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DEAF EDUCATION ELEMENTARY TEACHERS' PERCEPTIONS
ON SELF-DETERMINATION:
A MIXED METHODS STUDY

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

BY THE COMMITTEE CONSISTING OF

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Dedication

To my family and all D/deaf and hard of hearing students.

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I first want to acknowledge my Father in Heaven. Without His guidance and leading me on a mission to the Deaf, I do not know if I would be following the path I am on now. He helped me find something that I am passionate about and I am grateful for His involvement.

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Abstract

Self-determination is a best practice in special education and is taught to younger students with a disability to provide a foundation for academic success; yet these practices are dependent on teacher implementation. It is up to Deaf education elementary teachers to utilize self-determination and its components within their classrooms to support deaf and hard of hearing (DHH) students. The purpose of this study is to establish a case for instructing elementary teachers of DHH students concerning concepts related to self-determination that will increase the academic and postsecondary transition outcomes of their students. Determining the knowledge Deaf education elementary teachers (grades 1-6), have in relation to self-determination, its implementation in the classroom, and the barriers teachers face will be discussed. A mixed methods approach was utilized. One hundred and seventy-nine Deaf education elementary teachers participated in the survey and six survey participants were interviewed. Data analysis indicated teachers perceived self-determination important and advocated to start self-determination in the elementary grades, yet implementation of self-determination meager. Teachers also rated self-awareness and self-knowledge, and self-management and self-regulation as the most important self-determination components for DHH students.

Chapter 1

Introduction

Self-determination has been linked with improved postsecondary outcomes for students with a disability for some time now (Algozzine, Browder, Karnoven, Test, & Wood, 2001). It influences areas such as heightened academic outcomes (Mazzotti et al., 2013; Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012; Konrad, Fowler, Walker, Test, & Wood, 2007), elevated transition knowledge and skills (Test et al., 2009), employment (Shogren, Lee, & Panko, 2017), and greater community access (Shogren, Palmer, Wehmeyer, Rifenbark, & Little, 2015). Self-determination is often closely associated with transition services and postsecondary outcomes, as it is a common component in many transition plans for students with a disability. Within this transition scope and sequence, it is a best practice (Shogren, 2013) that support students with a disability to achieve their postsecondary goals.

Wolf Wolfensberger's 1972book entitled "The Right To Self-Determination" included a chapter by Bengt Nirje focused on self-determination and its relation to individuals with disabilities. Deci and Chandler (1986) also indicated importance of self-determination for students with a learning disability; this and the Nirje chapter are the two references connecting self-determination and a student with a disability in the literature (Shogren et al. 2015). The next step in furthering self-determination with students in special education came from the U.S. Office of Special Education and Rehabilitation Services (OSERS) in the form of funding grants to support self-determination (Ward, 2005). With this funding in 1989, the University of Minnesota convened the National Conference on Self-Determination (University of Minnesota, 1989). Many attendees had a disability and spoke of the importance of self-determination in their

lives. From the conference, 29 recommendations were proposed to increase self-determination with individuals with a disability (University of Minnesota, 1989).

The U.S. Congress in 1990 reauthorized the Education for All Handicapped Children Act as the Individuals with Disabilities Education Act (IDEA), which mandated transition planning for this population (Yell, 2016). This act was to serve three roles in support of the student with a disability, (a) include long-range planning, (b) provide transition pathways to post-school settings, and (c) prepare students in becoming adults (Prince, Plotner, & Yell, 2014). To support these three areas, researchers implemented self-determination practices into transition and an increased number of research studies ensued. Researchers such as Agran, Algozzine, Martin, Mazzotti, Shogren, Test, and Wehmeyer have brought self-determination to its present state.

Deaf and hard of hearing (DHH) students have always been included in IDEA and the education of children with disabilities. Therefore, all transition mandates apply to this population. When the term DHH is used, this incorporates students across the auditory spectrum and includes all communication modes available to these students.

Problem Statement

Several problems plague DHH students when trying to enter postsecondary schooling and employment. The average DHH student graduates from high school with a sixth-grade computation ability and a fifth-grade problem solving ability (Traxler, 2000). These students also understand math about three years below the average hearing peer's skill set (Nunes, 2004), confront barriers to accessing communications through websites (Bruyere, 2008), graduates high school with an average of a fourth-grade reading level (Scheetz, 2012), encounters employment discrimination (Ladd & Lane, 2013), and faces a stigmatism of being deaf (Kermit, 2018; Battat et al., 1998). Luft (2014) proposes long-term transition planning to support DHH students. In

conjunction with transition planning, the direct instruction of self-determination components could mitigate these problems.

For over 20 years Pepnet 2, a federally funded program, assisted DHH individuals with their education, career, and lifetime choices (CSUN, n.d.). In 2011, the U.S. Department of Education Office of Special Education Programs (OSEP) provided a five-year grant to support DHH students in their transition needs, which Pepnet 2 secured. It was housed at the California State University at Northridge under the Cooperative Agreement Number #H326D110003 (Pepnet, 2017). During this time, Pepnet 2 established state teams to support their local DHH students in transition, conducted national Building State Capacity summits, prepared free online modules, and published articles on how to support deaf youth in their transition needs, including self-determination. One such online module designed was Map It, specifically targeting the unique needs of DHH students in relation to self-determination (Pepnet, 2014). During the next funding cycle the National Deaf Center (NDC) received a grant to support DHH students with transition starting in 2017. The NDC has taken a more research focus, providing reports on employment, educational attainment, and individual state demographics pertaining to DHH individuals. The following information is from the NDC and its research base.

Several of the NDC's reports show key differences between hearing and DHH individuals which relate to self-determination and transition experiences. In 2017, there was a 22.5% employment gap among DHH and hearing people and a significant difference in unemployment rates (Garberoglio, Palmer, Cawthon, & Sales, 2019b). Between 2008 and 2017, employment rates rose for hearing individuals but not for the DHH. Also, DHH individuals were more likely to work part-time 26.6%, while 22.6% of hearing individuals did. When looking at fields of employment, the most common field for hearing individuals was the medical industry

while the most common field for DHH individuals was manufacturing (Garberoglio et al., 2019b). Looking at the top occupations between the groups, the third most frequent occupation for DHH individuals was janitors and building cleaners, whereas this did not make the list for hearing individuals. These discrepancies show a concerning outlook that DHH individuals are overqualified for their positions and do not receive promotional opportunities from employers.

A positive factor indicated for DHH working individuals was that with greater educational attainment, their annual earnings increased (Garberoglio et al., 2019b). Noteworthy reasons for DHH individuals gaining increased education relates to legislation and improved accessibility to educational facilities, yet their rates does not equal the rates of increased education for hearing individuals, whose rate is 5.7% greater (Garberoglio, Palmer, Cawthon, & Sales, 2019a). Comparing attainment of educational degrees between these groups, the greatest gaps are 15.6% for an associate's degree, 15.2% for a bachelor's degree, and 12.7% for some college, with hearing individuals attaining more in each category. Obtaining a high school diploma or GED only shows a 5.7% gap between the groups. It seems that this initial leap from secondary to post-secondary schooling is a concern for DHH individuals, which could be mitigated by implementing transition education and the use of self-determination skill sets in the DHH student's classroom.

Garberoglio, Palmer, Cawthon, and Sales (2019a) found within the DHH community, DHH individuals who had an additional disability fared even worse in educational attainment. Between receiving a high school diploma and a bachelor's degree, those DHH individuals with an additional disability had at least a 10% decrease in attainment compared to those individuals who were only DHH. In terms of graduate degrees, DHH individuals with additional disabilities completed degrees at least half the percentage of their DHH peers. The co-occurrence of a

hearing loss and an additional disability creates a greater gap in learning and postsecondary success compared to a hearing individual with two or more disabilities or a hearing loss alone (Garberoglio, Palmer, & Cawthon, 2019).

In the academic year 2015-2016, 18.2% of DHH students completed their studies compared to 21.5% of hearing students. Continued analysis of the data shows DHH individuals completing college work across age groups did not follow a similar trend as their hearing peers (Garberoglio et al., 2019a). I believe this gives hope to the deaf community, in that there is not a better age to obtain a degree, meaning DHH individuals can learn self-determination skill sets later in life and still benefit from this knowledge by applying it to obtaining more education.

Looking at financial aid, on average DHH students borrowed the same cumulative amount for undergraduate school loans as did their hearing peers, yet they received over $1,000 less in financial aid in the 2015-2016 school year (Garberoglio, Palmer, & Cawthon, 2019). Thirty-three percent of DHH students never applied for federal aid and of that percentage, over 40% did not provide a reason for not applying. Fewer DHH students received work-study jobs at their institutions and between 0.6%-3.8% reported accessing vocational rehabilitation funds to support their schooling (Garberoglio, Palmer, & Cawthon, 2019). This data might indicate DHH students do not self-advocate for more information or are not aware of opportunities around them such as the Free Application for Federal Student Aid (FAFSA), federal work study programs, or vocational rehabilitation funding (Garberoglio, Palmer, & Cawthon, 2019).

Garberoglio, Palmer, and Cawthon (2019) estimated that of the current total college population, 1.3% have a hearing loss. When looking at 2017 enrollment in postsecondary institutions data, 5% of DHH individuals attended educational settings compared to 11% of hearing individuals (Garberoglio et al., 2019a). With race and ethnicity in mind, DHH

individuals were well below their hearing peers in current attendance. The postsecondary attendance of the Hispanic/Latinx DHH population was the closest to that of their Hispanic/Latinx hearing peers, with a difference of 3.9% in postsecondary education (Garberoglio, Palmer, & Cawthon, 2019).

Currently, 53.5% of the DHH student postsecondary population are males (Garberoglio, Palmer, & Cawthon, 2019), yet more DHH women complete their schooling compared to their DHH male counterparts (Garberoglio et al., 2019a). Additionally, more DHH women are enrolled in certificate and bachelor's degree programs than are males. While nearly half of hearing students are enrolled in bachelor's degree programs, the majority of the DHH student population is enrolled in associate degree programs (Garberoglio, Palmer, & Cawthon, 2019). DHH males are primarily pursuing associate's degrees, and they are not graduating at the same rate as DHH women or their hearing peers.

The population of DHH individuals attending college, it is less diverse in terms of race and ethnicity compared to their hearing peers, with the majority of DHH students 55.8% identifying as white (Garberoglio, Palmer, & Cawthon, 2019). The next highest race and ethnicity attending college for the DHH population is Latinx (17.9%), followed by Black (14.3%), Asian (6.2%), and multiracial (2.9%). These DHH students also are older when compared to hearing peers, with an average age of 31 versus 25.7 across all postsecondary settings. Another aspect of diversity reflected in the DHH student population is that first-generation deaf students comprise 60.4% of the population (Garberoglio, Palmer, & Cawthon, 2019). This data informs us that the average DHH student will be a white male, first-generation college student, older than his hearing peers, and attending an associate's program.

A major concern expressed by Garberoglio et al. (2019), is that the DHH student population even though attending postsecondary schooling, may not have the confidence to find gainful employment after graduation. This coupled with the inequalities shown from the NDC reports between DHH individuals and their hearing peers describes a bleak future for DHH individuals. Incorporating self-determination in the elementary programs will give DHH students additional time to develop the skill sets needed to promote healthier post-school outcomes.

Significance of the Study

I believe there are two reasons why exploring Deaf education elementary teachers' perceptions on self-determination are important. First, from a historical standpoint we can see over time the curriculum in grades trickle down and begin at earlier ages. For example, the curriculum from one grade migrating to a younger grade is shown from first to kindergarten. Bassok, Latham, and Rorem (2016) and Graue (2010) have responded to this issue. Graue (2010) comments that kindergarten supported children's interests and skills in the past, yet now four to six times as much time is specialized on literacy and numeracy instead of play. With this in mind, current kindergarten teachers complain that their students lack social skills and basic knowledge of language even though they have received more formal schooling (Graue, 2010). Bassok et al. (2016) found kindergarten classrooms from the late 2000's has become very comparable to the 1st grade classrooms of the 1990's with a trend focused on assessment and less on art, music, and science. These kindergarten teachers from the late 2000's are twice as likely as their 1990's peers to expect children to read by the end of the academic year (Bassok, Latham, & Rorem, 2016). Within this time span of 10-15 years, kindergarten has become the new 1st grade. It might only be a matter of time before self-determination practices are required in the classroom and started at younger ages.

Transition practices incorporating self-determination are also moving from secondary schooling into the middle school grades. Benefits of early transition planning continue to be confirmed in research (Cimera, Burgess, & Bedesem, 2014; Halpern, 1994; Neubert & Leconte, 2013; Sitlington, Neubert, & Leconte, 1997) with the National Technical Assistance Center on Transition emphasizing the need to focus transition research with middle school aged students (Chang & Rusher, 2018). If this follows the 1st grade to kindergarten trend, it is possible that transition and self-determination practices will be standard by the year 2040 in middle school.

Second, self-determination is becoming more mainstream, and studies are showing that it is not only beneficial for students with a disability but general education students as well. Exploring the foundational knowledge of Deaf education elementary teachers' perceptions on self-determination will facilitate improved implementation of self-determination practices at these early grade levels.

Self-determination is a significant topic is that current research shows benefits for all students learning these skill sets (Raley, Shogren, & McDonald, 2018; Shogren et al., 2017). Burke et al. (2018) found from a meta-analysis on promoting self-determination, interventions supporting self-determination can be effective across grade levels, disability labels, and settings. This would expand statements by Raley, Shogren, and McDonald (2018) about a current expectation for students to develop self-determination skills incidentally instead of specific instruction on the skill sets. General education teachers can partner with special education teachers to support all students in a mainstream classroom in learning self-determination (Shogren, Wehmeyer, & Lane, 2016) and implement instruction at all tiers of a multitiered system (Raley et al., 2018). A preliminary study conducted by Raley, Shogren, and McDonald (in press) on goal attainment among students with and without disabilities found both groups

showing slight gains in self-determination. Teachers and students involved in the study responded positively to direct instruction and increased engagement. With over 75% of the DHH student population in PK-12 mainstreamed into the general education classroom and half of those students spending the majority of the day in a general education classroom, this would be an optimistic step forward (Oxford University Press, 2019).

Research Purpose

The purpose of this research is to create a foundational knowledge base specifically targeting Deaf education elementary teachers' perceptions on self-determination. A dearth of research exists related to self-determination and elementary teachers. The few studies found focus on Deaf Education as a whole in grades PK-12 and not individual content areas.

With implementation of self-determination components into the curriculum of DHH students in the elementary classrooms, students will be able to refine these skills which are needed to become successful during their life. Starting during this young age provides for the building of skills incrementally instead of focusing on them for only a short two to four-year period IDEA mandates or hoping skill acquisition happens incidentally. The increasing of self-determination skills will also allow students to directly and meaningfully be involved in the choices available in IEP meetings and life. Each student will have a voice and can share what is important to them.

Research Questions

This study will attempt to answer the following research questions:

1. To what extent do Deaf education elementary teachers perceive self-determination practices as important to teach to DHH students?

2. To what extent do Deaf education elementary teachers act on their perceptions of self-determination by teaching the components of self-determination?

3. Are there one or more self-determination components perceived to be more important by Deaf education elementary teachers and why?

4. What are the reasons Deaf education elementary teachers do not teach self-determination and its components?

Chapter 2

Review of Literature

The purpose of this study is to establish a case for instructing elementary teachers of students who are deaf or hard of hearing (DHH) concepts related to self-determination that will increase the postsecondary transition outcomes of their students. First, special education and the need for special education will be described. Second, the characteristics of the DHH population and the uniqueness relative to education will be explained. Third, self-determination, with its contributing components, will be defined and discussed. Last, connections between self-determination and the increase in postsecondary outcomes for transition will be shown. Unless stated, the literature collected and reviewed involved students with a disability and not DHH students specifically.

Prior to 1950 rarely were students with a disability educated in the United States, due to discrimination, thus initiating the need for special education. Students with a disability were excluded from attending school and students having a disability were misclassified (Turnbull, Turnbull, & Wehmeyer, 2010). Early legislation such as the Education of Mentally Retarded Children Act of 1958, the Training of Professional Personnel Act of 1959, the Elementary and Secondary Education Act of 1965, and the Education of the Handicapped Act of 1970 supported students with disabilities and paved the way for an act that is still providing needed legislation (Yell, 2016). This act is the Education for All Handicapped Children Act of 1975, which established federal financial incentives to states and local school districts to provide appropriate educational opportunities to students with disabilities and defined the rights students had under this new law. Amendments and reauthorization of this law occurred in 1986, 1990, 1997, and 2004. In 1990 the name of the act was changed to the Individuals with Disabilities Education Act

(IDEA). Turnbull, Turnbull, and Wehmeyer (2010) explain there are six principles that govern IDEA: (a) zero-rejection, (b) nondiscriminatory evaluation, (c) appropriate education, (d) least restrictive environment, (e) procedural due process, and (f) parent and student participation.

The zero-rejection principle prohibits schools from denying a student, no matter the severity of disability, the right to a free and appropriate education. Once students are at school, they can receive a nondiscriminatory evaluation which will decide if they have a disability and the services needed to support them. These services are planned by the Individualized Education Program (IEP) team and are designed to deliver an appropriate education for the student.

A main concern for the IEP team in determining an appropriate education is the environment in which the student needs to achieve their education. IDEA encourages students with disabilities to be with their nondisabled peers as much as possible and considers this to be the least restrictive environment. This inclusion with nondisabled peers theoretically provides access to the general curriculum and the same high standards as their peers without disabilities. If the decisions created during the IEP meeting are not satisfactory or are not implemented with fidelity, procedural due process is available to the student and parents. IDEA outlines the reconciliation process between the school and family, and if needed, it can progress to state and federal court.

Another principle established by IDEA is the right to both the parents and student to have a voice in the education process. Students and parents are members of the IEP team and may advocate for what they think is best for the student's success. IDEA also stipulates that at the age of 18, parental rights will be transferred to the student, unless under state law the student is not able to accept this responsibility. These principles safeguard the student with disabilities and should provide a meaningful education.

For the past 45 years, these laws and procedures have anchored the special education system and brought improvements to students with disabilities; yet, students are not reaching the same standards as their nondisabled peers. Findings from the National Longitudinal Transition Study 2 (NLTS2) by Newman et al. (2011) highlighted several points of concern in the discrepancy between post-school outcomes of students with a disability and their general education peers in relation to schooling, employment, and independent living. Data related to students with a disability from the 13 federal disability categories were collected for the NLTS-2 over a 10-year period from, 2001 to 2009. Surveys were administered to parents and/or students either by phone or mail. Questions were from the following domains: (a) postsecondary education: (b) employment: (c) productive engagement related to school, work, or preparation for work: (d) residential independence; and (e) social and community involvement. Students ranged in age from 13 to 16 when data collection began.

Students with a disability were less likely to enroll in a postsecondary program and when they did, it was typically in a two-year college, vocational, technical, or business school and not a four-year university. Overall, completion rates for students with a disability in postsecondary institutions were lower than those of their peers, but completion rates were better for two-year colleges. The average hourly wage of students with disabilities was $10.40 compared to $11.40 for their non-disabled peers. When investigating independent living, students with disabilities were more likely to not live independently. They had lower rates of marriage and were less likely to have a savings account or credit card. These findings helped educators and policy makers understand the vast difference between a student with a disability and the general education population once high school was completed. Even though legislation has implemented changes

through special education, it was supporting students with a disability to achieve outcomes at the same levels of the general population.

To enhance student outcomes and performance, the field of special education has turned to identifying, and disseminating practices with evidence of effectiveness. To distinguish these practices from others the field has used the term "evidence-based practices". Often though evidence-based practices are defined differently between organizations. The three main organizations with evidence-based practices in special education for transition are NTACT, the Council for Exceptional Children (CEC), and the What Works Clearinghouse (WWC). The defining feature of evidence-based practices, compared to other practices, is a magnitude of evidence of experimental studies that used a rigorous methodology to address whether the intervention improved student outcomes (Odom et al., 2005). Different methodologies answer different questions, and it is paramount to understand how to correctly apply various methodologies to gain the proper data (Cook, Tankersley, Cook, & Landrum, 2008; Odom et al. 2005) which will then contribute to the evidence-based practice knowledge base. Typically, the knowledge base consists of experimental methodologies, group studies or single-case research. Quality indicators for each methodology were created for special education; these standards were published in a special issue of *Exceptional Children*: Gersten et al. (2004) for experimental and group experimental design; Horner et al. (2004) for single-subject design; Thompson, Diamond, McWilliams, Snyder, and Snyder (2004) for correlational design; and Brantlinger, Jimenez, Klingner, Pugach, and Richardson, (2004) for qualitative design. Though NTACT, CEC, and WWC publish their own unique standards for evidence-based practices, the intent of evaluating the internal validity of methodology to enhance the validity in practice selection is present in each organization.

Quality indicators or standards set by professional organizations can help researchers apply appropriate methodology to their studies (Odom et al., 2005) and inform teachers in selecting practices with the highest level of evidence of effectiveness. Test et al. (2009) reviewed over 1,300 articles to compile evidence-based research practices for special education that can be traced to experimental research. Created from this study were five categories: student-focused planning, student development, family involvement, program structures, and interagency collaboration that would relate to evidence-based practices. Mazzotti, Rowe, Cameto, Test, and Morningstar (2013) extended the previous work and created predictors of post-school success in special education based on correlational research found with special education students. An important distinction between the two studies, Test et al. (2009) reviewed experimental research for evidence-based practices, which can show functional relationships, while Mazzotti et al. (2013) reviewed correlational research, which showed evidence for a strong correlation with certain outcomes. Thus Mazzottie et al. (2013) could not distinguish evidence-based practices, but instead developed predictors. Since then, NTACT (n.d.) has compiled additional predictors. These predictors correlate with three student outcomes: education, employment, or independent living. Application of these predictors with a student who has a disability has increased chances of success in these settings.

Table 1

Evidence-Based Predictors by Post-school Outcome Area

Predictors	Outcomes		
	Education	Employment	Independent Living Skills
Career awareness	X	X	
Community experiences		X	
Exit exam requirements/ High school diploma status		X	
Goal setting	X	X	
Inclusion in general education	X	X	X
Interagency collaboration	X	X	
Occupational Courses	X	X	
Paid employment/work experience	X	X	X
Parent Expectations	X	X	X
Parental Involvement		X	
Program of Study		X	
Self-advocacy/Self-determination	X	X	
Self-care/Independent living	X	X	X
Social skills	X	X	
Student Support	X	X	X
Transition Program	X	X	
Travel skills		X	
Vocational Education	X	X	
Work study		X	
Youth autonomy/Decision-making	X	X	

The Council for Exceptional Children focuses on experimental group comparison and single-subject experimental designs and requires the study to incorporate one of these methodologies to be classified as an evidence-based practice (Council for Exceptional Children, 2014). The other requirement to become an evidence-based practice is that the study must be methodologically sound, meaning all quality indicators are met (Council for Exceptional Children, 2014).

The What Works Clearinghouse is a federal program under the U.S. Department of Education's Institute of Education Sciences and is charged with vetting rigorous and relevant research (What Works Clearinghouse, 2020). The three methodologies reviewed are (a) randomized controlled trials and quasi-experimental designs, (b) regression discontinuity designs, and (c) single-case design studies. WWC (2020) utilizes standards for reviewing methodologies instead of quality checklists or indicators.

If possible, NTACT, CEC, and WWC would have researchers utilize experimental designs to show a causal relationship in educational research, yet this is difficult because of the stringent requirements of the design. Often educational researchers design correlational studies which cannot confirm causation. This is why the term predictor is used by NTACT in relation to the outcomes. It is then with multiple studies finding the same correlations, the term evidence-based practice is confirmed.

Deaf and Hard of Hearing Students

Students with a disability qualify for special education services under 13 different categories (Table 2). Deafness and hearing impairment are two of the 13 categories established by the federal government, together comprising 1.2% of the special education K-12 population (U.S. Department of Education, 2011) and is considered a low-incidence disability (Scheetz,

2012) due to the relatively low numbers of students affected by a hearing loss. Deafness is defined as a severe hearing impairment that impedes the processing of linguistic information and educational achievement through aural means with or without amplification usage (U.S. Department of Education, 2011). A hearing impairment is identified as an impairment that can be permanent or fluctuating which disrupts a student's educational performance and does not qualify the student for the category of deafness (IDEA, 2004). A hearing test conducted by an audiologist is measured in decibels (dB) and has six categories: (a) normal, 0-25 dB; (b) mild, 26-40 dB; (c) moderate, 41-55 dB; (d) moderate-severe, 56-75 dB; (e) severe, 76-90 dB; and (f) profound, 91+ dB. Using this auditory-focused lens to label and categorize people with a hearing loss is called the medical, pathological, or traditional model of deafness (Woodward & Allen, 1993). To use this label and ideology, it imparts a powerful stigmatism that these individuals have a deficit or deficiency and are not equal to those who can hear, thus their social and cultural lives endure consequences of being abnormal (Padden & Humphries, 1988). From this perspective, those with a hearing loss need to be "fixed" and must be helped to "fit in" with mainstream culture.

Table 2

IDEA 13 Disability Categories

Disability Category
Autism
Deaf-blindness
Deafness
Emotional disturbance
Hearing impairment
Intellectual disabilities
Multiple disability
Orthopedic impairment
Other health impairment
Specific learning disability
Speech or language impairment

In contrast to the medical model, a sociocultural model exists, despite the low numbers of individuals with a hearing loss. It is indicated as a capitalized "Deaf" which includes a vibrant culture with varying subgroups, traditions, art, literature, common language, and a "community bound together by historical successes and challenges" (Marschark, 2007, p. 8). This perspective disallows the need to be "fixed" or assimilated into mainstream culture; rather, the Deaf individual is accepted for who they are and recognized as having a gain rather than a deficit. Deaf gain is a term to accentuate this positive perspective of deafness and is defined as knowing the world not through hearing means but visually and spatially (Leigh, Andrews, & Harris, 2018). Less than 10% of DHH children have a DHH parent (Scheetz, 2012). Thus, a shared connection of communication and culture does not become immediate at birth with the family or with the Deaf community. The DHH individual must experience Deafhood, their personal journey to understand themselves as a Deaf person (Leigh, Andrews, & Harris, 2018) and encounter the Deaf community that will accept them for who they are, not as a person with a deficit.

The variations among demographics within the Deaf community and the degree of hearing loss contribute to understanding how DHH students learn. Ferrell, Bruce, and Luckner (2014) list these factors as

> (a) degree of hearing loss; (b) type of hearing loss; (c) when hearing loss occurred; (d) when hearing loss was identified; (e) whether early intervention services were provided; (f) the quality and quantity of any early intervention services: (g) use/benefits from hearing assistive technology (AT; i.e., hearing aids, cochlear implants, frequency

modulations [FM] systems, or communication boards); (h) home language of the family (i.e., American Sign Language [ASL], spoken English, and other spoken languages); (i) family attitude toward hearing loss; (j) any additional disabilities; (k) quality of home intervention and preschool services; (l) cultural identity (i.e., deaf, hearing, or hard of hearing and the interaction with other aspects such as race, ethnicity, language, and religion); (m) primary mode of communication preferred (i.e., spoken English, ASL, contact signing/Pidgin Sign English, Signing Exact English, or Cued Speech); and (n) where educational services are provided. (p. 10)

In addition, these factors influence how to approach and provide self-determination and transition education to DHH students (Luft, 2015). Students who are DHH; need long term transition planning established over a greater time span to meet their postsecondary goals (Luft, 2014). Current research encourages beginning transition activities, assessments, and goals earlier for DHH students than in the high school years. Luft (2015) proposes a postsecondary best practice approach would start DHH transition planning and services once they begin middle school.

Newman et al. (2011) found postsecondary DHH students differed in number of credits earned during postsecondary schooling, employment at the time of the interview, employment since high school, and employment accommodations in relation to other disability categories. Luft (2017) found DHH students remain beneath levels of their capacity and perform at much lower levels compared to the general education population, even among the lowest performing of students with disabilities. This gives credence to the need to begin self-determination and transition practices earlier than mandated by IDEA in order to support DHH students and their postsecondary goals.

Self-Determination

People of all ages, with or without disabilities, make continuous choices every day of their lives. Some decisions are small, like what to wear, whereas other decisions can be turning points in their lives, such as a career or marriage. The ability to process facts and determine what we as individuals want is self-determination. Wehmeyer (2004) defines 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" (p. 351). Distinct behaviors are associated with self-determination and common components include (a) choice-making, (b) decision-making, (c) problem-solving, (d) goal setting and attainment, (e) self-advocacy and leadership skills, (f) self-management and self-regulation skills, (g) self-awareness and self-knowledge, and (h) self-efficacy (Algozzine, Browder, Karnoven, Test, & Wood, 2001). The culmination of these components create self-determination and help all individuals lead the life of their choosing.

A meta-analysis conducted by Algozzine, Browder, Karnoven, Test, and Wood (2001) found the literature provided merit to the continued research of self-determination and the specific components of self-advocacy, goal setting and attainment, self-awareness, problem-solving skills, and decision-making. Since then, Test et al., (2009) identified teaching self-determination strategies as a best practice for special education and transition services. Shogren et al. (2015) and Mazzotti et al. (2013) found when students who have a disability acquire self-determination, postsecondary outcomes are more often attained than those who do not display self-determination. This is also verified with self-advocacy/self-determination, goal setting, and youth autonomy/decision-making as predictors of education and employment outcome success (NTACT, n.d.). With continued research showing the positive post-school outcomes of students

with disabilities, teachers need to implement teaching self-determination and the accompanying components as a centerpiece of their daily instruction.

Wehmeyer and Palmer (2000) explained self-determination exists throughout the life span and is supported when opportunities arise that allow for the expression of it. Yet, teachers and families can deny students these opportunities to express self-determination by taking control of the classroom and home life, thus limiting their self-expression. In the Lindstrom et al. (2007) study of school staff, young adults with disabilities, parents, employers, and vocational rehabilitation (VR) counselors, it was found the most important recommendation for school staff to improve students' post-school outcomes was to carefully listen to students. This idea is emphasized by a student, "just take the time to really, really listen to kids. Listen to what they think and what they want. Because that is what is going to determine their success more than you telling them what you think they should do" (p. 10). This was the number one recommendation from the young adults, parents, and VR counselors. Similarly, student interviews conducted by Garay (2003) found DHH students at a secondary institution preferred taking charge of their life decisions and advocating for their needs. They felt their voice and needs should be heard (Garay, 2003), yet the adults in students' lives exerted control and did not allow the DHH student to realize self-determination opportunities.

A study by Lipkowitz and Mithaug (2003) fournd that DHH students exhibited lower self-determination scores when compared to students who are blind or visually impaired. Sebald (2013) surveyed 76 teachers of DHH students relating to the importance of self-determination skills and found teachers thought the skills important in supporting the DHH student. However, student implementation of the self-determination skill sets had the smallest percentage total compared to direct instruction of the skill sets and teachers' ratings of importance. This mirrors

what Agran, Snow, and Swaner (1999); Carter et al. (2015); Cho, Wehmeyer, and Kingston (2011); and Mason, Field, and Sawilowsky (2004) found within the special education teacher population; self-determination is highly thought of, but consistent instruction is lacking. For this reason, Campbell-Whately, (2008) and Martin & Williams-Diehm, (2013) advocate for direct instruction of self-determination strategies in the classroom.

Additional reasons for direct instruction of self-determination not being implemented are found in the literature. Teachers of students with disabilities feel ill equipped to teach self-determination (Mason, Field, & Sawilowsky, 2004). Another study reported that over 40% of special education teachers surveyed felt insufficiently prepared to incorporate self-determination in their classrooms (Wehmeyer & Schwartz, 1998). Professional development could provide this needed support structure to help self-determination reach more teachers and students, yet teachers state professional development in self-determination is not readily available (Reynolds, 2019). Browder, Wood, Test, Karnoven, and Algozzine, (2001) explain that professional development in self-determination can improve teachers' instruction, by supplying conceptual resources and intervention resources. Conceptual resources allow the teacher to gain an understanding of self-determination, while intervention resources instruct the teacher to promote and implement self-determination skills within a given environment (Browder, Wood, Test, Karnoven, & Algozzine, 2001). Both types of professional development are needed for teachers to successfully teach students to increase self-determination skill sets. Mason et al. (2004) proposed professional development for teachers because instruction of self-determination is "unsystematic and informal." Even teachers who are unsure of implementing self-determination are interested in pursuing instruction through professional development to support their students (Mason et al., 2004).

Another barrier to teaching self-determination is related to administration. Administrative support at the school and district level can stymie progress teachers make with teaching self-determination. Karnoven, Test, Wood, Browder, and Algozzine, (2004) found the lack of support for teaching self-determination common across school sites. Lack of support may result from a lack of funding for curricula or no approval for time spent on the topic. General education teachers who have students with a disability in the classroom can also impact self-determination. With the emphasis of IDEA pushing for the inclusion of students with disabilities in the general education, those teachers servicing them must "understand and value self-determination activities" (Mason et al., 2004). The progress gained from direct instruction by special education teachers in self-determination cannot flourish if students are not allowed to implement these skills in their general education classrooms.

Students' self-determination is correlated with the student's knowledge about transition, how they were instructed in self-determination, and self-efficacy, all of which can be supported and taught by teachers (Lee et al., 2012) and have been shown to be effective across disability categories (Algozzine et al, 2001; Karnoven et al., 2004). However, teachers need to have the resources to appropriately guide students. Curriculums and strategies offered by researchers are often focused on one component of self-determination and do not offer a cohesive approach linking the components one to another (Algozzine et al., 2001), thus making it harder for students to generalize the skill sets together in everyday activities. To help in this area, Cobb, Lehman, Newman-Gronchar, and Alwell (2009) suggested from a metasynthesis of self-determination reviews that intertwining the components together "best achieve or maximize" instruction for students. A way to facilitate this is to use triangulation: combining postsecondary goals with industry standards and state content standards (Peterson et al., 2013); and gap

analysis: a way to calculate the discrepancy of the triangulated goal and student performance (Gothberg, Peterson, Peak, & Sedaghast, 2015) within IEP and transition goals, including self-determination.

Self-Determination in the Elementary Setting

Since the early 1990's researchers have supported the inclusion of self-determination skills instruction with elementary age students with disabilities. Brown and Cohen (1996) emphasize the critical nature of teaching self-determination to young children and report a dearth of literature on the subject. Nearly 20 years later, Carter et al. (2015) reported the growth of empirical data on self-determination and the positive outcomes it has for students with a disability yet note the effort of schools implementing self-determination instruction is lacking. One positive outcome Palmer and Wehmeyer (2003) found was that when using a curriculum for self-determination, students as young as five-years old were able to set goals, a component of self-determination, with teacher scaffolding.

To promote self-determination with young children, a supportive social and physical environment provided by parents and teachers is ideal (Erwin et al., 2009). Together, they can plan opportunities to engage the child in controlling and manipulating their surroundings. With the parents involved, cultural and family values can be connected to their child's self-determination growth (Erwin et al., 2009). With a positive attitude and supports, parents can enhance self-determination by focusing on their child's strengths (Shogren & Turnbull, 2006), which can be conveyed to teachers during the IEP meeting. This allows parents to guide where teachers can improve self-determination and transition skills for their child. Also, parents can incorporate more choices for their child throughout the day at home and permit them the opportunities and practice needed to develop self-determination (Shogren & Turnbull, 2006; Wu

& Chu, 2012). These choices can mimic what the teacher does at school and give consistency to the student's life. This natural environment becomes the testing ground to see what obstacles may impede the student as well as allow generalization to other settings (Erwin & Brown, 2003). Erwin and Brown (2003), Glago, Mastropieri, and Scruggs (2009), and Wu and Chu (2012) all discuss a need for a natural environment to become a testing ground for self-determination to see what obstacles may impede children with disabilities.

When looking at employing self-determination strategies in the elementary setting, findings were similar to those found in studies of adolescents with a disability. Danneker and Bottge (2008) found teachers were unaware of how to implement self-determination strategies without reducing academic instruction. Mason et al. (2004) observed that compared to secondary teachers, elementary teachers evidenced (a) poorer perceptions of preparedness to teach self-determination, (b) less instruction to set and manage goals, (c) less provision of informal self-determination instruction, (d) less formal use of self-determination curriculum, and (e) less systematic self-determination instruction. Even though elementary teachers stated incorporation of self-determination strategies was important (Cho et al., 2011; Mason et al., 2004; Stang, Carter, Lane, & Pierson, 2009), it has not occurred in schools. School administrators in one state were also found to support the importance of self-determination and the teaching of its components but admitted it was taught only sometimes by staff (Carter et al. 2015). A possible reason for self-determination not being taught in the elementary classroom could be the teachers are more worried about academics, yet these skills will benefit academics for the young student too (Erwin et al., 2009; Heller et al., 2011; Murawski & Wilshinsky, 2005; Palmer et al., 2012).

Beginning to teach self-determination at this critical age can provide an energetic impact to continued school performance in the secondary setting for a young student with a disability

(Eisenman, 2007). Palmer and Wehmeyer (2003) discovered that teachers found the self-determination curriculum useful and wanted to incorporate it throughout their teaching. Additionally, teachers indicated that 82% of the students involved perceived positive changes in behavioral or academic pursuits. Further research is needed in realizing the potential self-determination can have on students starting in the elementary grades (Cho et al., 2011; Danneker & Bottge, 2008; Mason et al., 2004; Stang et al., 2009).

Self-Determination Components

The components that culminate in self-determination differ depending on the researcher. (Rowe et al., 2015; Shogren and Turnbull, 2006; and Wehmeyer et al., 2013). For the purpose of this literature review Wehmeyer, Agran, and Hughes (2000) provide seven components: (a) choice-making, (b) decision-making, (c) problem solving, (d) goal setting, (e) self-advocacy and leadership skills, (f) self-management and self-regulation, and (g) self-awareness and self-knowledge. Each component will be defined, the need for the component will be stated, and suggestions on how to instruct students to gain the component will be offered.

Choice-making. Students must freely identify interests and express preferences to make their choices known. For students to convey choice-making, they must be able to communicate with a clear expression, and equally important, the listener must acknowledge it (Van Tubbergen, Omichinski, & Warschausky, 2008). Quite often students with a disability in the elementary school system do not develop an appropriate choice-making skill set (Stang et al., 2009) which leads to utilizing precious time on its development later in school. Sparks and Cotes (2012) created a six-sequence process to improve choice-making with elementary-aged students with a disability: (a) create scenarios, (b) provide three choices, (c) recycle first choice, (d) evaluate, (e) recycle second choice, and (f) re-evaluate. This sequence allows the student with a disability to

condense possible options into a multiple-choice format is an effective approach for their choice-making skill development (Van Tubbergen et al., 2008). To help students understand the consequences of their choices, those supporting the students can start a dialogue of what could transpire from the proposed list of choices and scaffold the logical chain of events for each choice (Sparks & Cote, 2012). Hughes et al. (1997) conducted a social validity survey with teachers and found that they support and value the idea of providing choice-making opportunities to students with disabilities to improve postsecondary outcomes. Possible ways to promote choice-making with students include identify strengths, interests, and learning styles; hold high expectations; learn about their disability and how it impacts them personally; allow for mistakes and natural consequences; and speak directly to and listen to them (Bremer, Kachgal, Schoeller, & NCSET, 2003).

Decision-making. Hickson and Khemka (2013) explain no clear definition is found in the literature for this component, but it is often closely associated with problem-solving. Though there are several definitions of decision-making (D'Zurilla, Maydeu-Olivares, & Gallardo-Pujol, 2011; Frauenknecht & Black, 2010; Izzo, Pritz, & Ott, 1990; and Wehmeyer & Shogren, 2008), they all view it as an important skill an individual with disabilities needs to succeed in the world. Decision-making encompasses the student's ability to articulate several options and efficiently deduce cause and effect (Hickson & Khemka, 2013). Lindstrom et al. (2007) found school staff, young adults, and employers emphasized the need to allow students to have greater independence and autonomous decision-making. Khemka, Hickson, and Mallory (2016) suggest using a step-wise process: (1) identify a situation as a problem; (2) generate alternatives; (3) consider possible consequences of each alternative; and (4) choose a course of action. A curriculum to support students with decision-making pertaining to negative peer pressure showed

the treatment group making significantly more effective action responses compared to the control group (Khemka, Hickson, & Mallory, 2016). This demonstrates the effectiveness for direct instruction of self-determination by teachers. Rowe, McNaught, Yoho, Davis, and Mazzotti (2018) suggested incorporating web-based resources to teach students decision making and autonomy skills on such topics as postsecondary education, employment, and independent living. Each of these categories contains sub questions and websites to assist students in becoming critical consumers of information.

Problem-solving. Allowing students with disabilities to systematically view problems and a chance to solve them summarizes problem solving (Wehmeyer, Agran, & Hughes, 2000). Greenberg and Kusche (1998) state that most DHH students lack knowledge on a linguistic level, as well as cognitive skills that can resolve difficulties in intrapersonal and interpersonal experiences. Distinct areas of note are (a) DHH students problem-solving with one another via signing; (b) a DHH student communicating with a hearing peer, and (c) a DHH student communicating with a hearing person by using an interpreter (Reiman, 1992). A curriculum specifically created for DHH students that addresses problem-solving is called Promoting Alternative Thinking Skills (PATHS). This curriculum has been found successful in helping students recognize problems, create various solutions, and predict possible consequences (Greenberg & Kusche, 1998). It was found when fourth- and fifth-grade students with a mild disability received direct instruction over a nine-week period for problem-solving, they generalized it into their lives (Glago, Mastropieri, & Scruggs, 2009). Bremer, Kachgal, Schoeller, and NCSET (2003) suggest additional strategies of allowing students with disabilities to: own challenges and problems; accept problems as part of healthy development; and schedule meetings to identify problems.

Goal setting and attainment. Locke and Latham (2002) described goal setting as a defined action with a set proficiency level and adjacent timeline. Copeland and Hughes (2002) suggested that students with a disability may lack this skill because they rely on others to create goals for them, and direct instruction in goal setting is sparse. Various approaches such as the Self-Determined Learning Model of Instruction (Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012) and Take Action lesson package (Martin, Martin, & Osmani, 2014) have been shown to improve the overall goal setting skill set of students with a disability. Also, within the Transition Assessment and Goal Generator, the goal setting and attainment construct predicted an increase in postsecondary educational outcomes for secondary students with a disability (Burnes, Martin, Terry, McConnell, & Hennessey, 2018). An often-recommended practice to improve goal setting is direct instruction (Balcazar et al., 2012; Williams-Diehm, Palmer, Lee, and Schroer, 2010). Such direct instruction should include parents in the creation and attainment of goals, and allows middle school students to set goals in academic, behavioral, and social arenas. Additional tips to improve children's goal setting can include teaching values, priorities, and goals; defining and demonstrating steps to goals; listing short-term identifiers to reach goals; and being flexible in supporting the goals (Bremer et al., 2003).

Self-advocacy and leadership skills. Self-advocacy is knowing and supporting one's rights and leadership involves skills for students to lead, guide, or direct. (Wehmeyer & Schwartz, 1998). Through a survey of over 1,000 special educators, it was reported their students had minimal to no involvement with school organizations which might include leadership activities (Simeonsson, Carlson, Huntington, McMillen, & Brent, 2001). A study of DHH students working with itinerant teachers found 80% of the students received supplemental education in nonacademic areas, and the number one area of nonacademic education was self-

advocacy (Antia & Rivera, 2016). This gives credence to the need for teachers of DHH students to incorporate advocacy skills into their regular teaching habits and supports findings of Grenwelge, Zhang, and Landmark (2010) stressing the development of leadership skills among students with a disability through authentic experiences. Lackaye and Margalit (2006) discuss how students with a disability rate themselves with low self-efficacy scores compared to typical peers. This suggests a need to reinforce the understanding of their strengths and needs of students with a disability to bypass negative self-attribution. To support children with self-advocacy, Bremer et al. (2003) recommended communication and self-representation, praise for effort, teaching appropriate accommodation needs, practicing how to disclose their disability and needs, and creating opportunities to talk about disability and needs.

Self-management and self-regulation skills. Wehmeyer et al., (2000) explain self-management and self-regulation skill sets as a process of evaluating their behavior, selecting reinforcements, establishing a schedule, and self-directing by self-instruction strategies. It was found that self-regulation along with self-realization contributed the most to students' transition planning knowledge and skill sets increasing, compared to other self-determination components (Wehmeyer, Palmer, Soukup, Garner, & Lawrence, 2007), indicating the critical need to teach these skills to students with a disability. Self-management and self-regulation can also entail managing risk-taking, where the student should identify potential risks and respond appropriately (Wehmeyer et al., 2000). It is possible that during the adolescence, students' decisions are greatly impacted by peer presence (Moffitt, 1993) and may result in increased risk taking activity (Gardner & Steinberg, 2005). Rational thinking becomes overruled when peers accompany each other, yet adolescents are prone to more deliberate decisions when alone (Hickson & Khemka, 2013). It is important to note that during the onset of puberty, students' ability to regulate

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feelings fluctuate (Hickson & Khemka, 2013) which in turn can cause irregularity with self-management and self-regulation. King-Sears (2006) found that while teaching self-management skills, it is imperative that follow up to instruction occurs though it does not need to be lengthy, and the expectation of skill transferability may be unreasonable without practice in authentic environments. Integrating short follow-up sessions by an adult in authentic environments with peers may stabilize adolescent students' feelings and help them build the confidence to transfer their new-found skills (King-Sears, 2006). This is supported by Evmenova et al.'s (2016), finding that including embedded self-regulated learning strategies into a curriculum, in this case writing with a computer-based graphic organizer yielded promising results.

  Self-awareness and self-knowledge. This skill set comprises a need to recognize limitations and strengths so students with a disability can employ them to their gain (Wehmeyer et al., 2000). Hadre and Reeve (2003) found if students feel their autonomy is ignored, dropout intentions can increase and to alleviate dropout intentions, autonomy-supportive environments should be implemented. This occurs when students can connect their interests and knowledge of who they are to the class and to assignments presented (Hadre & Reeves, 2003). Several ways for children to become self-aware are to identify and utilize support systems; to become involved to with the IEP; and write an autobiography (Bremer et al., 2003). A vocational rehabilitation counselor's quotation from Lindstrom et al. (2007) helps highlight the need for this component: "I also recommend people figure out who they are. And it's hard. I mean, you're going to change. And I think a lot of people end up making the wrong choices because they don't know who they are" (p. 8). Lindstrom et al. (2007) discovered the overall suggestion by all groups of participants was for students to understand themselves. Lindstrom et al. (2007) stated, "self awareness and self knowledge are critical building blocks for other transition skills" (p. 13) and

highly recommended increasing students' self-knowledge. This is a natural first step in the self-determination process and promotes a deeper cognitive thought process about who students are and who they want to become.

Transition

IDEA requires schools to provide a transition plan to the student with a disability based on their preferences prior to their 16th birthday in order to assist in their transition from secondary education (IDEA, 2004). However, 49% of states require transition education practices to begin earlier than the federal law, with the most common age being 14 (Suk, Martin, McConnell, & Biles, 2018). Transition plans with assessments and goals must address postsecondary education and employment and can include independent living and self-determination practices. Even with federal mandates for transition planning, students with disabilities exhibit lower post-school outcomes compared to general education peers (Kohler & Greene, 2004).

Halpern (1991) defined transition for youth with disabilities as moving from a student role to an emerging adult role involving (a) employment, (b) postsecondary education, (c) maintaining a residence, (d) involvement in the community, and (e) satisfactory relationships. To accomplish this process, IDEA requires schools to develop and implement transition planning that includes using results from transition assessments identifying strengths and needs and facilitating the establishment of both postsecondary goals and annual transition goals. To achieve the transition and postsecondary goals, transition services can include postsecondary education, vocational training, integrated employment, adult education, adult services, independent living, or community participation (IDEA, 2004).

The term "transition services" means a coordinated set of activities for a student with a disability that:

(A) is designed to be within a results-oriented process that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation;

(B) is based upon the individual child's needs, taking into account the child's strengths, preferences and interests; and

(C) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation (Section 602[a] [20 U.S.C. 1401[a]).

Transition assessment. A transition assessment battery is comprised of career, vocational, and functional assessments (Sitlington, Neubert, and Leconte, 1997) and should benefit the creation of transition activities and goals. Teachers' understanding of how to use these assessments and the ramifications of each assessment is vital in providing student support. Multiple assessments across these categories converge to create a holistic view of the student that assists the IEP team in creating meaningful transition goals. Besides developing the transition section of the IEP, transition assessment results enable educators to differentiate instruction, including transition activities, so students can attain annual transition goals. Self-determination assessments such as the ChoiceMaker Self-Determination assessment, the AIR Self-

Determination assessment, the Self-Determined Learning Model of Instruction, and the ARC Self-Determination Scale fit into the functional assessment category of the battery and inform teachers where to support students in becoming more self-determined. Without these needed functional assessments completing the transition assessment battery, teachers understand what career the student wants via career assessments, the skills needed for the career via vocational assessments, but lack the knowledge of the interpersonal skills needed from a validated self-determination assessment to support students in this career environment.

Prince, Plotner and Yell (2014) reviewed federal district court cases related to transition programming in order to understand the legal ramifications IDEA has put on school districts. Their findings concluded that (a) informal measures could not solely be the gauge for a student's ability and interests and ongoing assessment must include formal assessments, (b) transition plans must include a sequence of practical goals, (c) schools must maximize student participation in the IEP process, and (d) including transition aspects throughout the IEP supports the transition plan (Prince, Plotner, & Yell, 2014). By incorporating appropriate assessment data from career, vocational, and functional assessments, educators create individualized goals that satisfy IDEA and support the student's achievement of the transition plan. Petcu, Yell, Cholewicki, and Plotner (2014) also analyzed court rulings involving transition services neglected by schools and the violations found were related to (a) transition plan development, (b) IEP participants, (c) incorporating the student's preferences and strengths in the plan, (d) parent involvement, (e) goals for postsecondary education, (f) school and agency staff responsible for incorporating services, and (g) transition assessments that are age-appropriate. This led to the decision that effective transition planning must be a primary concern for special education administrators. Shogren and Plotner (2012) concluded that between 20-30% of students with disabilities did not

receive appropriate transition plan development by not including personal components such as strengths and preferences.

Employing the knowledge of IDEA requirements by the age of 16 for students with a disability can facilitate the development of additional supports by extending transition practices to students with a disability in the elementary grades. Implementing career, vocational, and functional assessments earlier allows students with a disability extended time to research and experience possible postsecondary options. This will naturally incorporate self-determination components into the transition practices and benefit students when they arrive at their transition IEP meetings, equipping them with the knowledge of what their strengths are and enabling them to have goals in mind.

Intersection of Elementary Deaf Education and Self-Determination

A dearth of research exists in the area of Deaf education, self-determination, and elementary education. Sebald (2013) conducted a survey of Deaf educators and their perceptions of self-determination from one western state that was comprised of Deaf educators from preschool to high school. A total of 76 (41.9%) responded to the mailed survey of the 181 possible Deaf educators in the state. Although nearly 20% (15 respondents) self-reported teaching in elementary classrooms, findings were not delineated by grade or age. It was found Deaf educators rated questions for perceived importance of self-determination with answers of "sometimes" to "almost always" on the Likert-type scale (M=3.67 of 5) as valuable (Sebald, 2013), yet we do not know how this translates across grade level of DHH students.

Antia and Rivera (2016) studied itinerant Deaf educators from Arizona and Colorado and observed 80% of the DHH students received non-academic support. The main area of support in non-academics was self-advocacy, a component of self-determination, with 59% of the students

in grades 2-5 receiving this support. A possible explanation for DHH students receiving nonacademic support such as self-advocacy is due to the benefit it can have across all academic areas (Antia & Rivera, 2016). These findings support the need for further investigation into the knowledge base elementary Deaf educators have concerning self-determination.

Reynolds (2019) investigated self-determination perceptions of Deaf individuals teaching DHH students in the early childhood setting incorporating a qualitative design. Criteria for participation included (a) being deaf or have a hearing loss, (b) associating with the Deaf community, (c) working with early childhood education (pK-3rd grade) DHH students, and (d) having a general knowledge of the education setting. Being deaf brings a different insight if the Deaf educator uses their life experiences to improve their students' transition and self-determination process. The study had three participants whose teaching experience ranged from a veteran teacher of over 15 years to a first-year teacher with classroom experience as a paraprofessional. This range of experience helped indicate different self-determination dynamics within the classroom.

Reynolds (2019) discovered that teachers (a) could not operationally define self-determination or list components other than choice-making and problem-solving, (b) received no academic professional development regarding self-determination, (c) knew no organizations promoting self-determination; and (d) had a desire to learn more about self-determination to improve their students' lives. Ironically, even though participants did not give a textbook definition of self-determination and its components, they utilized strategies involving most self-determination components within the classroom, but their use was not explicit in nature. If practices and curricula were made available to these individuals, it is possible they would

incorporate them into their everyday routines and establish self-determination as a primary tenet in their teaching (Reynolds, 2019).

Conclusion

Students with a disability, including DHH students, are not meeting the same standards as their nondisabled peers when assessing postsecondary outcomes even though IDEA provides for transition practices to access the same education. Despite differences among DHH students and other students with a disability, there are some instructional practices which aid all students in obtaining postsecondary outcomes. Students with a disability need the opportunity and ability to decide actions, set goals, solve problems, assess options, and accept consequences (Rowe et al., 2015). When students with a disability implement and utilize these skills, their self-determination increases, resulting in improved post-school educational and employment outcomes (NTACT, n.d.) and possibly other outcomes such as independent living. A way to support DHH students in achieving postsecondary goals is to implement proven transition practices, specifically self-determination, within the elementary setting. Starting in elementary grades with transition practices and self-determination will allow students more time to master the skills needed to function in today's world. To do this, elementary Deaf educators' knowledge of self-determination practices will need to increase and teachers will need to infuse these skills into the daily academic curriculums. Antia and Rivera (2016), Reynolds (2019), and Sebald (2013) show the need to look specifically at Deaf educators in the elementary school setting across the nation and understand how much they know about and practice self-determination.

Chapter 3

Methodology

Educational settings for deaf and hard of hearing (DHH) students are not preparing them for life after high school (Bruyere, 2008; Newman et al., 2011; Nunes, 2004; Scheetz, 2012; Traxler, 2000). Self-determination has been associated with improved postsecondary outcomes for students with a disability (Algozinne, Browder, Karnoven, Test, & Wood, 2001). Research has shown special education teachers (Wehmeyer et al., 2000), elementary teachers (Cho et al., 2011), and Deaf educators (Sebald, 2013) perceive self-determination as a valuable practice and feel it can improve their students' lives, yet teachers' implementation of self-determination in the classroom is lacking.

The purpose of this study is to establish a case for instructing elementary teachers of DHH students concerning concepts related to self-determination that will increase the postsecondary transition outcomes of their students. Determining the knowledge Deaf education elementary teachers (grades 1-6), have in relation to self-determination and its implementation in the classroom will become the foundation for future research. The term DHH will be used to identify all people who may have a hearing loss and who may also identify with the Deaf community. The study's purpose was accomplished by adapting the Wehmeyer et al. (2000) survey for Deaf educators and interviewing a small portion of those who took the survey. The underlying hypothesis was that the majority of Deaf educators would perceive self-determination to be important, but they would not explicitly plan or implement daily self-determination instruction (Reynolds, 2019). Thus, the study attempted to answer the following research questions:

1. To what extent do elementary Deaf education teachers perceive self-determination practices as important to teach to DHH students?

2. To what extent do elementary Deaf education teachers act on their perceptions of self-determination by teaching the components of self-determination?

3. Are there one or more self-determination components perceived to be more important by elementary Deaf education teachers and why?

4. What are the reasons why elementary Deaf education teachers do not teach self-determination?

Research Methodology

Due to the nature of the research questions, it was necessary to utilize both quantitative and qualitative measures resulting in a mixed method design. These combined techniques best captured the essence of self-determination usage in the Deaf education elementary classroom. Because qualitative and quantitative methods provide different types of data, together they can verify one another and provide more valid results. Johnson, Onwuegbuzie, and Turner (2007) explain pairing the two methodologies together allows for a greater "breadth and depth of understanding and corroboration" (p.123).
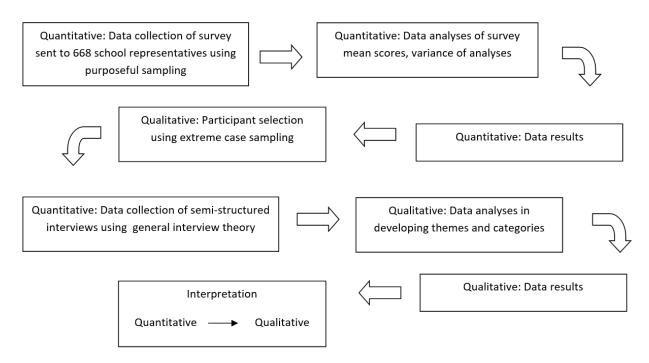
Research Design

To best answer these research questions, an explanatory sequential (Creswell & Clark, 2010) mixed methods design (see Figure 1) was used. Three reasons that support the utilization of an explanatory sequential design for the study are identifying important quantitative results, explaining surprising contradictory data between qualitative and quantitative approaches, and connecting the qualitative and quantitative data together (Creswell and Clark, 2018). An emphasis of the design is the qualitative data describing the quantitative data. The design allows for what Bryman (2006) called illustration, where the researcher can "flesh out" quantitative data with rich experiences from the participants through qualitative means. Additionally, the

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explanatory sequential design improves the utility (Bryman, 2006) of the quantitative data by integrating the lived experiences of the participants.

Figure 1

Explanatory Sequential Design

A literature review was conducted, and matrices were created to connect the quantitative and qualitative data. Prior research reviewed on the interconnectedness of self-determination, elementary education, and Deaf education allowed for a hypothesis to be created, analyzed, and synthesized into the research design. Second, two matrices were created to link quantitative and qualitative questions to the research questions. Creating a matrix is a common practice in qualitative studies, and Glasser (1992) states questions for participants should directly relate to the research questions, yet not be the direct research question. This process occurred during the creation of the research protocols and helped unite the data sets collectively. The literature review and matrices strengthened the validity of the explanatory sequential design by allowing for the data sets to be woven together.

Two phases occurred in data gathering: first, a nationwide survey was sent to elementary Deaf educators to assess their perception and use of self-determination practices in the classroom; second, interviews with a targeted, select number of survey participants were conducted to further understand the survey results. Insight from Deaf educators on self-determination will aid researchers to better bridge the research to practice gap and to identify problems they face with implementation of self-determination. Some Deaf educators may successfully adapt self-determination practices to their unique situations which can be ascertained through a mixed methods study. In addition, it will help Deaf educators understand the implications and possibilities of using the researched strategies.

Participants

The target participants for this study included teachers with certification in Deaf education and serving DHH students in elementary classrooms. Annually, the American Annals of the Deaf create a national reference list of schools that serve DHH students. With the reference list, an email listserv was created with 668 emails. Individuals listed for a corresponding program received an email to disseminate the survey to elementary teachers serving 1st to 6th grade DHH students in their school/district. The characteristics of schools related to teaching philosophy (Bilingual/Bicultural, Listening and Spoken Language, Total Communication, etc.), program structure (residential, day school, etc.), or services provided (itinerant, resource, self-contained, etc.) were not identified before the request for participation in attempt to reach all elementary teachers who serve this population. As a demographic item in the survey, teachers described their teaching philosophy, program structure, and services provided; these were then incorporated into the analysis. Efforts to recruit teachers through Facebook groups, alumni of a state teacher preparation program and a national Deaf educator group and the

National Deaf Center listserv were also made. For the remainder of this chapter, all teachers will be referred to as Deaf educators.

Data Collection

Quantitative data. Purposeful sampling procedures were utilized with Deaf educators serving DHH elementary students. Additionally, snowball sampling occurred by asking administration and teachers who have taken the survey to pass it on to their colleagues to complete. The resulting sample included 208 elementary Deaf educators who assessed the survey, with 179 educators who completed it entirely. Online survey data was collected through Qualtrics and secured on password protected networks.

Quantitative material. The quantitative instrument for the study included a modified survey to gather teacher knowledge on self-determination (Wehmeyer et al., 2000). The Wehmeyer et al. (2000) survey was initially based on a survey by Agran, Snow, and Swaner (1999) which was field tested with 10 special educators. This initial field testing and question examination by experts in the field ensured the survey contained acceptable content validity evidence. Cho, Wehmeyer, and Kingston (2011) adapted the Wehmeyer et at. (2000) survey by adding questions for elementary teachers and found a Cronbach's alpha of .90 for the Teaching Self-Determination section. The Wehmeyer et al. (2000) survey consisted of two parts, the Respondents' Information and Teaching Self-Determination, and 22 total questions (Appendix A).

The modified survey for this study consisted of 47 questions in two similar sections, with each section being adapted for the Deaf educator audience. Section one collected demographic information and was altered to reflect the philosophical teaching rationale, program structure, services provided, student population, grade level(s) taught, and uniqueness in teaching DHH

students. Several questions that were related to secondary teachers, such as content area and grade level were removed due to inappropriateness for the target population. An additional eight questions were added, resulting in 16 total questions to the modified section one. The three independent variables for analysis (philosophy, communication mode, and setting) came from this section. First, teachers selected their philosophy from four choices: (a) Bilingual Bicultural, (b) Aural/Oral, (c) Total communication, and (d) other. Second, teachers selected their communication mode from seven choices: (a) American Sign Language, (b) Listening and Spoken Language, (c) Simultaneous Communication, (d) Other, (e) Signed Exact English systems, (f), Conceptually Accurate Signed English, and (g) Pidgin Signed English. Third, teachers selected their setting from three choices: (a) Urban, (b) Suburban, and (c) Rural.

Section two collected data on the Deaf educator's knowledge of self-determination and the seven Wehmeyer et al. (2000) components: (a) choice-making, (b) decision-making, (c) problem solving, (d) goal setting, (e) self-advocacy and leadership skills, (f) self-management and self-regulation, and (g) self-awareness and self-knowledge. Questions with a Likert-type scale for the seven self-determination components measured the perceived importance of teaching the component and the perception of whether self-determination would help their students when employed on a scale of 1-6. A response of one indicated "not helpful" and a response of six indicated "very helpful." These eight questions became the dependent variables for analysis. This section also included a multiple choice question about possible barriers to teaching self-determination. Three questions were removed due to inappropriateness for the target population, such as asking for transition goals related to self-determination. Twenty-four questions were added, resulting in a total of 31 questions for section two of the modified survey. The majority of the new questions (n=21) broke down each of the seven self-determination

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components into a skill that could be taught in the classroom (Appendix A). The modified survey (Appendix B) was entered into Qualtrics with the corresponding link sent electronically to participants.

Qualitative data. Participants selected for the in-depth qualitative interviews were selected from participants who completed the full survey. The purpose of in-depth qualitative interviews was to provide meaningful themes and to offer explanation for the quantitative results (Creswell & Clark, 20018). A final question in the survey asked if participants were willing to participate in qualitative interviews, and if yes, to provide contact information. This final question did not force a response, allowing participants to remain anonymous.

Two willing participants, from each of the four resulting quadrants, (described in data analysis) were selected by following a purposeful extreme case sampling method. Looking at each group and those who provided contact information, participants closest to the phenomena (a) high belief and high implementation, (b) low belief and high implementation, (c) high belief and low implementation, and (d) low belief and low implementation were asked for an interview. Understanding why Deaf education teachers fell into these categories allowed for Bryman's (2006) utility and illustration rationale.

Qualitative material. Interviews with participants were 20- to 30-minutes-long and semi-structed; they followed a phenomenological research theory. Five questions were refined once qualitative data were collected, thus helping with the mixing of the data (Appendix C). Five interviews were conducted through voice and one through American Sign Language (ASL). Only two participants willing to be interviewed fell into the low belief and high implementation group and when contacted, they declined the interview. All voice interviews were recorded using Zoom. Camtasia was used to record the screen during the ASL interview. With all interviewees

being from out of state, incorporating Zoom and Camtasia instead of a phone call allowed for a more natural conversation. Doing so allowed a visual connection to the interviewee's visual features that would be missed over the phone. This process was used in Reynolds (2019), in which interviewers successfully navigated confusing transitions and questions because they could see the interviewee's face and respond appropriately. Note taking during the five voiced interviews was possible, but not when using ASL. Eye contact is necessary for ASL conversations and breaking eye contact is against social norms in the Deaf community. Without the visual connection, breakdowns in communication would occur. No other form of data was collected for the qualitative portion.

Data Analysis

Survey participants were categorized into four groups based on their belief of the importance of self-determination and how often they implemented it. The four groups were (a) high belief and high implementation, (b) low belief and high implementation, (c) high belief and low implementation, and (d) low belief and low implementation.

A single Likert-type scale question (1-not important to 6-very important) grouped participants based on their belief of self-determination importance. No participants selected a one or two for importance. If the participant selected a five or six on the scale, they were placed in the high belief quadrant and if the participant selected a three or four on the scale, they were placed in the low belief quadrant. This meant two choices from the questions were in each quadrant.

Implementation of self-determination by the teacher was calculated by the average score of the 21 questions that broke down the seven self-determination components into daily skills that could be taught. These questions were a Likert-type scale valued at (a) 1-daily, (b) 2-weekly,

(c) 3-monthly, (d) 4-quarterly, and (e) 5-never. To stay with the same scale as the belief of self-determination question, the 21 questions were reversed coded after the data were gathered. The new values became (a) 5-daily, (b) 4-weekly, (c) 3-monthly, (d) 2-quarterly, and (e) 1-never. If the average of the 21 questions was 3.75 or higher, respondents were put into the high implementation group. Respondents with an average of 3.74 or below, were put into the low implementation group. A respondent with an average of 3.75 across the 21 questions would be implementing self-determination components every 10 school days. The cut score of 3.75 between high and low implementation was a natural break between data points ensuring a clear separation between the categories.

       Quantitative data analysis. For quantitative data analysis, analyses of variance (ANOVAs) were determined between the Likert-type scores of self-determination importance and the dependent variable which were the self-determination components: (a) choice-making, (b) decision-making, (c) problem-solving, (d) goal setting and attainment, (e) self-advocacy and leadership skills, (f) self-management and self-regulation, (g) self-awareness and self-knowledge. The independent variables were teaching philosophy, communication mode, and setting of the teacher. These are defining impact factors of both schools and teachers which could influence DHH students' outcomes significantly. Once ANOVA analyses were conducted, a p level of $<.05$ was utilized to find significant correlations. Justification to employ ANOVA analysis was that it met the three assumptions, the independent variable was categorical and the dependent variable was interval or ratio, the dependent variable was normally distributed, and the homogeneity of the population was confirmed with Levene's test (Lomax & Hans-Vaugh, 2012).

Qualitative data analysis. Transcriptions of the interviews, except for the one conducted in ASL, were recorded by the researcher. A Certified Deaf Interpreter (CDI) translated and transcribed the one conducted in ASL. The reason for the CDI to translate and transcribe was because ASL was not the researcher's native language, and Deaf individuals modify their signing depending on the skill of those in the conversation (Temple & Young, 2004). With the CDI translating and transcribing an interview, the chance of researcher bias was minimalized. Having a CDI translate and transcribe the interview also increased credibility and confirmability of the study, since the CDI was certified by a national organization for interpreting ASL. After transcription, a copy was sent to each participant to review for accuracy. This member check helped the researcher engage in reflexivity to clarify biases and to ensure the accurate meaning of the participants and their quotations was conveyed (Creswell & Poth, 2018).

Morse's (1994) process of comprehending, synthesizing, theorizing, and recontextualizing to analyze the data was followed. To begin the comprehending phase, a thorough literature review on self-determination and Deaf education was conducted. Then interview questions that matched the research question and quantitative questions were created. Morse's (1994) suggestion to come into the interviews as a "stranger" by allowing the participant to lead the discussion for each question was also employed. This allowed for a natural conversation and a comfortable environment for the participant. To end the comprehending phase, the data gathered from the interviews was segmented into initial themes. Synthesizing led to coding the data line by line and incorporating constant comparison while doing so. Memoing during the synthesizing phase allowed for initial comparison of data (Creswell & Poth, 2018). Applying the memoing to the collected data in an Excel table for referencing began the categorization phase. The use of Excel streamlined the process of categorizing and thematizing

the data since it was all together. Once the code book was finished, the data were condensed and recontextualized into a working theory to inform the Deaf education field.

Mixed method data analysis. The main reason to mix quantitative and qualitative methods is to discover the relationship between the macro (survey) and micro (interview) levels of data (Bryman, 1992). Understanding one perspective will only inform us about half the problem. By bridging the gulf between these two methodologies, we use the strengths of both to create and inform best practices for the field.

The first mixing of quantitative and qualitative data occured by selecting participants from the quantitative survey that qualified for the extreme case sampling from each grouping. This was dependent on the quantitative data; participants were grouped based on their reported beliefs of the importance of self-determination and their implementation scores. With two participants from each grouping selected, a thick and rich description was possible (Creswell & Poth, 2018).

The second aspect of mixing the data to help bridge the information was to quantify (Tashakkori & Teddlie, 2010) the qualitative data themes into a frequency table. The frequency table allowed the comparison of the quantitative and qualitative data sets to see if trends aligned between both data sources. This allowed for generalizable data to come from the qualitative aspect of the study and to solidify the mixing of data.

Summary

The objective for this research study was to lay a foundation to understand the elementary classroom Deaf educator's knowledge and position on the use of self-determination strategies with DHH students. The collection and analysis of both quantitative and qualitative data in a

mixed methods design were conducted. The synthesized results in relation to the research

questions are discussed in Chapter 4.

Chapter 4

Results

Overview and Research Questions

This mixed-methods study was established to determine if Deaf education elementary teacher's perceived self-determination to be of benefit for their deaf and hard of hearing (DHH) students and to see if self-determination was implemented in the classroom. Another question posed was whether the teachers perceived some components of self-determination to be of greater importance than others for their DHH students. The term DHH is used broadly and includes any student with a hearing loss, whether or not they belong to the Deaf community. The questions that led the study are as follows:

1. To what extent do elementary Deaf education teachers perceive self-determination practices as important to teach to DHH students?

2. To what extent do elementary Deaf education teachers act on their perceptions of self-determination by teaching the components of self-determination?

3. Are there one or more self-determination components perceived to be more important by elementary Deaf education teachers and why?

4. What are the reasons why elementary Deaf education teachers do not teach self-determination?

One hundred and seventy-nine elementary teachers serving DHH students across the nation participated in the survey. Administrators were allowed to participate if they met the requirements of teaching DHH students before becoming an administrator. Years taught by teachers ranged from 0 to 44 (M=14.71, SD=11.11) and DHH students for whom they were responsible for ranged from 0 to 150 (M=17.69, SD=24.56). The teachers who were responsible

for the highest numbers of DHH students labeled themselves consultants. Demographic information (gender, highest degree earned, grade, philosophy, communication mode, school setting, trained in Deaf education, familiarity of self-determination) was collected at the onset of the survey. The second section collected data pertaining to the teachers' beliefs about self-determination, implementation of key components, and barriers to teaching self-determination. Interviews of six Deaf educators, based on beliefs and implementation were compiled for meaningful themes and verification of the survey results.

Table 3

Demographics of Quantitative Participants

Category	n	%
Gender		
Female	176	98.32
Male	2	1.12
Non-Binary	1	.56
Degree		
Bachelor's	35	19.55
Master's	128	71.51
Specialist	12	6.70
Doctorate	2	1.12
Other	2	1.12
Grade		
1st grade	5	2.79
2nd grade	4	2.23
3rd grade	3	1.68
4th grade	4	2.23
5th grade	1	.56
6th grade	2	1.12
Multiple grades (one setting)	50	27.93
Itinerant	101	56.42
Administration	9	5.03
Philosophy		
Aural/Oral	30	16.76
Total Communication	74	41.34
Bilingual Bicultural	54	30.17
Other	21	11.73
Communication Mode		

	Listening and Spoken Language	83	46.37
	Simultaneous Communication	34	18.99
	American Sign Language	39	21.79
	Cued Speech	0	0
	Signing Exact English System	3	1.68
	Conceptually Accurate Signed English	6	3.35
	Pidgin Signed English	3	1.68
	Other	11	6.15
Setting			
	Urban	57	31.84
	Suburban	75	41.90
	Rural	47	26.26
Trained Deaf Ed.			
	Yes	172	96.9
	No	7	2.91
Familiar with Self-Determination			
	Yes	151	84.36
	No	28	15.64
Years Taught	14.71 (SD=11.11)	Min=0	Max=44
Number of Students Responsible for Teaching	17.69 (SD=24.56)	Min=0	Max=150

Table 4

Demographics for Qualitative Participants

Category	n	Philosophy	Communication Mode	Setting	Grade	Belief	Implementation
High Belief, High Implementation	2						
Tracy		Total Communication	Simultaneous Communication	Rural	Itinerant	6	4.71
Jessica		Total Communication	Listening and Spoken Language	Urban	Itinerant	5	3.76
Low Belief, High Implementation	0						
High Belief, Low Implementation	2						
Kelsey		Aural/Oral	Listening and Spoken Language	Rural	Itinerant	6	1.62
Joanna		Total Communication	Listening and Spoken Language	Rural	Itinerant	6	1.29
Low Belief, Low Implementation	2						
Krystal		Aural/Oral	Listening and Spoken Language	Suburban	Multiple grades-one setting	4	3.43
Brittney		Bilingual Bicultural	American Sign Language	Rural	Itinerant	4	3.19

Research Question 1

Quantitative and qualitative analyses were used to answer research question 1: To what extent do elementary Deaf education teachers perceive self-determination practices as important to teach to DHH students?

Quantitative. The data collected for quantitative analysis were from participants' answers from the survey questions.

Belief. A survey question asked participants, "How important do you think teaching self-determination is?" (Wehmeyer et al., 2000). This question was used to group participants based on their belief of self-determination importance. No participants selected a one or two for importance. If the participant selected a five or six on the scale (n=152), they were placed in the high belief quadrant and if the participant selected a three or four on the scale (n=23), they were placed in the low belief quadrant. This meant two choices from the questions were in each quadrant.

Table 5

Teachers' Beliefs of Self-Determination Importance

Importance	n	%
1	0	0
2	0	0
3	5	2.86
4	18	10.29
5	37	21.14
6	115	65.71

Note. 1 = Not Important;
6 = Very Important

Table 6

Teachers' Belief and Implementation of Self-Determination

Category	n
High Belief, High Implementation	50

Low Belief, High Implementation	16
High Belief, Low Implementation	102
Low Belief, Low Implementation	7

Philosophy. A one-way ANOVA was conducted to determine if the belief of self-determination was different for teachers in relation to their philosophy. The three philosophies were Bilingual/Bicultural (n=53), Aural/Oral (n=29), and Total Communication (n=72), with an option for other (n=21) as well. There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .141$). Differences of scores of self-determination between the philosophy categories were not statistically significant, $F(3, 171) = 1.068$, $p = .364$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Communication mode. A one-way ANOVA was conducted to determine if the belief of self-determination was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=80), Simultaneous Communication (n=34), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .089$). Differences of scores of self-determination between the communication mode categories were not statistically significant, $F(6, 168) = .973$, $p = .445$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Setting. A one-way ANOVA was conducted to determine if the belief of self-determination was different for teachers in relation to their school setting. The three school settings were Urban (n=57), Suburban (n=74), and Rural (n=44). There was not a homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .030$). Differences of

scores of self-determination between the school setting categories were not statistically significant, $F(2, 172) = 2.237$, $p = .110$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Qualitative. The data collected for qualitative analysis were from six survey participants willing to be interviewed. Five questions (Appendix C) with probing questions were asked to the participants. The last question, "What age do you believe self-determination should start?" directly connects to the research question. All six participants expressed the need for elementary age DHH students or younger start learning about self-determination. Tracy stated,

> Elementary school. But definitely, if you haven't started this by middle school, I think that the train has left the station. You know, I mean, really in elementary school, you can start talking to them about careers. You know, it's not just about careers, but it's about, who are you, as a learner.

Four of the six participants expressed the need for teaching self-determination skills to start before the typical school age or by Kindergarten. Kelsey took the idea further and explained why this age was critical: "As soon as possible. I like kids. The younger the better because then it doesn't, then it becomes a habit or becomes natural." Overall, the belief that self-determination should be taught at such a young age was consistent across all interviewed participants.

Research Question 2

Quantitative and qualitative analyses were used to answer research question 2: To what extent do elementary Deaf education teachers act on their perceptions of self-determination by teaching the components of self-determination?

Quantitative. The data collected for quantitative analysis were from participants' answers from the survey questions.

Implementation. Twenty-one questions were created based on Wehmeyer et al.'s (2000) definitions of each of the seven self-determination components. Implementation of self-determination by the teacher was calculated by the average score of these 21 questions that broke down the seven self-determination components into daily skills that could be taught. Scores were in an implementation range from (a) 5-daily, (b) 4-weekly, (c) 3-monthly, (d) 2-quarterly/9 weeks, or (e) never. If the average of the 21 questions was 3.75 or higher (n=66), the teacher was put into the high implementation category; if the average was 3.74 or below (n=109), the teacher was put into the low implementation category. An average of 3.75 across the 21 questions would mean the teacher implemented self-determination components every 10 school days.

Qualitative. The data collected for qualitative analysis were from six survey participants willing to be interviewed. Five questions (Appendix C) with probing questions were asked to the participants. Four of the six participants expressed that they did not know exactly what self-determination was along with its components. As Joanna stated, "I guess I've never really heard of self-determination until I got your survey." Without a firm understanding of the self-determination concept, teachers' do not know if they are implementing self-determination or its components in the classroom, even though 86% of teachers rated their belief of self-determination importance a five or six.

Research Question 3

Quantitative and qualitative analysis, and the mixing of both data sets were analyzed to answer research question 3: Are there one or more self-determination components perceived to be more important by elementary Deaf education teachers and why?

Quantitative. The data collected for quantitative analysis were from participants' answers from the survey questions.

Belief. A survey question asked participants "How important do you think teaching component elements of self-determination behavior is compared with other instructional areas?" (Wehmeyer et al., 2000). This Likert-type scale question ranged from one to six, with six being high importance. This item evaluated the teachers' beliefs for each of the seven self-determination components. All components received 1.14% or lower for the combined categories for one and two. Looking at the category six, choice-making received the lowest amount, 43.75%, and self-advocacy and leadership skills received the highest amount with 66.48%. When only looking at category six, there are clear differences between components, but the combined categories for five and six for each component shows a difference of less than 10% between all seven components. The lowest percentage for the combined categories for five and six was goal setting and attainment with a 79.43% and the highest percentage was self-management and self-regulation with 88.64%. This data indicates self-advocacy and leadership skills and self-management and self-regulation as the top two components for self-determination among Deaf educators.

Table 7

Importance of Self-Determination Components

Component	1	2	3	4	5	6	5&6
Choice-Making	.57	.57	3.98	14.77	36.36	43.75	80.11
Decision-Making	0	.57	3.98	13.64	32.39	49.43	81.82
Problem-Solving	0	.57	4.41	9.66	21.02	65.34	86.36
Goal Setting and Attainment	.57	0	7.43	12.57	30.29	49.14	79.43
Self-Advocacy and Leadership Skills	.57	.57	4.55	6.82	21.02	66.48	87.02
Self-Management and Self-Regulation	1.14	0	2.84	7.39	26.14	62.5	88.64
Self-Awareness and Self-Knowledge	.57	.57	3.98	6.82	26.14	61.93	88.07

Note. 6 = high; 1 = low

Ranking. The question "Please rank the self-determination component elements in order of importance, 1 as high and 7 as low." was added to the modified survey. Participants were asked to rank the seven self-determination components in order of importance. A selection of one was the highest rank and a selection of seven was the lowest rank. The component with the highest percent in category one was self-awareness and self-knowledge with 52.17%. The next component was self-management and self-regulation with 12.42% for category one. The lowest percentage in category one was decision-making with 1.86%. When comparing components for the highest percentage for the combined categories of one and two, self-awareness and self-knowledge had 64.57% and self-management and self-regulation with 40.37%. The lowest percentage for the combined categories for one and two was decision-making with 10.56%. It is clear from these rankings that self-awareness and self-knowledge was the highest ranked component for Deaf educators with self-management and self-regulation being the second highest ranked.

Table 8

Average of Rankings for Self-Determination Components

Component	1	2	3	4	5	6	7
Choice-Making	6.21	9.94	18.63	11.80	15.53	14.91	22.98
Decision-Making	1.86	8.70	11.80	15.53	14.91	27.95	19.25
Problem-Solving	9.94	10.56	13.04	24.22	25.47	11.80	4.97
Goal Setting and Attainment	6.21	5.59	10.56	13.04	13.04	19.25	32.30
Self-Advocacy and Leadership Skills	11.18	24.84	16.77	11.18	9.32	13.04	13.66
Self-Management and Self-Regulation	12.42	27.95	21.74	13.04	13.66	8.07	3.11

Self-Awareness and Self-Knowledge	52.17	12.42	7.45	11.18	8.07	4.97	3.73

Note. 1 = high; 7 = low

Choice-making. A one-way ANOVA was performed for each of the three constructs of philosophy, communication mode, and school setting in regard to the teachers' beliefs of importance for the self-determination component of choice-making.

Philosophy. A one-way ANOVA was conducted to determine if the belief of choice-making was different for teachers in relation to their philosophy. The three philosophies were Bilingual/Bicultural (n=53), Aural/Oral (n=30), and Total Communication (n=72), with an option for other (n=21) as well. There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .518$). Differences of scores of choice-making between different philosophies were not statistically significant, $F(3, 172) = .189$, $p = .904$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Communication mode. A one-way ANOVA was conducted to determine if the belief of choice-making was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=81), Simultaneous Communication (n=34), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .531$). Differences of scores of choice-making between teachers using different communication modes were not statistically significant, $F(6, 169) = .615$, $p = .718$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

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Setting. A one-way ANOVA was conducted to determine if the belief of choice-making was different for teachers in relation to their school setting. The three school settings were Urban (n=57), Suburban (n=75), and Rural (n=44). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .241$). Differences of scores of choice-making between the school settings were not statistically significant, $F(2, 173) = .519$, $p = .596$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Decision-making. A one-way ANOVA was performed for each of the three constructs of philosophy, communication mode, and school setting in regard to the teachers' beliefs of importance for the self-determination component of decision-making.

Philosophy. A one-way ANOVA was conducted to determine if the belief of decision-making was different for teachers in relation to their philosophy. The three philosophies were Bilingual/Bicultural (n=53), Aural/Oral (n=30), and Total Communication (n=72), with an option for other (n=21) as well. There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .394$). Differences of scores of decision-making between philosophies were not statistically significant, $F(3, 172) = .479$, $p = .697$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Communication mode. A one-way ANOVA was conducted to determine if the belief of decision-making was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=81), Simultaneous Communication (n=34), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was

homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .272$).

Differences of scores of decision-making between communication modes were not statistically

significant, $F(6, 169) = .458$, $p = .839$. The group means were not statistically significant in

difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Setting. A one-way ANOVA was conducted to determine if the belief of decision-making

was different for teachers in relation to their school setting. The three school settings were Urban

(n=57), Suburban (n=75), and Rural (n=44). There was not a homogeneity of variances, as

assessed by Levene's test of homogeneity of variances ($p = .010$). Differences of scores of

decision-making between school settings were not statistically significant, $F(2, 173) = 1.074$, $p =$

.344. The group means were not statistically significant in difference ($p > .05$); therefore, the null

hypothesis cannot be rejected.

Problem-solving. A one-way ANOVA was performed for each of the three constructs of

philosophy, communication mode, and school setting in regard to the teachers' beliefs of

importance for the self-determination component of problem-solving.

Philosophy. A one-way ANOVA was conducted to determine if the belief of problem-

solving was different for teachers in relation to their philosophy. The three philosophies were

Bilingual/Bicultural (n=53), Aural/Oral (n=30), and Total Communication (n=72), with an

option for other (n=21) as well. There was homogeneity of variances, as assessed by Levene's

test of homogeneity of variances ($p = .111$). Differences of scores of problem-solving between

philosophies categories were not statistically significant, $F(3, 172) = .540$, $p = .656$. The group

means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis

cannot be rejected.

Communication mode. A one-way ANOVA was conducted to determine if the belief of problem-solving was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=81), Simultaneous Communication (n=34), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .066$). Differences of scores of problem-solving between communication modes were not statistically significant, $F(6, 169) = .442$, $p = .850$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Setting. A one-way ANOVA was conducted to determine if the belief of problem-solving was different for teachers in relation to their school setting. The three school settings were Urban (n=57), Suburban (n=75), and Rural (n=44). There was not a homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .010$). Differences of scores of problem-solving between school settings were not statistically significant, $F(2, 173) = 1.273$, $p = .283$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Goal setting and attainment. A one-way ANOVA was performed for each of the three constructs of philosophy, communication mode, and school setting in regard to the teachers' beliefs of importance for the self-determination component of goal setting and attainment.

Philosophy. A one-way ANOVA was conducted to determine if the belief of goal setting and attainment was different for teachers in relation to their philosophy. The three philosophies were Bilingual/Bicultural (n=53), Aural/Oral (n=30), and Total Communication (n=72), with an option for other (n=20) as well. There was homogeneity of variances, as assessed by Levene's

test of homogeneity of variances ($p = .102$). Differences of scores of goal setting and attainment between philosophies were not statistically significant, $F(3, 171) = 1.654$, $p = .179$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Communication mode. A one-way ANOVA was conducted to determine if the belief of goal setting and attainment was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=81), Simultaneous Communication (n=33), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .226$). Differences of scores of goal setting and attainment between communication modes were not statistically significant, $F(6, 168) = .192$, $p = .979$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Setting. A one-way ANOVA was conducted to determine if the belief of goal setting and attainment was different for teachers in relation to their school setting. The three school settings were Urban (n=57), Suburban (n=74), and Rural (n=44). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .085$). Differences of scores of goal setting and attainment between school settings were not statistically significant, $F(2, 172) = 1.363$, $p = .259$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Self-advocacy and leadership skills. A one-way ANOVA was performed for each of the three constructs of philosophy, communication mode, and school setting in regard to the

teachers' beliefs of importance for the self-determination component of self-advocacy and leadership skills.

Philosophy. A one-way ANOVA was conducted to determine if the belief of self-advocacy and leadership skills was different for teachers in relation to their philosophy. The three philosophies were Bilingual/Bicultural (n=53), Aural/Oral (n=30), and Total Communication (n=72), with an option for other (n=21) as well. There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .064$). Differences of scores of self-advocacy and leadership skills between philosophies were not statistically significant, $F(3, 172) = 1.007$, $p = .391$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Communication mode. A one-way ANOVA was conducted to determine if the belief of self-advocacy and leadership skills was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=81), Simultaneous Communication (n=34), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .148$). Differences of scores of self-advocacy and leadership skills between communication modes were not statistically significant, $F(6, 169) = .428$, $p = .856$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Setting. A one-way ANOVA was conducted to determine if the belief of self-advocacy and leadership skills was different for teachers in relation to their school setting. The three school settings were Urban (n=57), Suburban (n=75), and Rural (n=44). There was not a homogeneity

of variances, as assessed by Levene's test of homogeneity of variances (p = .000). Differences of scores of self-advocacy and leadership skills between school settings were not statistically significant, $F(2, 173)$ = 2.708, p = .069. The group means were not statistically significant in difference (p > .05); therefore, the null hypothesis cannot be rejected.

  Self-management and self-regulation. A one-way ANOVA was performed for each of the three constructs of philosophy, communication mode, and school setting in regard to the teachers' beliefs of importance for the self-determination component of self-management and self-regulation.

  Philosophy. A one-way ANOVA was conducted to determine if the belief of self-management and self-regulation was different for teachers in relation to their philosophy. The three philosophies were Bilingual/Bicultural (n=53), Aural/Oral (n=30), and Total Communication (n=72), with an option for other (n=21) as well. There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances (p = .223). Differences of scores of self-management and self-regulation between philosophies were not statistically significant, $F(3, 172)$ = .754, p = .522. The group means were not statistically significant in difference (p > .05); therefore, the null hypothesis cannot be rejected.

  Communication mode. A one-way ANOVA was conducted to determine if the belief of self-management and self-regulation was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=81), Simultaneous Communication (n=34), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances (p = .085). Differences of scores of self-management and self-

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regulation between communication modes were not statistically significant, $F(6, 169) = .837$, $p = .543$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Setting. A one-way ANOVA was conducted to determine if the belief of self-management and self-regulation was different for teachers in relation to their school setting. The three school settings were Urban (n=57), Suburban (n=75), and Rural (n=44). There was not a homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .004$). Differences of scores of self-management and self-regulation between school settings were not statistically significant, $F(2, 173) = 1.888$, $p = .155$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Self-awareness and self-knowledge. A one-way ANOVA was performed for each of the three constructs of philosophy, communication mode, and school setting in regard to the teachers' beliefs of importance for the self-determination component of self-awareness and self-knowledge.

Philosophy. A one-way ANOVA was conducted to determine if the belief of self-awareness and self-knowledge was different for teachers in relation to their philosophy. The three philosophies were Bilingual/Bicultural (n=53), Aural/Oral (n=30), and Total Communication (n=72), with an option for other (n=21) as well. There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .869$). Differences of scores of self-awareness and self-knowledge between philosophies were not statistically significant, $F(3, 172) = .673$, $p = .570$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Communication mode. A one-way ANOVA was conducted to determine if the belief of self-awareness and self-knowledge was different for teachers in relation to their communication mode. The seven communication modes were American Sign Language (n=38), Listening and Spoken Language (n=81), Simultaneous Communication (n=34), Other (n=11), Signed Exact English systems (n=3), Conceptually Accurate Signed English (n=6), and Pidgin Signed English (n=3). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .174$). Differences of scores of self-awareness and self-knowledge between communication modes were not statistically significant, $F(6, 169) = .966$, $p = .450$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Setting. A one-way ANOVA was conducted to determine if the belief of self-awareness and self-knowledge was different for teachers in relation to their school setting. The three school settings were Urban (n=57), Suburban (n=75), and Rural (n=44). There was not a homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = .009$). Differences of scores of self-awareness and self-knowledge between school settings were not statistically significant, $F(2, 173) = 1.227$, $p = .296$. The group means were not statistically significant in difference ($p > .05$); therefore, the null hypothesis cannot be rejected.

Qualitative. The data collected for qualitative analysis were from six survey participants willing to be interviewed. Five questions (Appendix C) with probing questions were asked to the participants. Interview question two, "Are there self-determination components that are more important for DHH students to gain than others? Which ones and why?" directly relates to the research question. To calculate this qualitative data, a chart was created marking the frequency and intensity of the components discussed during interviews. The frequency indicates how often

the self-determination component was mentioned, and the intensity shows how many participants stated component. Four of the seven components a) self-advocacy and leadership skills, b) problem-solving, c) goal setting and attainment, and d) self-awareness and self-knowledge were discussed as the most important for DHH students. The component self-advocacy and leadership skills had the highest intensity (n=4). An additional component regarding self-confidence was stated by one participant as the most important component for DHH students. From this data, self-advocacy and leadership skills was the top component for DHH students.

Table 9

Most Important Components for DHH Students

Component	Frequency	Intensity
Problem-Solving	2	2
Goal Setting and Attainment	2	2
Self-Advocacy and Leadership Skills	4	4
Self-Awareness and Self-Knowledge	1	1
Self-Confidence	2	1

Mixing. One way of mixing the quantitative and qualitative data sets was to quantify the qualitative data themes into a frequency table. All seven components were used in the survey, and all seven components were mentioned throughout the interviews as well. Problem-solving and goal setting and attainment were only components identified as top components, as mentioned above. Decision-making, choice-making, and self-management and self-regulation were mentioned generally during interviews; and self-advocacy and leadership skills and self-awareness and self-knowledge were discussed generally, as well as mentioned as top components. An additional component of self-confidence was discussed both generally and as a top component. Self-advocacy and leadership skills had the highest frequency (n=7) and intensity (n=5) for all components discussed in interviews.

Table 10

Self-Determination Components Mentioned in Interviews

Component	Frequency	Intensity
Choice-Making	2	2
Decision-Making	2	2
Problem-Solving	2	2
Goal Setting and Attainment	2	2
Self-Advocacy and Leadership Skills	7	5
Self-Management and Self-Regulation	2	2
Self-Awareness and Self-Knowledge	3	2
Self-Confidence	3	2

Research Question 4

Quantitative, qualitative, and the mixing of both data sets were analyzed to answer research question 4: What are the reasons why elementary Deaf education teachers do not teach self-determination?

Quantitative. The data collected for quantitative analysis were from participants' answers from the survey questions.

Barriers. The survey participants answered the question, "What reasons might lead you to decide not to provide instruction in any or all of the above self-determination areas (Check all that apply)?" This question was taken directly from Wehmeyer et al. (2000) with no modifications, and participants could select as many as applied. The most commonly selected barrier of the nine available was "other instruction areas are more important" at 17.44%, and the second was "insufficient time to instruct self-determination" at 15.97%. Participants who selected the item "someone else teaches it" (3.44%) were then taken to an open text box which

asked, "Who is responsible for teaching self-determination?" This open-ended text box was a modification to the survey. The majority of the open-ended answers were related to other adults; (e.g. parents, counselors, case managers, general education teachers) and "all professions working with a student." One participant indicated, "Transition," and another stated, "Everyone."

Qualitative. The data collected for qualitative analysis were from six survey participants willing to be interviewed. Five questions (Appendix C) with probing questions were asked to the participants. Interview question four, "Are there any barriers for you to overcome when teaching self-determination to your deaf students? What are they and how can they be overcome?" related directly to the research question. A total of 12 barriers were discussed between the six participants. Seven additional barriers were added to the nine from the survey, yet four barriers from the original survey were not discussed by interview participants. The additional barriers were student attitude, dependency of student, breakdown in communication, technology, parents, lack of funds, and teacher burnout. There was a tie for the highest intensity noted (n=4) for "other instruction areas are more important" and "breakdown in communication." Tracy stated, "Communication is one [barrier]. Sometimes it's communication between the parents and the child and between folks in the district." The highest frequency during interviews was student attitude. "Sometimes they [DHH students] do not want to do homework; that's fine; they will learn from the consequences of their choices as we know all choices have consequences", stated BM.

Mixing. The question regarding barriers in the survey addressed nine reasons teachers might not include self-determination instruction in the classroom and allowed for multiple selections of the choices. While coding the six interviews, each time a barrier was discussed, it was put into a table. Seven additional barriers were added from the interviews to the original

nine from the survey. Five of the original barriers were mentioned during interviews. "Other instruction areas are more important" had the highest intensity (n=4) and the second highest frequency (n=4). The barrier with the highest frequency (n=5) from the interview participants and survey barriers was "insufficient time to instruct self-determination" and it had the second highest intensity (n=3).

Table 11

Barriers to Teaching Self-Determination

Barrier	Quantitative		Qualitative	
	n	%	Frequency	Intensity
Adequate Self-Determination Skills	47	11.55		
Someone Else Teaches it	14	3.44		
Insufficient Time to Instruct Self-Determination	65	15.97	5	3
No Latitude to Teach Self-Determination	51	12.53	2	2
Other Instruction Areas are More Important	71	17.44	4	4
Students Would not Benefit	23	5.65		
Not Enough Training to Teach Self-Determination	44	10.81	3	2
No Curriculum Available	62	15.23	4	2
None of the Above	30	7.37		
Student Attitude			7	3
Dependency of Student			2	1
Breakdown in Communication			5	4
Technology			1	1
Parents			3	2
Lack of Funds			1	1
Teacher Burn Out			1	1

Summary

Included in this chapter were results of quantitative, qualitative, and mixed analyses to answer questions about elementary Deaf educator's perceptions on self-determination. A

discussion of the results, as well as implications for future research are presented in the following

chapter.

Chapter 5

Discussion

Self-determination has been a recognized best practice in special education transition (Shogren, 2013; Test et al., 2009) for over 10 years. Research on the promotion of self-determination interventions for increased self-determination has shown improved results for students with a disability (Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2013; Wehmeyer et al. 2012). Creating curriculums that implement self-determination for students with a disability creates opportunities for skill enhancement and improved academic and post-school outcomes (Shogren et al., 2017). These practices and curriculums are critical, since researchers believe self-determination is a developmental process over the lifespan of a student with a disability, and these students need opportunities to employ self-determination through all domains of life (Wehmeyer, Shogren, Little, & Lopez, 2017). Utilizing and implementing self-determination knowledge with younger students with a disability is gaining more recognition (Brown & Cohen, 1996; Carter et al., 2015; Erwin et al., 2009; Palmer & Wehmeyer, 2003). It is imperative that researchers begin to collect data related to special education elementary teachers' beliefs and implementation of self-determination in the classroom if we are to understand how to best support teachers' in their efforts of empowering students with a disability with self-determination. The purpose of this study was to gather data on Deaf education elementary teachers' perceptions of self-determination. The mixed-methods study sought to capture the Deaf education elementary teachers' beliefs, implementation, and perceived barriers related to self-determination both through a survey and through selected participant interviews.

Findings

Research Question 1

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Quantitative and qualitative analyses were used to answer research question 1: To what extent do elementary Deaf education teachers perceive self-determination practices as important to teach to deaf students? The three variables of philosophy, communication mode, and setting were specific variables that the researcher believed could have an impact on how teachers viewed the importance of self-determination. Depending on each variable, would it instill a greater sense for student autonomy and allow for teachers to empower their students with self-determination?

Philosophy. For the quantitative data, an ANOVA calculated p value=.364, >.05 indicate no significant value for philosophy interacting with a teacher's belief of self-determination. For the qualitative data, all three philosophies were represented, and all participants agreed starting young was important. Joanna stated, "So, we need to start a lot earlier with these [DHH] kids because they take longer to mature, take longer to think about it. Takes twice as long to explain it to them sometimes," indicating philosophy did not change the teacher's perception for self-determination importance. Between the quantitative and qualitative data, philosophy did not have an impact on the teacher's belief of the importance of self-determination.

Communication mode. An ANOVA calculated p value=.445, >.05 indicate no significant value for a communication mode interacting with a teacher's belief of self-determination. For the qualitative interview, the three communication modes with the most participants (Listening and Spoken Language, American Sign Language, and Simultaneous Communication) were represented. Even though the communication mode varied between participants, a common element discussed in interviews was the teacher's effort in supporting their students in using self-determination skills and in achieving a meaningful life. Five of the six teachers brought up the idea of putting more effort into it, as Krystal stated, "Am I, you know,

doing everything as an educator in a deaf ed. environment that I should be or could be doing for my students?" Tracy took the effort concept further when she stated, "…we have to dig deeper. And so, we have to take the time that it takes to say, what can we do with each kid to set up a life goal. Say what's important to you and how can we then attach it meaningfully to the curriculum…" The participants realized during interviews that not having the knowledge of self-determination and its components and not implementing it with their DHH students was not giving them the students everything they may need to succeed in life. Kelsey mentioned, "It's not really something that I've focused on. But I think if I changed my focus and if I can add self-determination skills during the time that I work with them, I should be doing that." Between the quantitative and qualitative data, communication mode did not have an impact on the teacher's belief of self-determination importance.

Setting. An ANOVA calculated p value=.110, >.05 indicate no significant value for a setting interacting with a teacher's belief of self-determination. All three settings were represented in the qualitative interviews. Three participants spanning the three settings and the three quadrants of teacher belief and implementation reported wanting professional development on self-determination. Krystal who taught in a suburban setting and was in the low belief and low implementation quadrant stated, "So I would just like to know more, how I could, you know, how it [self-determination] could help them be more successful." Even Jessica, who taught in an urban setting and was in the high belief and high implementation quadrant, explained, "I would like to be trained on how to really dive in and do lessons on self-determination." The finding that teachers were willing to be trained supported earlier findings of Reynolds (2019) related to early childhood Deaf educators' eagerness. Between the quantitative and qualitative data, the setting did not have an impact on the teacher's belief of self-determination importance.

Importance of self-determination. The researcher was curious to see if any of the component variables from philosophy, communication mode, or setting would show a significant impact on a teacher's belief about self-determination. If so, this would enable a new line of research as to why this specific component variable did impact self-determination beliefs. No variable was statistically significant, yet setting was the closest variable to significance of the three. It is hypothesized that setting may have an increased impact on self-determination because more DHH students are mainstreamed, with over 75% of the population in general education settings (Oxford University Press, 2019). Moores (2009) explained that residential schools are seeing a decrease in student attendance, forcing closures, or a transformation into day schools with the push for a student with a disability to be with their general education peers in a less restrictive environment. This means DHH children are attending schools closer to home and possibly have fewer DHH peers to socialize with. It also could mean DHH students do not have adequate services from specially trained Deaf education teachers or support personnel like certified interpreters. This changing demographic of student placement is of concern, as it may impede a DHH student's increase in self-determination if appropriate services are lacking in the home school district.

Research Question 2

Quantitative and qualitative analyses were used to answer research question 2: To what extent do elementary Deaf education teachers act on their perceptions of self-determination by teaching the components of self-determination?

Implementation. Quantitative data showed on average the frequency with which a Deaf education teacher implemented self-determination strategies. A total of 37.7% (n=66) of teachers were placed in the high implementation category, and 62.3% (n=109) of teachers were placed in

the low implementation category. With over 55% of the participants self-identifying as itinerant teachers and daily visits to DHH students not being typical for these teachers, the instrument used may not have been sensitive enough to capture a true understanding of how itinerant teachers implement self-determination during their visits. Conversely, one could argue that an itinerant teacher who visits the DHH student on a weekly basis or less is not meeting the individual DHH student's need to implement and sustain self-determination. Caution is warranted when generalizing implementation data to all types of Deaf education teachers.

Two main themes from the qualitative interviews were individualization and the teacher's action in implementation. Tracy summarized it this way:

> …but I think the biggest thing is you start with the needs of the students. It's what we do right, we start with what are the needs of the child. And then we say, well, you know, how can we bridge the gap forward into a great plan for this kid. What is necessary and then it's really just a matter of education and pulling in partners on that and doing our best job that we can to educate and bring people on board...

These teachers, whether or not they know what self-determination is, want the best for their DHH students and put time and effort into seeing them succeed. Joanna stated, "And a few of us itinerants get together every month and we create things." This is because so few resources are available for DHH students, yet the teachers will spend extra time individualizing for the one student in need. Brittney expressed this desire:

> I want students to have the same privilege as their hearing peers. If hearing students are required to perform at a level, deaf students should expect to do the same and not limit their choices. But, how they solve the problem or address it should be left to the student to decide.

This willingness to go the extra mile, to individualize content for one student, and to set high expectations for DHH students indicates that if a DHH self-determination curriculum were available and professional development was in place to support the Deaf education elementary teachers, they would incorporate self-determination with their students.

Research Question 3

Quantitative, qualitative, and the mixing of both data sets were analyzed to answer research question 3: Are there one or more self-determination components perceived to be more important by elementary Deaf education teachers and why?

The researcher was interested to see if participants would signify a component of self-determination that is more important for DHH students, since this is a unique population with its own language and facets. If there was a consensus from participants for a component as more important for the population, it could be the starting point to initiate the teaching of self-determination to DHH students. These could then be connected to the other components to incorporate the recommendation by Cobb et al. (2009) of intertwining self-determination component learning.

Choice-making. Individual ANOVAs were conducted with philosophy, communication mode, and setting as the independent variable and choice-making as the dependent variable. The p values for each variable were philosophy $p=.904$, communication mode $p=.718$, and setting $p=.596$. None of the p values attained significance at the $p<.05$ level. Component importance showed choice-making as the lowest component of importance regarding category six, the highest category, with 43.75%. It's rank also was low, being tied for the second lowest for category one, the highest category for rank, with 6.21%. During qualitative interviews, choice-making was discussed little by participants, with only two mentioning it, once each. From this

data, Deaf education elementary teachers did not consider choice-making of unique importance for DHH students.

Decision-making. Individual ANOVAs were conducted with philosophy, communication mode, and setting as the independent variable and decision-making as the dependent variable. The p values for each variable were philosophy p=.697, communication mode p=.839, and setting p=.344. None of the p values attained significance at the p<.05 level. The quantitative measure of component rank showed decision-making with the lowest percentage for category one, the highest category, with 1.86% and the lowest rank when category one and two were combined, with 10.56%. The qualitative data supports the quantitative data with no mention of decision-making as more important than the other components for DHH students. Two participants mentioned it once each during interviews. From this data, Deaf education elementary teachers did not consider decision-making of unique importance for DHH students.

Problem-solving. Individual ANOVAs were conducted with philosophy, communication mode, and setting as the independent variable and problem-solving as the dependent variable. The p values for each variable were philosophy p=.656, communication mode p=.850, and setting p=.283. None of the p values attained significance at the p<.05 level. The other quantitative measures of component importance and rank showed problem-solving as neither scoring high or low on either question. It received the second highest score for component importance with 65.34%, but for the combined categories for five and six, it dropped to the fourth highest component. Two participants mentioned problem-solving as a top component once each during interviews, but no other data was gathered in relation from interviews. From this

data, Deaf education elementary teachers did not consider problem-solving of unique importance for DHH students.

Goal setting and attainment. Individual ANOVAs were conducted with philosophy, communication mode, and setting as the independent variable and goal setting and attainment as the dependent variable. The p values for each variable were philosophy $p=.179$, communication mode $p=.979$, and setting $p=.259$. None of the p values attained significance at the $p<.05$ level. The quantitative measure of component importance showed goal setting and attainment with 79.43% of the total for the combined categories for five and six. This was the lowest total between the categories for five and six. For component ranking, goal setting and attainment had the highest amount for category seven, the lowest rank, with 32.30%. This is a clear variation between the other components, with a 9% difference for the next lowest component. The qualitative data showed two participants stating goal setting and attainment as a top component, once during each interview. No other participants mentioned it. Jessica stated, "Goal setting. It's funny because part of the whole process is, are the kids part of the goal setting?" This statement encapsulates the impression from participants because at some point goal setting and attainment is considered a component that will help DHH students, but as Jessica mentioned, are they part of goal setting? Teachers may not allow their students this option, but when teachers do, they realize it is worthwhile and understand it supports DHH students in being successful. From this data, it seems Deaf education elementary teachers did not consider goal setting and attainment of unique importance for DHH students.

Self-advocacy and leadership skills. Individual ANOVAs were conducted with philosophy, communication mode, and setting as the independent variable and self-advocacy and leadership skills as the dependent variable. The p values for each variable were philosophy

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p=.391, communication mode p=.856, and setting p=.069. None of the p values attained significance at the p<.05 level. Analyses related to the setting variable were the closest to a statistically significant finding, and this may pertain to the number of itinerant teachers involved in the study, which was over 55% of the participants. Antia and Rivera (2016) found 80% of DHH students receiving services from itinerant teachers received supplemental education in nonacademic areas, and the number one area of nonacademic education was self-advocacy. Another quantitative measure of component importance showed self-advocacy and leadership skills with the highest number in category six on importance with 66.48% for this category. The combined categories for five and six accumulated to 87.02%. Compared to the other components this was the third highest amount, only 1.62% different from the highest total percentage for the combined categories for five and six. Comparing self-advocacy and leadership skills on the rank score, it measured third with 36.02% for the combined categories for one and two. This quantitative data showed self-advocacy and leadership skills was considered important by Deaf education elementary teachers, but it was not the highest importance for this data set.

During interviews, four participants identified self-advocacy and leadership skills as a top component, each mentioning it once. Kelsey reaffirms what Antia and Rivera (2016) found, "Well, we do a lot of work with self-advocacy... Because most of my kids are hard of hearing. I don't have a lot of deaf students." A reason self-advocacy may be more influential than other components relates to specific content on the topic related to DHH students. Joanna explained:

> I do a lot of self-advocacy with them [DHH students]…I have a lot of information on self-advocacy and teaching them about themselves, about their hearing loss…I have the advocacy and action book. I love it! We use a lot of Karen Anderson"

Along with it being the top component discussed by participants, it had the highest frequency and intensity overall from interviews. It was mentioned seven times from five different participants. From this data, Deaf education elementary teachers considered self-advocacy and leadership skills of unique importance for DHH students and a top component for these students to acquire.

Self-management and self-regulation. Individual ANOVAs were conducted with philosophy, communication mode, and setting as the independent variable and self-management and self-regulation as the dependent variable. The p values for each variable were philosophy $p=.522$, communication mode $p=.543$, and setting $p=.155$. None of the p values attained significance at the $p<.05$ level. The other quantitative measure for component importance showed self-management and self-regulation had the highest number for combined categories for five and six, with 88.64%. For the ranking score, it was second with 40.37% for the combined categories of one and two, 24.22% behind the highest component. Though self-management and self-regulation saw quantitative value, it was not mentioned as a top component qualitatively. Two participants mentioned it once each, but no other data was gathered in relation to self-management and self-regulation from interviews. From this data, Deaf education elementary teachers considered self-management and self-regulation of unique importance for DHH students.

Self-awareness and self-knowledge. Individual ANOVAs were conducted with philosophy, communication mode, and setting as the independent variable and self-awareness and self-knowledge as the dependent variable. The p values for each variable were philosophy $p=.570$, communication mode $p=.450$, and setting $p=.296$. None of the p values attained significance at the $p<.05$ level. The other quantitative measure of component importance showed

self-awareness and self-knowledge the second highest total, 88.07% for the combined categories for five and six. It was also ranked the highest component with 52.17% for category one, being 39.75% above the next component. For component rank, with the combined categories for one and two, it still was the highest ranked at 64.57%, 24.22% above the next component. Self-awareness and self-knowledge was the clear top component when utilizing quantitative data. For the qualitative data, it was mentioned once as a top component and twice more by participants during interviews. From this data, Deaf education elementary teachers considered self-awareness and self-knowledge of unique importance for DHH students and a top component for DHH students to acquire.

Self-confidence. During qualitative interviews, one participant expressed that self-confidence should be a component, and it was an important need for DHH students. Brittney stated, "They [DHH students] lack the ability to feel confident that they made the right decision and follow through...If a student decides to do something and feels unsure about their decision, they resort to adults to help make a choice." It was also discussed in another interview, and Tracy takes this concept further by including the whole family when she stated:

> All of these things go into helping make a kid confident. A student confident in their ability to go out into the world and say, I know how to make it, I know what my rights are. We teach them about the ADA etc., what their rights are as a deaf adult, as a hard of hearing adult and what accessibility they need for in the future. A lot of places don't do that anymore or the staff aren't as knowledgeable as they should be. So, these are all things that unless you have someone who's knowledgeable around you to help the young student and really the families and the parents grow. And help the child know what they

should be asking for as not only a young person, but really as a family that's around them.

It's just really important to their future.

Though self-confidence was not a surveyed component, it is worth noting that Deaf education elementary teachers felt it impacts DHH students' lives and should be looked at.

Top Components. When reviewing both quantitative and qualitative data sets from Deaf education elementary teachers related to the seven self-determination components included in this research, I would rank them in the following order of importance: (a) self-awareness and self-knowledge, (b) self-management and self-regulation, (c) self-advocacy and leadership skills, (d) problem-solving, (e) decision-making, (f) goal setting and attainment, (g) choice-making. Kelsey provided a quotation that emphasizes why self-awareness and self-knowledge is the most important component, "Most of my kids are mainstreamed, I'm itinerant and for them to manage in the classroom... I tried to make it important to them. Your hearing loss isn't anything that you've done." Joanna helps her students internalize this self-knowledge by having her students socialize with other DHH students and create presentations about themselves.

> I try to do groups, if I have more than one [DHH] student in a school and sometimes we just do get togethers so that they just know other people with a hearing loss. I have the kids do a lot of presentations to their peers in their classroom. So that just helps them, I think, feel, maybe more accepted with their peers. That's probably the biggest thing I see in the elementary, is kind of work with their peers and their classroom teachers.

Utilizing this data, it would seem appropriate to develop or modify a self-determination curriculum specifically for DHH students based on the self-awareness and self-knowledge and self-management and self-regulation components. From there, intertwining the other five components would facilitate Cobb et al.'s (2009) idea.

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Research Question 4

Quantitative, qualitative, and the mixing of both data sets were analyzed to answer research question 4: What are the reasons why elementary Deaf education teachers do not teach self-determination?

Barriers. The quantitative survey provided nine options for teachers to select from for possible barriers for instruction of self-determination. An additional seven barriers were found during the qualitative interviews for a total of 16 barriers. Only five barriers were discussed from the survey in the interviews, helping to solidify the data sets. Three of these barriers found in the data sets can also be linked to prior research: lack of teacher training in self-determination (Mason, Field, & Sawilowsky, 2004; Wehmeyer & Schwartz, 1998), the need for professional development and curriculum (Mason et al., 2004), and no latitude to teach self-determination because the lack of administrative support (Karnoven, Test, Wood, Browder, & Algozzine, 2004). Each of these barriers was mentioned by at least two participants, and each was mentioned up to four times per barrier. Joanna explained about not having a curriculum, "I think a lot of us just do things on our own. I don't think we have something [a self-determination curriculum] that says this is what we should be doing." Jessica stated about her experience with administration, "…the principal is very strict. This is what you teach. I want my state scores to look good." With this information, we see that Deaf education elementary teachers' barriers mirror some barriers already found in the literature (Wehmeyer et al., 2000), yet they also face unique challenges specific to the population.

This mixing of the data achieves what Bryman (1992) identifies as macro and micro levels coming together. Researchers may believe one aspect of the problem, but by collecting the data from those who are experiencing the phenomena firsthand, the scope is enlarged, and

researchers can do more to improve the situation. The interviews expanded the barriers specifically underscoring DHH students' needs. A specific barrier faced by Deaf educators was a breakdown in communication between parents and the school system and parents and their child. Less than 10% of DHH children have a DHH parent (Scheetz, 2012), meaning the parents and the child's communication mode could be different, thus hindering a natural development of language. Brittney highlights this concept, "Part of this frustration comes from the language barrier. At home, verbal communication is used and at school it's sign language." When a topic is taught at school, students may have problems discussing what they learned with their parents, which disrupts the students' flow of learning. This can apply when students learn about self-determination at school and try to discuss the matter with parents. Kelsey expressed this sentiment, "Unfortunately, I have parents, I have families that aren't as supportive with hearing needs." Powers and Saskiewicz (1998) found parents of DHH students had lower involvement with their child's classroom and teacher compared to parents with hearing children. This lack of communication hinders the DHH student in multiple ways and isolates them from appropriate language acquisition. Brittney shares this same idea:

> They [hearing students] can make choices based on what they learned from their surroundings. The deaf lack the education that can be gained from their environmental learning. Most deaf students are born in hearing families which deprives deaf students from their environmental learning that would help them build self-determination. Instead they depend on adults to make their choices.

It is imperative for DHH students to have access to clear and meaningful communication wherever their school placement may be, and one interpreter or teacher is not enough.

Helpful Strategies. During qualitative interviews, several strategies were discussed that support DHH students in learning self-determination. Collaboration was one strategy that teachers found effective. Converse to the idea that parents impede their child's learning of self-determination, they can be a major factor in support of it. Kelsey stated, "…the ones [students] that have been most successful [with self-determination] are the ones who have a very strong parent support with them. When your parents have high standards and higher expectations for their kids, they also lend more support to those kind of skills." This statement is congruent with previous research findings of parents playing a critical role in supporting a child's self-determination (Cawthon, Garberoglio, Caemmerer, Bond, & Wendel, 2015; Mazzotti et al., 2013; Wu & Chu, 2012).

Another helpful strategy is connecting students' personal goals to academic instruction. Tracy stated, "We are all about trying to attach this [their learning] to life goals… What we do is try to say, how can we catch this kid and attach something really functional and meaningful [to instruction]?" Krystal makes learning meaningful by utilizing hands-on experiences:

> I think all of those extra experiences outside of, you know, academics. All the plays, all the guest speakers, and all the field trips. I think those experiences all tie in… I think especially with deaf and hard of hearing kids those hands-on experiences that can connect the learning definitely help them.

Connecting academics to students' personal goals and making the connections explicit to the student are things we lack in education in general. If teachers are mindful of the many benefits of connecting self-determination to academic instruction and allowing students to decide what and how they learn, DHH students' postsecondary success will improve.

Implications and Limitations

With a continual increase in knowledge about the benefits of self-determination for a student with a disability and their general education peers (Raley, Shogren, & McDonald, 2018; Shogren et al., 2017) a continued effort needs to be put forth to investigate the possible benefits of self-determination for DHH students at the elementary grades. Though deafness and hearing impaired IDEA categories combined total only 1.2% of the special education K-12 population (U.S. Department of Education, 2011), their unique language and cultural factors should prompt researchers to consider alternative methods to support their needs. Modifying a self-determination curriculum or creating one specifically for the DHH elementary student population could improve belief and or implementation by teachers as well as increase self-determination skill sets for the students. Several studies show self-determination curricula based in the classroom are effective with increasing a student's self-determination (Algozzine et al., 2001; Burke et al, 2018; Hoffman & Field, 1995; Raley et al., 2018; Powers et al., 2001; Wehmeyer et al., 2013). With philosophy, communication mode, and setting not individually impacting self-determination significantly, I believe a single curriculum can be used to benefit DHH students in acquiring self-determination no matter the composition of the classroom.

A statement made by Kelsey guided the researcher to consider the special nature of DHH teachers teaching DHH students:

> … when you didn't understand something, or the process of listening takes energy and sometimes when they're trying to process, like if they hear something. They're [the student is] like, 'oh, what did they just say?' By the time they try to figure out what was said, obviously, then the teacher has gone on. So, they lose stuff, so I don't know necessarily if it's more important, but certainly saying, "Hey, I didn't catch that"…I need more explanation or something like that.

This led to a unique factor that other interviewees discussed, a special connection between DHH individuals serving DHH students. First, Krystal discussed how the guidance counselor at her school could relate better with the students because of the shared trait of deafness. "She [guidance counselor] has a hearing loss herself. I think the kids can kind of… like get on the same level as her, you know, interact with her at a deeper level." Research shows a positive perception of a minority teacher from minority students can increase academic outcomes (Midgley, Feldlaufer, & Eccles, 1989; Teven & McCroskey, 1997; Wentzel, 2002). Brittney explained how her teaching was different, "…from my experience [being deaf], I don't want the students to share the same frustration I had in the past which was limiting my choices." When a teacher has a disability, they can become a role model for all students, still be an effective educator, and promote a positive school culture of acceptance (Hauk, 2010). They use their prior experiences to help mitigate these same problems for the next generation and teach students ways to be successful in a world that may not accept either who they are or their culture. Previous research has also found DHH students were more favorable towards deaf teachers and identified them as better teachers (Lang, Dowalilby, & Anderson, 1994; Roberson & Serwatka, 2000; Serwatka, Anthony, & Simon, 1986), following the same trend as minority students favoring minority teachers (Auerbach, 2007; Cherng & Halpin, 2016; Quiocho & Rios, 2000; Shipp, 1999).

Several limitations should be noted about this study. Though a matrix to coordinate interview questions with the research questions was created, some interview questions did not elicit data directly related to the research questions. Revising these questions for clarity so the interviewees understand what is sought after will increase the validity of the study. An example of this was interview question three, "What experiences have you had with DHH student(s) that

support them in their self-determination?" Two interviewees provided specific experiences, yet one did not relate to elementary aged DHH students. Rewording of this specific question and potentially the order in which the questions were asked could improve the qualitative data obtained.

Having more interviews would expand the insight we have with Deaf education elementary teachers and the challenges they face. Participants were only selected based on their belief and implementation category and not the three independent variables of philosophy, communication mode, and setting or individual self-determination components. Between the six interviewees, each of the main categories within the philosophy, communication mode, and setting variables were present, but additional interviews expanding on the variables with more than one participant per variable would improve the generalizability and trustworthiness of the data. additionally, utilizing the revised questions that are more honed to elicit the needed data in a grounded theory perspective could expand the knowledge of the phenomenon.

A limitation for the quantitative data was related to the option of "none of the above" (n=30) in identifying barriers on the survey. It would have been interesting to have a follow-up question related to this answer. If participants selected "none of the above", they could explain what was meant. It is unclear if participants meant that none of the barriers applied to them, there were no barriers to implement self-determination, or there were barriers, but the barriers mentioned did not impede implementation. Allowing for an option to add additional barriers could have been insightful. With this same reasoning, attaching another follow-up question when participants selected "students would not benefit" (n=23) could expand why they felt students would not benefit. It is unclear if the teacher was indicating self-determination was not beneficial for any of their students or it only benefitted a select few. Participants may have selected this

option for students with multiple disabilities, feeling if self-determination was implemented, a negligible benefit would be accomplished.

I believe education in general has veered from student-led learning with states implementing mandated tests and curriculums that do not look at students holistically. Curriculums need to be student centered to support social, emotional, and holistic well-being, not just academics. Students are not allowed the choices they once had, and this impacts DHH students more so because of the barrier to language most face. As evidenced in the data, teachers stated "other academic areas are more important" than self-determination instruction, reducing the time spent to improve a student's ability to navigate real world situations.

This academic only focus has had a negative effect on the preparation of teachers who serve DHH students. The focus of Deaf education teacher preparation programs is language acquisition so students can pass state test because that is what district administration searches for in a new teacher, one that can increase student test scores. Without Deaf education teacher preparation programs instructing and promoting the importance of self-determination throughout the DHH student's life, where will the teacher learn these important strategies?

A change needs to happen within Deaf education teacher preparation programs to include best practices in self-determination and school districts to regularly promote professional development on the topic. Over 80% of survey participants stated they were familiar with self-determination yet during interviews, 66% questioned whether they really understood self-determination and its components. If Deaf education teacher training programs would include a specific course or embed self-determination strategies across coursework, teachers would be better prepared to integrate self-determination practices throughout the school day, still

supporting their DHH students in their language acquisition, state testing, and growth as a well-rounded citizen.

Teachers need to understand the value of allowing DHH students embracing their self-determination and the positive benefits that happen throughout the student's life because of this learning. Self-determination skill sets are life-long whereas some state standards are only critical to the test. It will be hard for teachers to "give up control" of the classroom and it may become "messy" at times, yet I feel this will better serve DHH individuals holistically.

Conclusion

As the researcher, I was curious to understand Deaf education elementary teachers' perceptions of self-determination and to see if they implemented self-determination with their DHH students. I was intrigued to find a teacher's philosophy, communication mode, and setting did not impact beliefs related to self-determination and teachers believed self-awareness and self-knowledge and self-management and self-regulation were the top two components for DHH students to acquire. The overall findings from this study mirror what Agran et al. (1999); Carter et al. (2015); Cho, Wehmeyer, and Kingston (2011); and Mason, Field, and Sawilowsky (2004) found within the special education teacher population: self-determination is highly thought of, but consistent instruction is lacking. This study also furthers the work of Sebald (2013) by focusing on elementary Deaf education teachers at a national level instead of in one state, though findings were very similar in that teachers asserted self-determination's importance but were lacking implementation. Though no significant findings arose, this research continues to lay a foundation to support the need of self-determination being taught to elementary DHH students to further their self-determination and postsecondary success.

References

Agran, M., Snow, K., & Swaner, J. (1999). Teacher perceptions of self-determination: Benefits, characteristics, strategies. *Education and Training in Mental Retardation and Developmental Disabilities*, 34, 293-301.

Algozzine, B., Browder, D., Karnoven, M., West, D. W., Wood, W. M. (2001). Effects of interventions to promote self-determination for individuals with disabilities. *Review of Educational Research, 71*, 219-277. doi:10.3102/00346543071002219

Antia, S. D., & Rivera, C. M. (2016). Instruction and service time decisions: Itinerant services to deaf and hard-of-hearing students. *Journal of Deaf Studies and Deaf Education, 21*, 293-302. doi:10.1093/deafed/enw032

Auerbach, S. (2007). From moral supporters to struggling advocates reconceptualizing parent roles in education through the experience of working-class families of Color. *Urban Education, 42*(3), 250–283.

Battat, B., & PEPNet-Northeast. (1998). Teaching students who are hard of hearing. PEPNet Tipsheet. *PEPNet-Northeast*. Retrieved from http://search.ebscohost.com.ezproxy.lib.ou.edu/login.aspx?direct=true&db=eric&AN=ED509262&site=ehost-live

Balcazar, F. E, Taylor-Ritzler, T., Dimpfl, S., Portillo-Pena, N., Guzman, A., Schiff, R., & Murvay, M. (2012). Improving the transition outcomes of low-income minority youth with disabilities. *Exceptionality, 20*, 114-132. doi:10.1080/09362835.2012.670599

Bassok, D., Latham, S., & Rorem, A. (2016). Is kindergarten the new first grade?. AREA Open, 1, 1-31. doi:10.1177/2332858415616358

Brantlinger, E., Jimenez, R., Lkinger, J., Pugach, M., Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children, 71,* 195-207.

Bremer, C. D., Kachgal, M., Schoeller, M., & National Center on Secondary Education and Transition M. M., (2003). *Self-Determination: Supporting Successful Transition. Research to Practice Brief.* Retrieved from http://libraries.ou.edu/access.aspx?url=http://search.ebscohost.com.ezproxy.lib.ou.edu/login.aspx?direct=true&db=eric&AN=ED478553&site=ehost-live

Browder, D. M., Wood, W. M., Test, D. W., Karnoven, M., & Algozzine, B. (2001). Reviewing resources on self-determination: A map for teachers. *Remedial and Special Education, 22*, 233-244.

Brown, F., & Cohen, S. (1996). Self-determination and young children. *Journal of Association of Persons with Severe Handicaps*, *21*(1), 22-30.

Bruyere, S. (2008). Total access: Making college web sites accessible to students with disabilities. *Community College Journal*, *79*(1), 36–39.

Bryman, A. (1992). Quantitative and qualitative research: Further reflections on their integration. In J. Brannen (Ed.). Mixing methods: Qualitative and quantitative research (pp.57–80). Aldershot: Avebury.

Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative research, 6*(1) 97-113.

Burke, K. M., Raley, S. K., Shogren, K. A., Mumbardo-Adam, C., Uyanik, H., Hagiwara, M., & Behrens, S. (2018). A meta-analysis of interventions to promote self-determination of students with disabilities. *Remedial and Special Education*. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/0741932518802274

Burnes, J. J., Martin, J. E., Terry, R., McConnell, A., E., & Hennessey, M. N. (2018). Predicting postsecondary education and employment outcomes using results from the transition assessment and goal generator. Career Development and Transition for Exceptional Individuals, 41, 111-121. doi:10.1177/2165143417705353

Campbell-Whately, G. D. (2008). Teaching students about their disability: Increasing self-determination skills and self-concept. *International Journal of Special Education, 23*, 136-144.

Carter, E. W., Lane, K. L., Jenkins, A. B., Magill, L., Germer, K., & Greiner, S. M. (2015). Administrator views on providing self-determination instruction in elementary and secondary schools. *The Journal of Special Education*, *49*, 52-64. doi:10.1177/0022466913502865

Cawthon, S. W., Garberoglio, C. L., Caemmerer, J. M., Bond, M., & Wendel, E. (2015). Effect of parent involvement and parent expectations on postsecondary outcomes for individuals who are d/Deaf or hard of hearing. *Exceptionality, 23*, 73-99. doi:10.1080/09362835.2013.865537

Chang, W., & Rusher, D. (2018). Middle school transition planning practices. *National Technical Assistance Center of Transition*. Retrieved from https://www.transitionta.org/sites/default/files/news/AB_MiddleSchool%26TransitionPla nning_%202018_FINAL_0.pdf

Cherng, H. S., & Halpin, P. F. (2016). The importance of minority teachers: Student perceptions of minority versus white teachers. Educational Researcher, 45, 407-420. doi:10.3102/0013189X16671718

Cho, H., Wehmeyer, M., & Kingston, N. (2011). Elementary teachers' knowledge and use of
    interventions and barriers to promoting student self-determination. *Journal of Special
    Education, 45*, 149-156.

Cimera, R. E., Burgess, S., & Bedesem, P. L. (2014). Does providing transition services by age
    14 produce better vocational outcomes for students with intellectual disability? *Research
    and Practice for Persons with Severe Disabilities, 39*(1), 47-54.
    doi:10.1177/1540796914534633

Cobb, B., Lehmeann, J., Newman-Gonchar, R., & Alwell, M. (2009). Self-determination for
    students with disabilities. Career Development for Exceptional Individuals, 32, 108-114.
    doi:10.1177/0885728809336654

Cook, B. G., Tankersley, M., Cook, L., & Landrum, T. J. (2008). Evidence-based practices in
    special education: Some practical considerations. *Intervention in School and Clinic, 44*,
    69-75. doi:10.1177/1053451208321452

Creswell, J. W. & Clark. P. V. L. (2010). *Designing and conducting mixed methods research.*
    (2nd ed). Los Angeles: SAGE Publications.

Creswell, J. W. & Clark. P. V. L. (2018). *Designing and conducting mixed methods research.*
    (3rd ed). Los Angeles: SAGE Publications.

Council for Exceptional Children. (2020). *Evidence-based practice resources*. Retrieved from
    https://www.cec.sped.org/Standards/Evidence-Based-Practice-Resources-Original

Copeland, S. R., & Hughes, C. (2002). Effects of goal setting on task performance of persons
    with mental retardation. *Education and Training in Mental Retardation and
    Developmental Disabilities, 37*, 40-54.

CSUN. (n.d.). *Pepnet 2*. Retrieved from https://www.csun.edu/ncod/pepnet2

Danneker, J. E., & Bottge, B. A. (2009). Benefits of and barriers to elementary student-led individualized education programs. *Remedial and Special Education, 30*, 225-233. doi:10.1177/0741932508315650

Deci, E. L., & Chandler, C. L. (1986). The importance of motivation for the future of the LD field. *Journal of Disability Studies*, doi:10.1177/002221948601901003

D'Zurilla, T. J., Maydeu-Olivares, A., & Gallardo-Pujol, D. (2011). Predicting social problem solving using personality traits. *Personality and Individual Differences, 50,* 142-147.

Eisenman, L. T. (2007). Self-determination interventions: Building a foundation for school completion. *Remedial and Special Education, 28*, 2-8.

Erwin, E. J., Brotherson, M. J., Palmer, S. B., Cook, C. C., Weigel, C. J., & Summers, J. A. (2009). How to promote self-determination for young children with disabilities. *Young Exceptional Children, 12*(2), 27-38. doi:10.1177/1096250608329611

Erwin, E. J., & Brown, F. (2003). From theory to practice: A contextual framework for understanding self-determination in early childhood environments. *Infants & Young Children, 16*, 77-87.

Evmenova, A. S., Regan, K., Boykin, A., Good, K., Hughes, M., MacVittie, N., …Chirinos, D. (2016). Emphasizing planning for essay writing with a computer-based graphic organizer. Exceptional Children, 82, 170-191. doi:10.1177/0014402915591697

Ferrell, K. A., Bruce, S., & Luckner, J. L. (2014). *Evidence-based practices for students with sensory impairments* (Document No. IC-4). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: http://ceedar.education.ufl.edu/tools/innovation-configurations/

Frauenknecht, M., & Black, D. R., (2010). Is it social problem solving or decision making?

Implications for health education. *American Journal of Health Education*, *41*, 112-123.

Garay, S. V. (2003). Listening to the voices of deaf students: Essential transition issues. *Teaching Exceptional Children, 35*, 44-48.

Garberoglio, C. L., Palmer, J. L., & Cawthon, S. (2019). *Undergraduate Enrollment of Deaf Students in the United States*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes.

Garberoglio, C.L., Palmer, J.L., Cawthon, S., & Sales, A. (2019a). *Deaf People and Educational Attainment in the United States: 2019*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes.

Garberoglio, C. L., Palmer, J. L., Cawthon, S., & Sales, A. (2019b). *Deaf People and Employment in the United States: 2019*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes.

Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology, 41,* 625-635.

Gersten, R., Fuchs, L. S., Compton, D., Coyne, M., Greenword, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children*, *71*, 149-164.

Glago, K., Mastropieri, M. A., & Scruggs, T. E. (2009). Improving problem solving of elementary students with mild disabilities. *Remedial and Special Education, 30*, 372-380. doi:10.1177/0741932508324394

Glasser, B. G. (1992). *Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.

Gothberg, J. E., Peterson, L. Y., Peak, M., & Sedaghat, J. M. (2015). Successful transition of students with disabilities to 21st-century college and careers. *Teaching Exceptional Children, 47,* 344-351.

Graue, E. (2010). Reimagining kindergarten. *Education Digest: Essential Readings Condensed for Quick Review*, *75*(7), 28–34.

Greenberg, M. T., & Kusche, C. A. (1998). Preventive intervention for school-age deaf children: The PATHS curriculum. *Journal of Deaf Studies and Deaf Education, 3,* 49-63.

Grenwelge, C., Zhang, D., Landmark, L. (2010). Comprehensive leadership training for youth with disabilities: A new and improved youth leadership forum model. TEACHING Exceptional Children, 42, 62-68.

Hadre, P. L., & Reeve, J. (2003). A motivational model of rural students' intentions to persist in, versus drop out of, high school. Journal of Educational Psychology, 95, 347-356. doi:10.1037/0022-0663.95.2.347

Halpern, A. S. (1994). The transition of youth with disabilities to adult life: A position statement of the division on career development and transition, the council for exceptional children. *Career Development and Transition for Exceptional Individuals, 17*(2), 115-124. doi:10.1177/088572889401700201

Halpern, A. S. (1991). Transition: Old wine in new bottles. *Exceptional Children, 58*, 202-211.

Hauk, A. (2010). Authentic inclusion: A celebration of exceptional teachers and student identity a phenomenological self-study. *Review of Disability Studies: An International Journal*, 6(2).

Heller, T., Schindler, A., Palmer, S. B., Wehmeyer, M. L., Parent, W., Jenson, R., Abery, B. H.,

    Geringer, W., Bacon, A., & O'Hara D.M. (2011) Self-determination across the life span:

    Issues and gaps, *Exceptionality, 19*, 31-45, doi:10.1080/09362835.2011.537228

Hickson, L., & Khemka, I. (2013). Problem solving and decision making. In M. Wehmeyer

    (Ed.), The Oxford handbook of positive psychology and disability. New York: Oxford

    University Press.

Hoffman, A., & Field, S. (1995). Promoting self-determination through effective curriculum

    development. *Intervention in School and Clinic, 30*(3), 134-141.

Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of

    single-subject research to identify evidence-based practice in special education.

    Exceptional Children, 71, 165-179.

Hughes, C., Kim, J. H., Hwang, B. Killian, D. J., Fischer, G. M., Brock, M. L., … Houser, B.

    (1997). Practitioner-validated secondary transition support strategies. *Education and

    Training in Mental Retardation and Developmental Disabilities, 32,* 201-212.

Individuals With Disabilities Education Improvement Act of 2004, 20 U.S.C. *§*1400 *et seq.*

    (2004).

Izzo, M. V., Pritz, S. G., & Ott, P. (1990). Teaching problem-solving skills: A ticket to a brighter

    future. *Journal for Vocational Special Needs Education, 13,* 23-26.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed

    methods research. *Journal of Mixed Methods Research*, 1, 112-133.

Karnoven, M., Test, D. W., Wood, W. M., Browder, D., & Algozzine, B. (2004). Putting self-

    determination into practice. *Exceptional Children, 71*, 23-41.

Kermit, P. S. (2019). Passing for recognition – deaf children's moral struggles languaging in

    inclusive education settings, *Deafness & Education International, 21*:2-3, 116-132.

    doi:10.1080/14643154.2018.1561783

Khemka, I., Hickson, L., Mallory, S. B. (2016). Evaluation of a decision-making curriculum for

    teaching adolescents with disabilities to resist negative peer pressure. *Journal of Autism*

    Development Discord, 46, 2372-2384. doi:10.1007/s10803-016-2770-0

King-Sears, M. E. (2006). Self-management for students with disabilities: The importance of

    teacher follow-up. *International Journal of Special Education, 21*, 94-108.

Kohler, P. D., & Greene, G. (2004). Strategies for integrating transition-related competencies

    into teacher education. *Teacher Education And Special Education*, *27*(2), 146-162.

Konrad, M., Fowler, C. H., Walker, A. R., Test, D. W., & Wood, W. M. (2007). Effects of self-

    determination interventions on the academic skills of students with learning disabilities.

    Learning Disability Quarterly, *30*, 89–113. doi:10.2307/30035545

Lackaye, T. D. & Margalit, M. (2006). Comparisons of achievement, effort and self-perceptions

    among students with learning disabilities and their peers from different achievement

    groups. *Journal of Learning Disabilities, 39,* 432-446.

Ladd, P., & Lane, H. (2013). Deaf ethnicity, deafhood, and their relationship. *Sign Language*

    Studies, *13*(4), 565–578.

Lang, H. G., Dowalilby, F. J., & Anderson, H. (1994). Critical teaching incidents: Recollections

    of deaf college students. *American Annals of the Deaf, 139*, 119-127.

Leigh, I., W., Andrews, J., F., & Harris, R., L. (2018). *Deaf Culture: Exploring Deaf*

    Communities in the United States. San Diego: CA. Plural Publishing.

Lindstrom, L., Paskey, J., Dickinson J., Doren, B., Zane, C., & Johnson, P. (2007). Voices from

    the field: Recommended transition strategies for students and school staff. *The Journal of*

    Vocational Special Needs Education, 29, 4-15.

Lipkowitz, S., & Mithaug, D. E. (2003). Assessing self-determination prospects of students with

    different sensory impairments. In D. E. Mithaug, D. K. Mithaug, M. Agran, J. E. Martin,

    & M. L. Wehmeyer (Eds.). Self-determined learning theory: Construction, verification,

    and evaluation (pp. 104-120). Mahwah, NJ: Lawrence Erlbaum.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and

    task motivation: A 35-year odyssey. *American Psychologist, 57*, 705-717.

Lomax, R.G., & Hahs-Vaughn, D.L. (2012). *An introduction to statistical concepts* (3rd ed.).

    New York, NY: Routledge.

Luft, P. (2014). A national survey of transition services for deaf and hard of hearing students.

    Career Development and Transition for Exceptional Individuals, 37, 177-192.

    doi:10.1177/2165143412469400

Luft, P. (2015). Transition services for DHH adolescents and young adults with disabilities:

    Challenges and theoretical frameworks. *American Annals of the Deaf, 160*, 395-414.

    doi:10.1353/aad.2015.0028

Luft, P. (2017). What is different about deaf education? The effects of child and family factors

    on educational services. *The Journal of Special Education, 1*, 27-37.

    doi:10.1177/0022466916660546

Marschark, M. (2007). *Raising and Educating a Deaf Child*. New York, NY: Oxford University

    Press.

Martin, J. D., Martin, J. E., & Osmani, K. J. (2014). Teaching students to attain annual transition goals using the take action goal attainment lessons. *Career Development and Transition for Exceptional Individuals, 37*, 72-83. doi:10.1177/2165143413476544

Martin, J. E., & Williams-Diehm, K. (2013). Student engagement and leadership of the transition planning process. *Career Development and Transition for Exceptional Individuals, 36*, 43-50. doi:10.1177/2165143413476545

Mason, C., Field, S., & Sawilowsky, S. (2004). Implementation of self-determination activities and student participation in IEPs. *Exceptional Children, 70*, 441-451.

Mazzotti, V. L., Rowe, D. A., Cameto, R., Test, D. W., & Morningstar, M. E. (2013). Identifying and promoting transition evidence-based practices and predictors of success: A position paper of the Division on Career Development and Transition. *Career Development and transition for Exceptional Individuals*, *36*, 140-151. doi:10.1177/2165143413503365

Midgley, C., Feldlaufer, G., & Eccles, J. S. (1989). Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. *Child Development, 60*(4), 981–992.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent anti peer pressure social behavior: A developmental taxonomy. *Psychological Review, 100*, 674-701.

Moores, D. F. (2009). Residential schools for the deaf and academic placement past, present, and future. *American Annals of the Deaf, 154*, 3-4. doi:https://doi.org/10.1353/aad.0.0077

Morse, J. (1994). Emerging from the data: The cognitive processes of analysis in qualitative inquiry. In J. Morse (Ed.), *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage.

Murawski, W. M., & Wilshinsky, N. (2005). Teaching self-determination to early elementary

    students: Six-year-olds at the wheel. *TEACHING Exceptional Children Plus, 1*(5).

National Technical Assistance Center on Transition. (n.d.). *Predictors by outcome area*.

    Retrieved from http://transitionta.org/sites/default/files/Pred_Outcomes_0.pdf

Neubert, D. A., & Leconte, P. J. (2013). Age-appropriate transition assessment: The position of

    the division on career development and transition. *Career Development and Transition*

    for Exceptional Individuals, 36(2), 72-83. doi:10.1177/2165143413487768

Newman, L., Wagner, M., Knokey, A., Marder, C., Nagle, K., Shaver, D., & Schwarting, M.

    (2011). The post-high school outcomes of young adults with disabilities up to 8 years

    after high school. A report from the national longitudinal transition study-2 (NLTS2)

    [NCSER 2011–3005] (NCSER 2011–3005). Menlo Park: SRI International.

Nirje, B. (1972). The right to self-determination. In W. Wolfensberger, (Ed.), *Normalization:*

    The principle of normalization (p. 176-200). Toronto: National Institute on Mental

    Retardation.

Nunes, T. (2004). *Teaching mathematics to deaf children*. London, England: Whurr.

Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. N., Thompson, B., & Harris, K. R. (2005).

    Research in special education: Scientific methods and evidence-based practices.

    Exceptional Children, 71, 137-148.

Oxford University Press. (2019). *Deaf and hard of hearing students in the mainstream*. Retrieved

    from http://www.raisingandeducatingdeafchildren.org/2014/01/01/deaf-and-hard-of-

    hearing-students-in-the-mainstream/

Padden, C., & Humphries, T. (1988). *Deaf in America: Voices from a culture*. Cambridge, MA:

    Harvard University Press.

Palmer, S. B., Summers, J. A., Brotherson, M. J., Erwin, E. J., Maude, S. P., Stroup-Rentier, V., Wu, H. Y., Peck, N. F., Zheng, Y., Weigel, C. J., Chu, S. Y., McGrath, G. S., & Haines, S. J. (2012). Foundations for self-determination in early childhood: An inclusive model for children with disabilities. *Topics in Early Childhood Special Education, 33*, 38-47, doi:10.1177/0271121412445288

Palmer, S. B. & Wehmeyer, M. L. (2003). Promoting self-determination in early elementary school: Teaching self-regulated problem-solving and goal-setting skills. *Remedial and Special Education, 24*, 115-126.

Petcu, S. D., Yell, M. D., Cholewicki, J. M., & Plotner, A. J. (2014). Issues of policy and law in transition services: Implications for special education leaders. *Journal of Special Education Leadership, 27*, 66-75.

Pepnet 2. (2017). *Pepnet 2*, Retrieved from http://www.pepnet.org/

Pepnet 2. (2014). Map it: What comes next?. Retrieved from https://dcmp.org/learn/465-map-it-what-comes-next-module

Peterson, L. Y., Burden, J. P., Sedaghat, J. M., Gothberg, J. E., Kohler, P. D., & Coyle, J. L. (2013). Triangulated IEP transition goals. *Teaching Exceptional Children, 45,* 46-57.

Powers, G. W., & Saskiewicz, J. A. (1998). A comparison study of educational involvement of hearing parents of deaf and hearing children of elementary school age. *American Annals of the Deaf, 143*, 35-39.

Powers, L. E., Tuner, A., Westwood, D., Matuszewski, J., Wilson, R., & Phillips, A. (2001). TAKE CHARGE for the future: A controlled field-test of a model to promote student involvement in transition planning. *Career Development for Exceptional Individuals, 24*(1), 89-104. doi:10.1177/088572880102400107

Prince, A. M., Plotner, A. J., & Yell, M. L. (2014). Postsecondary transition and the courts: An update. *Career Development and Transition for Exceptional Individuals, 25*, 41-47. doi:10.1177/1044207314530469

Quiocho, A., & Rios, F. (2000). The power of their presence: Minority group teachers and schooling. *Review of Educational Research, 70*, 485–528.

Raley, S. K., Shogren, K. A., & McDonald, A. (2018). How to implement the Self-Determined Learning Model of Instruction in inclusive general education classrooms. *TEACHING Exceptional Children, 51*, 62-71.

Raley, S. K., Shogren, K. A., & McDonald, A. M. (in press). Whole-class implementation of the Self-Determined Learning Model of Instruction in inclusive high school mathematics classes. *Inclusion*.

Reiman, J., And Others, & Northern Illinois Univ., D. R. and T. C. for T. U. P. W. A. D. (1992). Assessment, intervention, and program needs of lower achieving and multiply disabled deaf people requiring extended transition support. Retrieved from http://libraries.ou.edu/access.aspx?url=http://search.ebscohost.com.ezproxy.lib.ou.edu/login.aspx?direct=true&db=eric&AN=ED356601&site=ehost-live

Reynolds, M. A. (2019). *Deaf educator perspectives: Do early childhood education self-determination transition practices exist?* Unpublished manuscript, University of Oklahoma, Norman OK.

Roberson, J. L., Serwatka, T, S. (2000). Student perceptions and instructional effectiveness of deaf and hearing teachers. American Annals of the Deaf, 145, 256-262. doi:10.1353/aad.2012.0066

Rowe, D. A., Alverson, C. Y., Unruh, D. K., Fowler, C. H., Kellems, R, & Test, D. W. (2015). A

    Delphi study to operationalize evidence-based predictors in secondary transition. *Career*

    Development and Transition for Exceptional Individuals, *38*, 113-126.

    doi:10.1177/2165143414526429

Rowe, D. A., McNaught, J., Yoho, L. M., Davis, M., & Mazzotti, V. L. (2018). Helping students

    make informed decisions about transition via web-based resources. *Career Development*

    and Transition for Exceptional Individuals, 41, 252-259.

    doi:10.1177/2165143417736266

Scheetz, N. A. (2012). *Deaf education in the 21st century*. Boston, MA: Pearson.

Sebald, A. (2013). Teachers of the deaf and hard of hearing: perceptions of self-determination

    for their students. *Teacher Education and Special Education, 36*, 145-159.

    doi:10.1177/0888406413484158

Serwatka, T. S., Anthony, R., & Simon, S. (1986). A comparison of deaf and hearing teacher

    effectiveness. American Annals of the Deaf, 131, 339-343.

Shipp, V. H. (1999). Factors influencing the career choices of African American collegians:

    Implications for minority teacher recruitment. *Journal of Negro Education, 68*, 343–351.

Shogren, K. A. (2013). *Self-determination and transition planning*. Baltimore, MD: Brookes.

Shogren, K. A., Lee, J., & Panko, P. (2017). An Examination of the relationship between

    postschool outcomes and autonomy, psychological empowerment, and self-realization.

    Journal of Special Education, *51*, 115–124.

Shogren, K. A., & Plotner, J. (2012). Transition planning for students with intellectual disability,

    autism, or other disabilities: Data from the national longitudinal transition study-2.

    Intellectual and Developmental Disabilities, 50, 16-30.

Shogren, K. A., & Turnbull, A. P. (2006). Promoting self-determination in young children with

disabilities. *Infants & Young Children*, *19*, 338-352.

Shogren, K. A., Palmer, S. B., Wehmeyer, M. L., Rifenbark, G. G., & Little, T. D. (2015).

Relationships between self-determination and postschool outcomes for youth with

disabilities. *Journal of Special Education, 48*, 256-267.

Shogren, K. A., Palmer, S. B., Wehmeyer, M. L., Williams-Diehm, K., & Little, T. D. (2012).

Effect of intervention with the Self-Determined Learning Model of Instruction on access

and goal attainment. *Remedial and Special Education*, *33*, 320–330.

doi:10.1177/0741932511410072

Shogren, K. A., Wehmeyer, M. L., & Lane, K. L. (2016). Embedding interventions to promote

self-determination within multitiered systems of supports. *Exceptionality*, *24*, 213–224.

doi:10.1080/09362835.2015.1064421

Shogren, K. A., Wehmeyer, M. L., Little, T. D., Forber-Pratt, A. J., Palmer, S. B., & Seo, H.

(2017). Preliminary validity and reliability of scores on the Self-Determination Inventory:

Student Report version. *Career Development and Transition for Exceptional Individuals,*

40, 92-103. doi:10.1177/2165143415594335

Simeonsson, R. J., Carlson, D., Huntington, G. S., McMillen, J. S., & Brent, J. L. (2001).

Students with disabilities: A national survey of participation in school activities.

Disability and Rehabilitation, 23, 49-63.

Sitlington, P., Neubert, D., & Leconte, P. J. (1997). Transition assessment: The position of the

division on career development and transition. *Career Development for Exceptional*

Individuals, 20, 69-79.

Sparks, S. C., & Cote, D. L. (2012). Teaching choice making to elementary students with mild to

    moderate disabilities. *Intervention in School and Clinic, 47*, 290-296.

    doi:10.1177/1053451211430123

Stang, K., Carter, E., Lane, K., & Pierson, M. (2009). Perspectives of general and special

    educators on fostering self-determination in elementary and middle school. *Journal of*

    Special Education, 43, 94-106.

Suk, A. L., Martin, J. E., McConnell, A. E., & Biles, T. L. (2018). *States decrease the age when*

    secondary transition planning must begin. Manuscript submitted for publication

Tashakkori, A. & Teddlie, C. (2010), *SAGE Handbook of mixed methods in social and*

    behavioral research (2nd ed). Thousand Oaks, CA: Sage.

Temple, B., & Young, A. (2004). Qualitative research and translation dilemmas. *Qualitative*

    Research, 4, 161-178.

Test, D. W., Fowler, C. H., Richter, S. M., White, J., Mazzotti, V., Walker, A. R., …Kortering,

    L. (2009). Evidence-based practices in secondary transition. Career Development for

    Exceptional Individuals, 32, 115-128. Doi:10.1177/0885728809336859

Teven, J. J., & McCroskey, J. C. (1997). The relationship of perceived teacher caring with

    student learning and teacher evaluation. *Communication Education, 46*, 1–9.

Thompson, B., Diamond, K. E., McWilliam, R., Snyder, P., & Snyder, S. W. (2005). Evaluating

    the quality of evidence from correlational research for evidence-based practice.

    Exceptional Children, 71, 181-194.

Turnbull, A., Turnbull, R., & Wehmeyer, M. L. (2010). *Exceptional Lives: Special Education in*

    Today's Schools 6th edition. Upper Saddle River, NJ: Merrill.

Traxler, C. (2000). The Stanford Achievement Test, ninth edition: National norming and

performance standards for deaf and hard of hearing students. *Journal of Deaf Studies and Deaf Education, 5*(4), 337-348.

University of Minnesota. (1989). *National Conference on Self-Determination*. Retrieved from http://mn.gov/mnddc/learning/document/GT070.PDF

U.S. Department of Education. (2011). *33rd annual report to Congress, Parts B*. Retrieved from http://www2.ed.gov/about/reports/annual/osep/2011/parts-b-c/index.html

Van Tubbergen, M., Omichinski, D., & Warschausky, S. (2008). Using the choice-making skills of students with disabilities for educational planning. *Journal of the American Academy of Special Education Professionals,* 14-24. Retrieved from http://libraries.ou.edu/access.aspx?url=http://search.ebscohost.com.ezproxy.lib.ou.edu/login.aspx?direct=true&db=eric&AN=EJ1139298&site=ehost-live

Ward, M. J. (2005). An historical perspective of self-determination in special education: Accomplishments and challenges. *Research and Practice for Persons with Severe Disabilities,* doi:10.2511/rpsd.30.3.108

Wehmeyer, M. L. (2004). Beyond self-determination: Causal agency theory. *Journal of Developmental and Physical Disabilities, 16*, 337-359. doi:10.1007/s10882-004-0691-x

Wehmeyer, M. L., Agran, M., & Hughes, C. (2000). A national survey of teachers' promotion of self-determination and student-directed learning. *The Journal of Special Education, 34*, 58-68.

Wehmeyer, M. L., & Palmer, S. B. (2000). Promoting the acquisition and development of self-determination in young children with disabilities. *Early Education and Development*, *11*, 465-481. doi:10.1207/215566935eed11046

Wehmeyer, M. L., Palmer, S. B., Shogren, K. A., Williams-Diehm, K., & Soukup, J. H. (2013). Establishing a causal relationship between interventions to promote self-determination and enhanced student self-determination. *The Journal of Special Education, 46*, 195–210. doi:10.1177/0022466910392377

Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *EXCEPTIONALITY, 15*, 31-44.

Wehmeyer, M. L., & Schwartz, M. (1998). The self-determination focus of transition goals for students with mental retardation. *Career Development for Exceptional Individuals, 21*, 75-86.

Wehmeyer, M. L., & Shogren, K. (2008). Self-determination and learners with autism spectrum disorders. In R. Simpson & B. Myles (Eds.), *Educating children and youth with autism: Strategies for effective practice* (2nd ed.) (pp. 433-476). Austin, TX: Pro-Ed Publishers, Inc.

Wehmeyer, M. L., Shogren, K. A., Little, T. D., & Lopez, S. J. (Eds.). (2017). *Handbook of the development of self-determination*. New York, NY: Springer.

Wehmeyer, M. L., Shogren, K. A., Palmer, S. B., Williams-Diehm, K., Little, T. D., & Boulton, A. (2012). Impact of the Self-Determined Learning Model of Instruction on student self-determination: A randomized-trial placebo control group study. *Exceptional Children, 78*, 135–153.

Wentzel, K. R. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development, 73*, 287–301.

What Works Clearinghouse. (2020). *Standards Handbook 4.1*. Retrieved from

   https://ies.ed.gov/ncee/wwc/Handbooks

Williams-Diehm, K., Palmer, S., Lee, Y., & Schroer, H. (2010). Goal content analysis for middle

   and high school students with disabilities. *Career Development for Exceptional*

   Individuals, 33, 132-142. doi:10.1177/0885728810380230

Wolfensberger, W. (1972). *Normalization: The principle of normalization in human*

   services. Toronto: National Institute on Mental Retardation.

Woodward, J., & Allen, T. (1993). Models of deafness compared: A sociolinguistic study of deaf

   & hard of hearing teachers. *Sign Language Studies, 79*, 113-126.

Wu, H., & Chu, S. (2012). Self-determination of young children with special needs from

   culturally and linguistically diverse backgrounds. *Preventing School Failure*, *56*, 149-

   156.

Yell, M. L. (2016). *The Law and Special Education.* Boston, MA: Pearson.

PROMOTING SELF-DETERMINATION AND STUDENT-DIRECTED LEARNING: A NATIONAL SURVEY

Please respond to each question as completely as possible.

I. Respondent Information

1. In which state do you teach? _____

2. What age group do you currently teach? (Check all that apply)
   ❑ 14 - 16 years   ❑ 17 - 18 years   ❑ 19 years and older

3. Is your **principal** teaching assignment at
   ❑ a middle school campus?
   ❑ a junior high school campus?
   ❑ a senior high school campus?
   ❑ a postsecondary campus?
   ❑ another setting? If so, what setting? _____

4. Were you trained as a special educator?   ❑ Yes   ❑ No

5. Your principal teaching assignment is with students identified in what primary disability category? (Check all that apply):

   ❑ Specific Learning Disabilities   ❑ Speech or Language Impairments
   ❑ Mental Retardation   ❑ Serious Emotional Disturbance
      ❑Mild ❑Moderate ❑Severe ❑ Traumatic Brain Injury
   ❑ Multiple Disabilities   ❑ Hearing Impairments
   ❑ Orthopedic Impairments   ❑ Visual Impairments
   ❑ Autism   ❑ Deaf-Blindness

6. Students for whom you are primarily responsible for instruction receive their instruction in which of the following educational environments? (These categories are directly from IDEA, and are defined below. Check only the most appropriate)

   ❑ Regular Class   ❑ Resource Room
   ❑ Separate Class   ❑ Separate School
   ❑ Residential Facility   ❑ Homebound/Hospital Environment

Regular Class: Includes students who receive the majority of their education program in a regular classroom and receive special education and related services outside the regular classroom for less than 21% of the school day.
Resource Room: Includes students who receive special education and related services outside the regular classroom for at least 21% but no more than 60% of the school day.
Separate Class: Includes students who receive special education and related services outside the regular classroom for more than 60% of the school day.
Separate School: Includes students who receive education in private and public separate day schools for students with disabilities for more than 50% of the school day.
Residential Facility: Includes students who receive education in a public or private residential facility, at public expense, for more than 50% of the school day.
Homebound/Hospital Environment: Includes students placed in and receiving special education in hospital or homebound programs.

7. Which setting best describes the location of your principal teaching assignment?
    ❒ Urban   ❒ Suburban   ❒ Rural

8. How many students are you directly responsible for teaching? _____

9. What content or curricular area are you responsible for implementing with students? (Check all that apply).
    ❒ Academic   ❒ Vocational/Transition
    ❒ Social Skills Instruction   ❒ Health/Physical Education
    ❒ Functional Life Skills/Community-Based Instruction
    ❒ Other (Please specify)_____

10. Are your students most frequently taught using (Check all that apply):
    ❒ one-to-one instruction   ❒ small group instruction
    ❒ whole group instruction   ❒ individual seatwork

11. Do you currently, or have you in the past, used peers as a resource to teach students with disabilities? ❒ Yes   ❒ No
               (Go to Question 12)   (Go to Question 13)

12. If yes, please describe how peers were used _____
_____
_____
_____

II. Teaching Self-Determination

13. Are you familiar with the term 'self-determination'?   ❒ Yes   ❒ No
                                         (Go to Question 14)   (Go to Question 16)

14. If yes, from what source have you heard the term? (Circle all that apply).
    ❒ Undergraduate training   ❒ Graduate training
    ❒ District inservice   ❒ Conference or workshop
    ❒ Education text   ❒ Professional journal articles
    ❒ Colleagues   ❒ Other _____

15. If yes, how would you define self-determination?_____
_____
_____
_____
_____

16. How important do you think teaching component elements of self-determined behavior is, compared with other instructional areas. Circle only one response for each domain.

a. *Choice-Making* (Teaching students to identify interests, express preferences, make choices; Structuring instructional activities to provide students the opportunity to select preferences).

1	2	3	4	5	6
Low		Medium			High

b. *Decision-Making* (Teaching students to make effective decisions, providing opportunities to participate in making decisions about their education and postschool life).

1	2	3	4	5	6
Low		Medium			High

c. *Problem-Solving* (Teaching students to systematically solve problems, providing opportunities to participate in problem-solving activities).

1	2	3	4	5	6
Low		Medium			High

d. *Goal Setting and Attainment* (Teaching students to set and track goals, participate in goal-setting activities, develop plans to achieve goals).

1	2	3	4	5	6
Low		Medium			High

e. *Self-Advocacy and Leadership Skills* (Teaching students to know and stand up for their rights, to communicate effectively and assertively, to be an effective leader or team member).

1	2	3	4	5	6
Low		Medium			High

f. *Self-Management and Self-Regulation Skills* (Teaching students to monitor and evaluate their own behavior, select and provide their own reinforcement, set their own schedule, and to self-direct learning through strategies like self-instruction).

1	2	3	4	5	6
Low		Medium			High

g. *Self-Awareness and Self-Knowledge* (Teaching students to identify their own strengths and limitations, to identify their own preferences, interests, and abilities, and to apply that knowledge to their advantage).

1	2	3	4	5	6
Low		Medium			High

17. How much will teaching your students self-determination prepare them for school?

1	2	3	4	5	6
Not Helpful		Somewhat Helpful		Very Helpful	

18. How much will teaching self-determination prepare your students for postschool life?

1	2	3	4	5	6
Not Helpful		Somewhat Helpful		Very Helpful	

19. How many of the students you currently teach have a self-determination related goal on their IEP or transition plan?   ❐None   ❐Some   ❐All

20. Have you taught any of the following self-management strategies to the students you currently teach or have taught previously?
   a. Self-monitoring (student records how often a behavior is performed)   ❐Yes ❐No
   b. Self-evaluation (student evaluates own behavior, effort, or progress) ❐Yes ❐No
   c. Self-reinforcement (student selecting or providing own reward)   ❐Yes ❐No
   d. Self-instruction (student guides their performance through self-talk) ❐Yes ❐No
   e. Goal setting or contracting (student sets own instructional goal)   ❐Yes ❐No
   f. Self-scheduling (student sets own daily schedule)   ❐Yes ❐No
   g. Antecedent cue regulation (using picture cues to direct behavior)   ❐Yes ❐No

21. What reasons might lead you to decide **not** to provide instruction in any or all of the above self-determination areas or to teach self-management strategies? (Check all that apply).
   ❐ Your students already have adequate self-determination skills.
   ❐ Someone else is responsible for instruction in this area.
       If you checked this, please list responsible party. _____
   ❐ You don't have sufficient time to provide instruction in these areas.
   ❐ You don't have the latitude to provide instruction in these areas
   (e.g., because of course content requirements, state testing requirements, etc.).
   ❐ There are other areas in which your students need instruction more urgently.
   ❐ Your students would not benefit from instruction in these areas because of

their characteristics (level of ability, capacity to engage in behavior, etc.).
❒ You haven't had sufficient training or information on teaching self-determination.
❒ You are not aware of available curricular or assessment materials, or familiar with instructional methods or strategies related to self-determination.
❒ None of the above.

22. What other strategies or activities have you implemented that might promote self-determination?
      ❒ Student involvement in educational planning meetings.
      ❒ Structuring classroom environment to promote student-directed learning
      ❒ Instructional activities in non-school settings
      ❒ Mentoring programs
      ❒ Other _____

Dead Education Elementary Teachers' Perceptions of Self-Determination

In what state do you teach?

_____

Gender?

Female

Male

Non-binary

Highest degree earned?

Bachelor's

Master's

Specialist degree

Doctorate

Other

Display This Question:

If Highest degree earned? = Other

Highest degree earned?

_____

What grade do you currently teach?

    1st grade

    2nd grade

    3rd grade

    4th grade

    5th grade

    6th grade

    multiple grades (one setting)

    multiple grades (multiple setting/itinerant)

    administration

What is your primary teaching philosophy?

    Aural/Oral

    Total Communication

    Bilingual Bicultural

    Other

Display This Question:

    If What is your primary teaching philosophy? = Other

What is your primary teaching philosophy?

   _____

What is your primary communication mode?

Listening and Spoken Language

Simultaneous Communication (speaking and signing)

American Sign Language

Cued Speech

Signing Exact English System

Conceptually Accurate Signed English

Pidgin Signed English

Other

What is your primary communication mode?

_____

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Please list the communication mode(s) of your students (Check all that apply)?

☐ Listening and Spoken Language

☐ Simultaneous Communication (speaking and signing)

☐ American Sign Language

☐ Cued Speech

☐ Signing Exact English System

☐ Conceptually Accurate Signed English

☐ Pidgin Signed English

☐ Other

Please list the other communication mode(s) your students use.

_____

Were you trained as a Deaf educator?

Yes

No

Please state what teacher certification area you were trained in.

_____

Students for whom you are primarily responsible for instruction receive their instruction in which of the following education environments? *Regular Class*: Includes students who receive the majority of their education program in a regular classroom and receive special education and related services outside the regular classroom for less than 21% of the school day.
Resource Room: Includes students who receive special education and related services outside the regular classroom for at least 21% but no more than 60% of the school day.
Separate Class: Includes students who receive special education and related services outside the regular classroom for more than 60% of the school day.
Separate School: Includes students who receive education in private and public separate day schools for students with disabilities for more than 50% of the school day.
Residential Facility: Includes students who receive education in a public or private residential facility, at public expense, for more than 50% of the school day.
Homebound/Hospital Environment: Includes students placed in and receiving special education in hospital or homebound programs.

    Regular class

    Resource room

    Separate class

    Residential facility

    Homebound/Hospital environment

    Separate School

Which setting best describes the location of your principal teaching assignment?

    Urban

    Suburban

    Rural

How many DHH students are you directly responsible for teaching?

_____

How many years have you taught?

_____

Are all of your years teaching in Deaf education?

Yes

No

Display This Question:

If Are all of your years teaching in Deaf education? = No

How many years have you taught in Deaf education?

_____

What kind of supports do your students use (Check all that apply)?

☐   Cochlear implants

☐   Hearing Aids

☐   FM System

☐   BAHA

☐   ASL

☐   Other

☐   Other Signing System

☐   Interpreter

What other kinds of supports do your students use?

_____

Are your students most frequently taught using (Check all that apply):

one-to-one instruction

whole group instruction

small group instruction

individual seatwork

Page Break ——————————————————————————————

Are you familiar with the term 'self-determination'?

Yes

No

From what source have you learned about the term 'self-determination' (Check all that apply)?

☐   Undergraduate training

☐   Graduate training

☐   District in-service

☐   Conference or workshop

☐   Education text

☐   Professional journal articles

☐   Colleagues

☐   Other

☐   I have not heard of it

Display This Question:

If From what source have you learned about the term 'self-determination' (Check all that apply)? = Other

What other source(s) have you learned about the term 'self-determination'?

_____

How would you define self-determination? (If you do not know, please write that)

_____

_____

_____

_____

_____

How important do you think teaching component elements of self-determination behavior is, compared with other instructional areas?

	1 Low	2	3	4	5	6 High
Choice-Making						
Decision-Making						
Problem-Solving						
Goal Setting and Attainment						
Self-Advocacy and Leadership Skills						
Self-Management and Self-Regulation Skills						
Self-Awareness and Self-Knowledge						

Please rank the self-determination component elements in order of importance, 1 as high and 7 as low.

_____ Self-Awareness and Self-Knowledge

_____ Self-Advocacy and Leadership Skills

_____ Choice-Making

_____ Self-Management and Self-Regulation Skills

_____ Problem-Solving

_____ Goal Setting and Attainment

_____ Decision-Making

How important do you think teaching self-determination is?

    1 Not Helpful

    2

    3

    4

    5

    6 Very Helpful

How much will teaching your students self-determination prepare them for school?

    1 Not Helpful

    2

    3

    4

    5

    6 Very Helpful

How much will teaching your students self-determination prepare them for postschool life?

    1 Not Helpful

    2

    3

    4

    5

    6 Very Helpful

What reasons might lead you to decide not to provide instruction in any or all of the above self-determination areas? (Check all that apply)

- [ ] Your students already have adequate self-determination skills.

- [ ] Someone else is responsible for instruction in this area.

- [ ] You don't have sufficient time to provide instruction in these areas.

- [ ] You don't have the latitude to provide instruction in these areas (e.g., because of course content requirements, state testing requirements, etc.).

- [ ] There are other areas in which your students need instruction more urgently.

- [ ] Your students would not benefit from instruction in these areas because of their characteristics (level of ability, capacity to engage in behavior, etc.).

- [ ] You haven't had sufficient training or information on teaching self-determination.

- [ ] You are not aware of available curriculum or assessment materials, or familiar with instructional methods or strategies related to self-determination.

- [ ] None of the above.

Who is responsible for teaching self-determination?

_____

How often do you teach your students to identify their interests?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you teach your students to express their preferences?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you structure instructional activities to provide your students the opportunity to select the activity?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you teach your students to make effective decisions?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you provide opportunities for your students to participate in making decisions about their education?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to deduce the cause and effect of their choices?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to systematically solve their problems?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you provide opportunities to your students to participate in problem-solving activities?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to summarize their problems with several possible choices available?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to set and track goals?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to participate in goal-setting activities?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to develop plans to achieve their goals?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to know and stand up for their rights?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to communicate effectively and assertively?

    Daily

    Weekly

    Monthly

    Quarterly/9 weeks

    Never

How often do you teach your students to be an effective leader or team member?

Daily

Weekly

Monthly

Quarterly/9 weeks

Nevel

How often do you teach your students to monitor and evaluate their own behavior?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you teach your students to select and provide their own reinforcements?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you teach your students to set their own schedule?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you teach your students to identify their own strengths and limitations?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you teach your students to identify their own preferences, interests, and abilities?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

How often do you teach your students to apply their knowledge of themselves to their advantage?

Daily

Weekly

Monthly

Quarterly/9 weeks

Never

Would you be willing to provide further information by doing an interview? Please enter your name and email for contact information.

_____

Appendix C: Qualitative Interview Protocol

<u>Introduction</u>
Thanks for letting me interview you today. I am doing my doctoral studies at OU in Special Education and I am interested in self-determination practices for deaf students. [Do you have a sign for self-determination?] Particularly, I am trying to understand if deaf education elementary teachers know what self-determination is, with its accompanying components. If the questions are general or abstract, you may volunteer any detail you wish. You also have the option of declining to answer – passing on – any of the questions. Do you have any questions before we start?

<u>Interview Questions</u>
1. You rated self-determination as a __ for importance for deaf students? Why do you

   believe that? (RQ 1)

2. Are there self-determination components that are more important for deaf students to gain

   than others? Which ones and why? (RQ 3)

3. What experiences have you had with DHH student(s) that support them in their self-

   determination? (RQ 1)

   a. Where did you learn these practices or did you adapt them from somewhere?

4. Are there any barriers for you to overcome when teaching self-determination to your deaf

   students? What are they and how can they be overcome? (RQ 4)

5. Depends on grouping (RQ 2)

   a. Perceive it's important and they do it- What allows you to teach self-

      determination on a regular basis? or How do you incorporate self-determination

      into schedule?

b. Perceive it's important but they don't do it- You ranked self-determination as something of importance but you don't teach it to your students, why do you think that is?

c. Perceive it isn't important but they do it-You ranked self-determination not important but you teach more than you think, why do you think that is?

<u>Closing</u>

Those are all my questions. Do you have any questions about what we discussed or the research I am conducting? If you want to contact me later, here is my contact information. Also, I may need to contact you later for additional questions or clarification. Can I contact you again if I need any further information?

Appendix D: Emergent Themes

Themes	Categories
Knowledge	It is important Professional development Self-determination defined When to start
Teacher's actions	Students with additional needs Collaborate with others Effort put forth Experience of teacher Freedom in position Self-determination not happening Giving opportunities
Barriers	Possible barriers Teacher burn out What is more important Professional development
Component	Components Top Components
Individualization	How to individualize Know your student
Strategy	Motivate the student Positive strategy Negative strategy Successful strategies Collaboration with others