorry, you're late for class at the door and you have to not to be let in kind of thing. So, doing that usually everybody will jump right back in. They might have stepped away for a second, maybe they were a little bit slow."

			"We also try to do a game review game like once a month to get the kids kind of cooperating together." "We've got a Google Slide activity for study skills, like what's the word I'm looking for - scavenger hunt kind of activity where I have the kids going to breakout rooms. They explore these different study strategies and then they come back, and they talk to me about what their group talked about, which ones they use the most often, what would be the most helpful for them." "And if somebody has maintained perfect attendance with me, I'll make them a goody bag and ship it to their house with, like more t shirts, sweatshirts, pins, a bag, sunglasses, whatever." "Our school also, too, pays kids to attend school, so if they get perfect attendance for a month, they get twenty-five-dollar checks. If they if they do, you know, if they may meet a certain goal on their EOC or their act or Satie's, they get checks, they get paid. Fifty dollars, like I've got to do is study really hard for a test and at least make the score. Yeah, I know, but hey, you have an opportunity to make like five hundred dollars a year here. Please, please, I'm begging you and sometimes you know, I'll do a little giveaway. Yeah, I know, but hey, you have an opportunity to make like five hundred dollars a year here. Please, please, I'm begging you and sometimes you know, I'll do a little giveaway." "So that and I would say as far as determined self-determination, a lot of times that ends up being individualized. So, for those kids, we typically just have a one on one

			scheduled time every week where they have to call or show up to lesson.”

APPENDIX L

TIMELINE OF ACTIVITIES

Table L.1 Timeline

Month	Activity	Data Analysis
Second week of August	Send out email and call for participation – send interview questions to additional researcher for review	Once received schedule interviews beginning second week of August and send informed consent
Second week of August	Schedule and conduct pilot interviews	Revise any questions needed based on pilot responses
August – October	Conduct first interviews – anticipated 9 total and plan to do one to two per week.	Transcribe each interview after completion and begin coding (interview during week and transcribe/code on weekends/weeknights)
October – December	Conduct second interviews - anticipated 9 total and plan to do one to two per week.	Transcribe each interview after completion and begin coding (interview during week and transcribe/code on weekends/weeknights)
December – March		Complete data analysis and send to reviewer; write up findings and remaining chapters and submit to committee by mid-March

APPENDIX M

PARTICIPANT DEMOGRAPHICS

Table M.1 Participant Demographics

Participant Number	Educational Degrees	Years Teaching	Years Teaching in an Online School	Years in a brick and mortar school
One	Bachelors Master of Arts in Teaching (MAT)	7	5	2
Two	Bachelors	9	5	4
Three	Bachelors	15	4	11
Four	Bachelors	16	3	13
Five	Bachelors	15	2	13
Six	Bachelors Masters	18	6	12
Seven	Bachelors Masters	7	5	2
Eight	Bachelors Masters	21	13	8
Nine	Bachelors Masters	7	6	1

APPENDIX N

SAMPLE IEP GOALS

Table N.1 Sample IEP Goals

Participant	Student IEP Goal Sample
One	By the end of the IEP, ____will have no more than five overdue lessons, that's evidenced by a review of their grade book. By the end of the IEP, ____ will attend 100% of their scheduled sessions.
Two	By the end of the IEP, after additional instruction in organization and study skills, the student will attend two live lessons per week from a baseline of one live lesson per week on three out of four consecutive weeks as measured by the student's log. By the end of the IEP after additional instruction is self-advocacy skills, the student will reach out to their gen ed teacher before reaching out to their special education teacher.
Three	By the end of the IEP, given direct instruction or indirect instruction student A will increase the daily attendance rate for all three classes from fifty nine percent to eighty five percent as measured by the attendance log. By the end of the IEP given coaching, Student A will increase his attendance rate from 50 percent to 90 percent as measured by the attendance log.
Five	By the end of the IEP, given coaching, Student C will increase his daily attendance rate for all three classes from 59 percent to 85 percent, as measured by the attendance logs. By the end of the IEP given coaching, Student A will increase his attendance rate from forty five percent to 90 percent as measured by the attendance log.

Six	By the end of the IEP ___ will attend live lessons once a week from a baseline of once a month. By the end of the IEP ___ will reach out to their teachers once a week as opposed to like a baseline of zero.
Seven	By the end of the IEP, given direct or indirect instruction, student B will increase the overall lesson submission completion rate from 13 percent to 80 percent as measured by course logs. By the end of the IEP, given direct or indirect instruction, student D will increase the rate of submissions from 30 percent age to eighty five percent as measured by the attendance logs.
Eight	By the end of the IEP, the student will be able to create self-monitoring checklists and schedules for daily living and school activities, as measured by at least two self-monitoring checklists or schedules created per year and submitted to a special education teacher. The student will demonstrate improved social skills by using when using a webcam by maintaining eye contact during Face-To-Face interactions, staying on topic, using appropriate topic discussions and responses, and showing an interest in peer.
Nine	By the end of the IEP, given direct or indirect instruction, student D will increase the rate of submissions from 30 percent age to eighty five percent as measured by the attendance logs. By the end of the IEP given direct or indirect instruction, student C will check in with his teacher increasing from seventy-five percentage to 90 percent of the time as measured by teacher logs.