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The Life-Long Potential of Students with Moderate-Severe Disabilities: Perceptions of Elementary Special Education Teachers

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by

James Christopher Blee Koontz

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ABSTRACT OF THE DISSERTATION

The Life-Long Potential of Students with

Moderate-Severe Disabilities:

Perceptions of Elementary Special Education Teachers

by

James Christopher Blee Koontz

Doctor of Education

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Professor Connie Kasari, Chair

This study examines how elementary special education teachers' beliefs about the life-long, transition-related learning potential of their students with moderate-severe disabilities affects instructional choices related to transition-focused skills. Knowledge about instruction of students with moderate-severe disabilities in elementary schools is limited to older studies that were conducted prior to NCLB and Common Core standards eras, and while the skills these students need for life-long success have not fundamentally changed, the newer focus on standards-based curriculum is influencing instructional choices. Identifying how teachers are addressing the functional skill needs of students in this new context provides insight for other educators. This research consists of interviews with 11 elementary teachers of students in upper elementary grades with moderate-severe disabilities across a large urban school district in California. A

phenomenological approach is used to conduct and analyze teacher interviews. Teacher participants identified social skills, communication ability specifically, as the key to student future success, that students are more successful when expectations are high, and that they have limited knowledge of what the long-term possibilities are for their students. Recommendations include focusing on communication skills early, utilizing systematic social skill instruction, and strengthening inter-agency collaboration to provide elementary teachers more information about life-long possibilities for their students.

The dissertation of James Christopher Blee Koontz is approved.

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2019

DEDICATION

For my wife, Sakura. There was only one way to get this done, and it was through your patience, care, and encouragement. I am forever grateful.

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VITA

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CHAPTER 1

Statement of the Problem

Students with moderate-severe disabilities typically spend multiple elementary school years instructed by the same teacher. Teachers' perceptions of these students' abilities have a lasting effect on their educational outcomes as they transition from elementary and secondary education to adulthood. Current special education law mandates planning for transition to adulthood begin at age 16, but earlier interventions are shown to yield significant, positive effects for students with disabilities (Casto & Mastropieri, 1986; Mastropieri & Scruggs, 2005). The instructional choices of elementary teachers impact the life-long transition abilities of students in post-secondary education, vocational education, employment, independent living, and community participation.

This study examines how elementary special education teachers' beliefs about the life-long, transition-related learning potential of their students impact their instructional choices. Understanding the factors that influence these instructional choices may lead to improved outcomes for students with moderate-severe disabilities.

Background

Special Education Service and the Focus on Transition

Students with disabilities are provided services and support through an Individualized Education Program (IEP). The IEP is developed by a team of professionals and parents with the goal of providing education benefit, or growth, to the student with a disability. For students with severe disabilities, a wide range of service models exist in the United States, from absolute segregation in special schools to full inclusion in general education classes.

With the variety of service models comes a variety of curricular options. Some educators believe in the use of general education materials that are modified to meet a student at their ability level, while other educators believe a separate curriculum is necessary. IEP teams make decisions about the goals a student will work toward during a year, and many educators draw on a variety of sources to develop these goals. Educational assessments for students moderate-severe disabilities include criterion-referenced skills that address early development and help IEP teams determine instructional focus.

Most students with moderate-severe disabilities will be eligible for special education service until they turn 22, with transition planning mandated by special education law to begin at 16. Transition planning is "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" (IDEA 2004).

While the six years between ages 16 and 22 can be an effective time to focus on student life-long outcomes, many IEP teams miss the transition opportunities for students earlier in their education because they are not mandated to consider them at earlier ages. Earlier, longer, and more intense educational interventions were found to increase success for students with disabilities (Casto & Mastropieri, 1986), yet current law focuses IEP teams on these services after more than ten years of educational service have already been provided. While the interventions that Casto and Mastropieri reviewed addressed students with less severe disabilities, their work supports considering the impact of focusing on transition-related skills earlier in a student's educational career.

National Disability Statistics: Transition to Adulthood

Employment. One indicator of a successful transition to adulthood is the ability for an individual to be employed. People with disabilities[1] in the United States are twice as likely to be unemployed than their non-disabled peers (Bureau of Labor Statistics, 2017). In 2016, the labor force in the US consisted of an estimated 151 million individuals, and of the eight and a half million unemployed, over one million of them had a disability (United States Census, 2016). While statistics show high levels of unemployment for people with disabilities, people with disabilities also make up one-third of those not actively looking for work. Of the 45 million adults listed as "not in labor force," 12 million are those with disabilities. Consistently, the largest groups of people with disabilities that are unemployed or are not looking for work are those with cognitive, ambulatory, and independent living difficulties.

In California, the number of adults identified with disabilities topped two million in 2016, an increase of 150,000 since 2009. In the group of those with disabilities, 1.2 million were not looking for work, while a little more than 700,000 were employed.

Post-Secondary Education. Another indicator of successful transition is the rate at which adults with disabilities participate in educational opportunities. The range of participation in post-secondary education (PSE) varies based upon disability type. Post-secondary education is half as likely for people with intellectual disabilities[2], autism, and multiple disabilities when compared to others forms of disability (NLTS2, 2011). When students with disabilities enrolled in PSE, 2-year colleges see the biggest number of enrollments from these three groups. Those

[1] Employment statistics do not describe disability in the same manner as schools. Eligibility through IDEA is based upon the identification of a specific disability, such as intellectual disability or autism. Disabilities in employment statistics are based upon the function that is impacted, such as having difficulty with concentrating or difficulty dressing or bathing.
[2] Mental retardation in NLTS2.

with intellectual disabilities were least likely to be enrolled full time or to be enrolled consistently in post-secondary activities.

Social Interaction. One other indicator of transition success is the amount and quality of social interaction that individuals with disabilities engaged in after finishing school. Less than sixty-percent of those surveyed with intellectual disabilities, autism, and multiple disabilities saw friends outside of work at least weekly during the prior year (NLTS2, 2011). Additionally, only 19 percent of respondents with intellectual disability reported being involved in a volunteer or community service activity.

Beliefs About the Future for Elementary Students with Moderate-Severe Disabilities

When considering the transition outcomes for students as adults, elementary teacher beliefs about learning potential can set the tone for future success. Teacher perceptions of student ability at a young age can have a lasting effect on outcomes for students with and without disabilities. Two students setting out on their educational voyage with similar developmental profiles can end their elementary and secondary education with vastly different outcomes because of teacher choices related to academics and independent skill development. The pervasive belief that some students are not ready or able to attempt some tasks can develop into a self-fulfilling prophecy that lowers expectations and achievement. One teacher may view a student as not able to communicate their wants and needs verbally and assume the student is also lacking the cognition to make such decisions, while another teacher might view the same student and try a variety of communication strategies to teach the student how to express themselves effectively. Perceptions of communication ability in elementary school, among other transition-related and independent skills, affect student success. Therefore, the focus of my research is

teacher perceptions of elementary student readiness for experiences related to independence, and thus transition.

School Culture Influences. Teachers' perceptions about disabilities, and the ability of schools to make a difference in the lives of students with severe disabilities, are influenced by the school culture associated with the support of such students (Jordan & Stanovich, 2003). The study by Jordan and Stanovich revealed that the norm expressed by teachers through their survey answers supported their interpretation of disability and that a school's cultural values could also be derived from this data. The survey results further led the authors to relate their work to the idea of explanatory narratives, which are developed when recounting events through a specific lens—in this case, the lens of the school culture. If school culture affects teachers' perceptions of students, school culture can also play a role in the actual outcomes of those students. The use of explanatory narratives may also be evidence of elementary teacher perceptions that impact instructional choices for students with moderate-severe disabilities.

Teacher Attitudes. Avramidis and Norwich (2002) conducted a review of the literature related to teacher attitudes toward integration and inclusion, suggesting that general educators in the USA "have not developed an empathetic understanding of disabling conditions." Their research also revealed that general education teachers in Australia were predisposed to including students with severe disabilities when they do not "require extra instructional or management skills." These findings indicate that, while educational support of students with severe disabilities is evolving to include more time in the general education setting, there is still a lack of research evidence that argues the merit of this form of service provision with respect to long-term educational benefit. Given the current context of separate educational programs for students with

moderate-severe disabilities, analysis of elementary special education teacher perceptions of the learning potential of their students is called for.

General Education Teacher Perceptions. General education teacher perceptions of students with disabilities also influences their perceptions of teachers that support such students. Special education teachers perceive their role on campuses as disrespected by general education teachers (Jones, 2004). Separation of students into ability categories and "special" classes mystifies the role of special education teachers on campuses and in the possible educational outcomes for their students. Physical separation into different classrooms reduces interactions between general education teachers and special education teachers. Additionally, this separation isolates students with disabilities from their peers. This isolation reduces the possibility of influence from peers as models of academic and social skills.

Other Influencing Factors. Other factors influencing teacher attitudes about students with severe disabilities are the role of pre-service and in-service training, prior experiences with people with disabilities, and attitudes about disability. Sharma, Forlin, and Loreman (2008) conducted a study of pre-service teachers at the beginning and end of their educational programs to determine if a model with an infusion of disability related content in all courses had a larger impact on teacher attitudes than a "standalone course" model. While the results of the study did not find one model to yield better understanding of disability, the authors did conclude that a focus on disability in both models improves outcomes for students.

While pre-service teaching experiences are important, the attitudes developed prior affect instruction also. Several suggested models have developed to better understand these attitudes as they relate to students with disabilities. Mullholland and Cumming (2016) suggest expanding the use of a science education-focused attitude survey to consider how cognitive beliefs, affective

states and perceived control (attitude) lead to behavioral intention and thus the exhibited behavior of student instruction. The Attitudes Towards Intellectual Disability Questionnaire (ATTID) and a researcher-created questionnaire were used to understand the training, experiences, and willingness of teachers to include students with intellectual disability (ID) in their classes in Quebec (Sermier Dessemontet, Morin, & Crocker, 2014). The ATTID has three components relating to knowledge of the disability, rights for those with the disability, and comfort level with those who have ID.

The findings show that teachers feel unprepared to teach students with intellectual disabilities even after having been provided pre-service and in-service training according to a survey study conducted in Quebec (Sermier Dessemontet et al., 2014). Prior contacts with those with ID were predictive of willingness to interact and increase the likelihood that a teacher would want to include another student with ID in the future. Teachers that previously included a student with ID were over three times more likely to believe that they could teach a student with intellectual disability.

Studies of teacher perceptions about readiness to teach all kinds of students, including those with severe disabilities, reveal similar findings for the past 20 years. The perceptions of some teachers that it takes a "special" teacher with specific qualities was explored by Young when she interviewed preservice teachers about their experiences in a variety of educational settings (2008). In another study, participants were provided vignettes to determine their perceptions of students and teachers' ability to guide instruction. The findings revealed that teachers felt more comfortable managing learning (developing instructional plans and curriculum) than with directly instructing students with severe disabilities (Ruppar, Neeper, & Dalsen, 2016).

Existing Interventions and Research Needed

Current research for students with moderate-severe disabilities focuses on participation in the general education environment (inclusion or integration) but not on the long-term impact of the instructional choices of teachers in elementary schools as they relate to independence and transition skills. Perception analysis related to students with moderate-severe disabilities often focuses on the beliefs of teachers and peers when students are integrated or included in general education classrooms. Similarly, current research about the perception of students with moderate-severe disabilities focuses on general education teacher perception and not special education teacher perceptions (Scruggs & Mastropieri, 1996; Soodak, Podell, & Lehman, 1998). Given the current state of service provision and education for students with moderate-severe disabilities, many remain in segregated classrooms on general education campuses, sometimes with the same teacher for multiple years. The potential for teacher instructional choices to affect student outcomes as they relate to the development of transition skills is significant in these instances.

This work explores elementary special education teacher perceptions about students with moderate-severe disabilities and how those perceptions impact instructional choices as they relate to transition-focused skills.

Statement of Project

My research examines elementary special education teacher self-reported attitudes about their students with disabilities and their instructional choices related to transition-focused skills. The following research questions guided my study:

1. What are elementary special education teachers' perceptions of the prospects for the future for students with moderate-severe disabilities?

2. What information sources do elementary special education teachers use to make instructional decisions for students with moderate-severe disabilities?
3. What is the relationship between teacher perceptions of student disabilities and instructional choices as they relate to independence and transition skills?
4. Based upon teacher perception of student disabilities, what independence and transition related skills are most important to life-long achievement?

Research Design

This is qualitative study that analyzes the responses of elementary special education teachers collected through an interview that focuses on their perceptions of their students. Teacher participants were provided a demographic survey to gather basic information about their teaching history and current students followed by an interview. The interview and survey were scheduled with teachers for one hour after the school day ended, and all surveys were conducted in the teacher classrooms.

Site and Population

The site for this study is a large urban school district in California with a large number of special education teachers who teach programs specifically for students with moderate-severe disabilities. From this district, a sample of teachers who have fifth grade students in their class were recruited. Fifth grade is a key transition grade for most students. By focusing on a group of teachers that have students preparing for the transition to middle school, thoughts about the future for students were expected to be common along with ideas about what the more distant future might hold for these students.

Research Design

Demographic survey data was collected prior to the interview portion of this research. Survey data asked participants questions about their experience teaching, credentialing experience, and experience with people with disabilities prior to working as teachers. Interviews were conducted using a semi-structured format that allowed participants to respond freely to prompts. Interviews asked participants to consider the students in their class currently. Participants were asked to identify and describe the students they considered to be the most and least skilled. For these students, teachers were also asked to answer a set of questions about the adult outcomes they thought were most likely in the areas of education, employment, transportation, and independent living. Participants also were asked what skills they believed to be the most important for the life-long success of their students.

Interview data was transcribed and coded to identify perceptions, sources of instructional guidance, and transition-related skills as identified in employability literature (Ju, Pacha, Moore, & Zhang, 2014). Data was collected to identify trends based upon years teaching, prior experience with people with disabilities, and perceived life-long achievement possibilities of students.

Significance of the research for solving the problem

This study identifies the perceptions of teachers in elementary settings and their instructional choices for students with moderate-severe disabilities. Information from this study will be used to educate teachers about the importance of long-term planning for these students.

CHAPTER 2

Factors influencing the teaching of students with multiple-severe disabilities

Elementary special education teachers' beliefs about the life-long, transition-related learning potential of their students impacts their instructional choices and ultimately affects outcomes for those students. Understanding the factors that influence these instructional choices may lead to improved outcomes for students with moderate-severe disabilities. In my review of the literature, I first present an overview of the history of special education and pertinent laws which have increased the expectations for students with moderate-severe disabilities since the middle of the 20th century. Next, I explore the perceptions of teachers, the public, and students related to disabilities, which have evolved during the past 100 years because of civil rights advances that provide the general population more opportunity for interaction with people with disabilities. Furthermore, teacher preparation, experiences, and in-service training all impact the formation of what teachers believe is possible for their students with moderate-severe disabilities, either limiting or expanding their view of the goals these individuals can accomplish and what curriculum and instructional activities are important. Additionally, the ability to provide instruction to students with moderate-severe disabilities is explored through the lens of expert teaching, curriculum planning, and early intervention as these areas are found to be important positive influencers of student outcomes in the literature. Finally, I explore the current state of life-long outcomes for people with moderate-severe disabilities because this information provides a baseline from which to consider how improvements in such outcomes will be measured.

The Law as an Indicator of Expectational Progress for Students with Disabilities

The expansion of civil rights during the 20th century set the tone for an increase in societal expectations for all learners—including those with moderate-severe disabilities. In this section I present a review of the law pertinent to the progress for students with moderate-severe disabilities, including those laws related to their transition to adulthood. This information provides the context for movement from non-schooling to segregated schooling and finally inclusive models of schooling for these students. The development of transition related laws, some focused in the area of labor law, also emphasize the integration of people with more severe disabilities into the workplace and society at large.

The laws that most significantly impact the educational outcomes of students with disabilities were developed in the post-World War II era and are borne of the civil rights movement. Following the *Brown v. Board of Education* (*Brown v. Board of Education, 347 U.S. 483 (1954)*, n.d.) decision and supported by the Civil Rights Act of 1964, parents and others interested in providing an education to children with disabilities formed organizations and brought lawsuits against states for violating discrimination statutes in their implementation of compulsory education laws.

Because students were not attending school, no solid count of those with disabilities existed at the time. Many children with moderate-severe disabilities were institutionalized or excluded from school, while students with identified learning disabilities were segregated in special classrooms. In 1961, President Kennedy, influenced by family members, started the President's Panel on Mental Retardation in 1961 and provided funding for training teachers and research related to intellectual disabilities. During this same era, Congress provided funding

through the 1965 Elementary and Secondary Education Act for grants to support programs for students with disabilities.

The changes brought about by lawsuits and grant funding began to expand through more focused legislation, increasing the opportunities for students with disabilities to participate in school. With the enactment of Section 504 of the Rehabilitation Act of 1973, a new set of protections for all people with disabilities became a part of the law. Because of Section 504, people with disabilities were no longer denied access to or participation in programs and locations receiving federal financial assistance. This statute, buried in a labor law, clarified that the equal protection provided in the Civil Rights Act included persons with disabilities, and became the foundation for later growth in the legal rights of those individuals.

Two years after Section 504, Congress passed Public Law 94-142, known then as the Education for All Handicapped Children Act (EAHCA) (Individuals with Disabilities Education Act of 1990, 20 U.S.C. §1401 et seq., n.d.). This legislation codified previous laws and legal decisions into the Individualized Education Program (IEP), the plan that is developed by a team of school professionals and parents to ensure a student receives a free appropriate public education (FAPE). Additionally, it used the funding authority of Congress to require states to develop plans to implement supports that provided all students with disabilities FAPE in the setting nearest to the general education classroom in which they would have been instructed if they did not have a disability. This concept is known as the "least restrictive environment" (LRE) and is a consideration at each IEP team meeting. Each of these aspects of the law furthered the development of instructional supports for students with moderate-severe disabilities.

Special education law evolved throughout the 20th century. The reauthorization of the Education for All Handicapped Children Act as the Individuals with Disabilities Education Act

(IDEA) brought with it the inclusion of requirements to provide transition services to students aged 16-22 and to include these students as participants in their IEP team meetings. Later updates to special education law added requirements of expected educational achievement for all students, including those with moderate-severe disabilities (IDEA 1997 amendments). The enactment of the Individuals with Disabilities Education Improvement Act (IDEIA 2004) further solidified transition as an important aspect of a student's instructional program to "facilitate the child's movement from school to post-school activities" such as post-secondary education, work, and independent living (Ayres, Lowrey, Douglas, & Sievers, 2011). The focus on these laws related to achievement and transition causes the need for elementary teachers to consider their focus on skills that impact transition-related skill development.

While laws focusing on the education of students with disabilities were enacted and implemented, laws that support the independent employment and living outcomes of individuals with disabilities were also developed. The Rehabilitation Act of 1973 prohibited employment discrimination on the basis of disability, while the most recent iteration of the law, known as the Workforce Innovation and Opportunity Act (WIOA), requires collaboration between vocational rehabilitation programs that support people with disabilities to gain employment skills (Rehabilitation Act of 1973, 1973; Workforce Innovation and Opportunity Act (WIOA), 2014).

Through decades of focus on people with disabilities, special education and employment law changes reveal an increasing social commitment to the expectation that all people be educated and employable (Carter, Brock, & Trainor, 2014).

Beliefs, Perceptions, and Expectations of People with Moderate-Severe Disabilities

The public's beliefs, perceptions, and expectations of what can be accomplished by people with moderate-severe disabilities has evolved with the law in the 20th century, but not to

the extent that the legal framework allows. While the law provides the right to integration into school and work communities, perceptions of people with moderate-severe disabilities by the general public, teachers, and student peers reveal low expectations for community participation, ability to work, and ability to live independently (Werner, 2015b). Though the law supports the rights of people with moderate-severe disabilities, the lag in perceptions by the previously mentioned groups leads to lower expectations and reduced emphasis on the overall development of independence and transition-related skills. This relationship between beliefs of what people with moderate-severe disabilities can do as adults is affecting instructional choices early in life and reducing expectations for success. Public attitudes can be influenced by teacher attitudes (Antonak & Livneh, 2000; Skrtic, Sigler, & Lazar, 1973), and thus together form a basis of understanding the expectations for students with severe-disabilities as they advance in school and life.

Public Attitudes

To gauge the attitudes of the public toward people with disabilities, researchers developed rating scales that address the concept through a multidimensional approach. Recently developed scales such as the Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS) and the Attitudes Toward Intellectual Disability (ATTID) use the dimensions of affective, cognitive and behavioral constructs of attitudes to understand respondents attitudes toward people with intellectual and physical disabilities (Findler, Vilchinsky, & Werner, 2007; Morin, Crocker, Beaulieu-Bergeron, & Caron, 2013; Morin, Rivard, Crocker, Boursier, & Caron, 2013). These scales were used to gather information about the public's perception of people with disabilities. The relevance of understanding the public's attitudes toward people with disabilities is borne in the continued barriers to their integration into social and employment contexts, of

which attitudes play a role (Jahoda, Wilson, Stalker, & Cairney, 2010; World Health Organization, 2001).

Common among the findings when using the MAS, ATTID, and other attitude rating scales is a discomfort by the general public with people with disabilities because of a lack of exposure and experience with them (Findler et al., 2007; Morin, Rivard, et al., 2013; Timms, McHugh, O'Carroll, & James, 1997). Social distance is a factor in attitudes of the public, indicated by a lower expectation of rights for those with disabilities by those with greater social distance (Werner, 2015a). Even when the public does have knowledge of disabilities, the understanding of their rights and abilities is still underestimated (Cooney, Jahoda, Gumley, & Knott, 2006). More pronounced and better understood is the "hierarchy of acceptance" for groups of people with disabilities, based upon their perceived level of ability to function in a community (Miller, Chen, Glover-Graf, & Kranz, 2009; Wang, Thomas, Chan, & Cheing, 2003).

Beliefs held by the general public about persons with moderate-severe disabilities play a role in their development of self-esteem and social identities (Jahoda et al., 2010). In a study by Antonak and Livneh (2000), the role of professionals working with people with disabilities was identified to be important in both the development of the identities of people with disabilities and in the public's perception of disability. The finding of the mediating effect of the education professional in the understanding of disability for the public and for the person with a disability reflects the importance of teachers to be both supporters of people with disabilities and supporters of students without disabilities to understand the wide range of abilities that exist in their schools.

Public perceptions of disability are able to be changed through intervention. A study of a digital intervention that presented scenarios about people with disabilities through video modules

showed reduced ratings of social distance by participants (Lindau, Amin, Zambon, & Scior, 2018). Timms et al. (1997) asked participants to take the Attitudes Toward Disabled Persons Scale (ATDP), presented them a disability awareness training, and then gave the ATDP one month later, finding that there was a small positive increase in attitudes towards persons with disabilities. Another study that measured the effects of a video-based intervention that used the Community Living Attitudes Scale-Intellectual Disability (CLAS-ID) as a pre- and one-month post-intervention survey found that inclusion attitudes and social distance were positively affected, but that behavioral intentions did not maintain over-time (Walker & Scior, 2013). These studies show promise in the area of improving the attitudes of the public, ultimately affecting the lives of those with disabilities.

Teacher Perceptions

The expectations of teachers as they relate to student achievement is a long-running theme in research. While this review focuses on students with moderate-severe disabilities, research of general education teacher perceptions at large and with respect to students with disabilities through the lens of inclusion make up the bulk of studies available. First, I begin with the broad category of teacher expectations, how they affect student success, and the broad theories that have developed from this research. Next, I share the research that focuses on students with disabilities as they are included in general education classrooms—this work, while not always related to students with severe disabilities or their special education teachers, shares the pervasive beliefs that can influence special education teacher attitudes. Last, I present the small amount of research available related to both students with severe disabilities and their teachers' beliefs about their future prospects.

General teacher beliefs, perceptions, expectations. It has long been hypothesized and supported through research that there is an effect of teacher expectations on the academic success of students. In their seminal study "*Pygmalion in the Classroom,"* Rosenthal and Jacobson (1968) present a randomized control trial of elementary school students where teachers were told some students would make considerable growth during the next year. In the early elementary grades, this group of students showed a significant amount of growth over the control students. While the authors present a number of possible factors that influenced the dramatic growth of the students in early elementary grades, the idea that expectations lead to success fostered future research that confirmed the effects seen.

The idea of the Pygmalion Effect was studied by later researchers and a similar theory—the self-fulfilling prophecy—was developed to further explain this idea (Good, 1987). Good conducted a meta-analysis of studies from the 1960s through 1980s to confirm the idea that teacher expectations influence teacher-student interactions and student academic outcomes. The author surmised that low teacher expectations may be borne out of "inappropriate knowledge of how to respond to students who have difficulty learning."

This mismatch of teacher knowledge as it relates to student learning needs was found in later research to have a cumulative effect (Muijs & Reynolds, 2002). In a review of teacher effects, specifically on math achievement in the Tennessee Value Added Assessment System, ineffective teaching behaviors were related in a two-way relationship to teacher beliefs (Figure 1.). Previous work by Fang (1996) also found that teaching is a combination of teacher's thoughts and teachers' actions. The thoughts of teachers lead to behaviors that influence success.

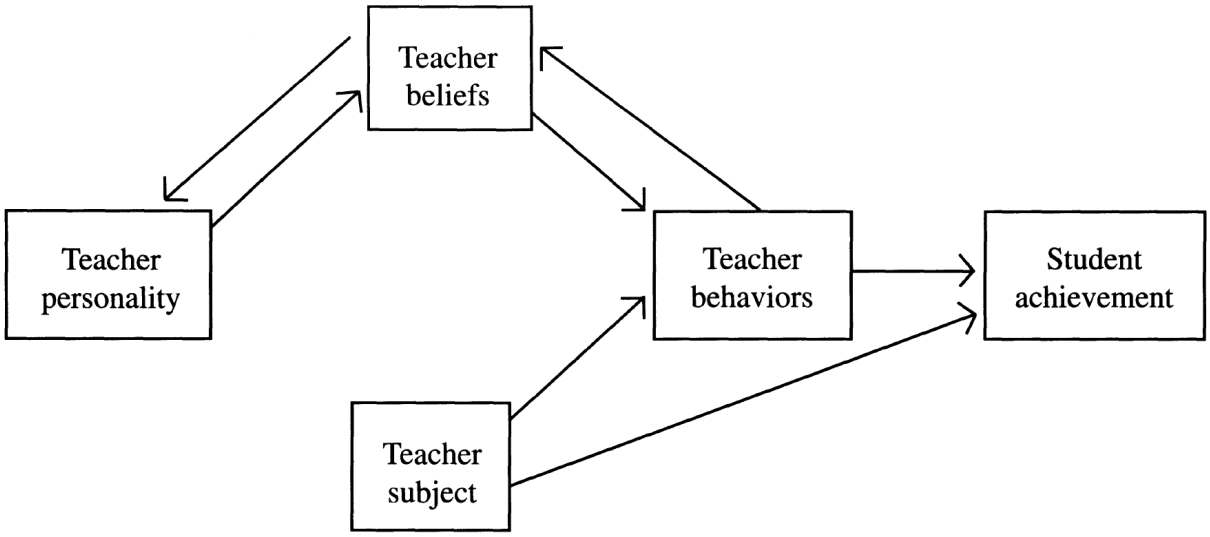

Figure 1. Theoretical model of the relationship between teacher characteristics and student learning (Muijs & Reynolds, 2002)

Teacher Attitudes Toward Inclusion. A large body of research focuses specifically on the attitudes of teachers related to the inclusion of students with disabilities. The terms integration, inclusion, and main-streaming are all used in the literature, but for the purposes of this review all terms related to the opportunity for students with disabilities to participate with their peers without disabilities will be referred to as inclusion. Inclusion has "superseded" other terms related to this idea and is affirmative of the rights of individuals to be educated in the general education setting (Avramidis & Norwich, 2002).

Both general education and special education teachers have participated in studies that attempt to capture their attitudes about the included students with disabilities in their schools. Two meta-analyses revealed themes in the attitudes of teachers toward inclusion. Scruggs and Mastropieri (1996) reviewed twenty-eight studies in the United States associated with inclusion

conducted between 1958 and 1995. Avramidis and Norwich (2002) conducted a similar review of multinational studies from 1980 to 2000. Both meta-analyses found that attitudes toward inclusion were generally positive but influenced by teacher attitudes toward the severity of a student's disability. Further research has supported this finding, with teachers developing a hierarchy of ability that influences their expectations of included students based upon perceived level of disability (Cook & Semmel, 2000; Lohrmann & Bambara, 2006; Soodak et al., 1998).

Cook (2001) explains the difference in expectations for students with disabilities in inclusion settings as aligned with the expectations the community has for them—students with "more obvious" disabilities are not expected to adhere to the expectations of peers and this aligns with what the community believes is possible for them. Teachers hold expectations and attitudes that inclusion for students with disabilities is most able to affect their social outcomes, while academics is rated as of lesser importance (Carter & Hughes, 2006). Other attitudes represented by general education teachers for students with severe disabilities are lower levels of attachment and higher levels of indifference about their progress, even in high SES settings where higher resource levels support inclusion (Cook, 2004). Teacher attitudes towards students with disabilities are also a function of their beliefs about the attitudes of other teachers. This information comes from a study of teachers by Dupoux, Wolman, and Estrada (2005) in the United States and Haiti that found that other teacher's attitudes explained the largest variance of attitude—teachers who perceived other teachers to be positive about inclusion were also more positive themselves.

Special education teacher beliefs, perceptions, and expectations. Because the a large amount of special education research related to teacher attitudes has been focused on inclusion, a small number of studies about special education teachers' beliefs about their students has been

conducted. Some of the studies cited in the previous section included special education teachers in their samples, but only Dupoux et al. (2005) reported on them separately.

One extremely specific study about special educators, and the most related to the research questions posed by the author of this dissertation, was for a paper that was presented at a Council for Exceptional Children Conference in 1973 (Skrtic et al., 1973). The focus of the study was on teachers of students who were working with students considered to be "trainable mentally retarded," revealing both how far we have come in language about people with disabilities but how little has changed in the way these students are provided their education—they continue to spend a large portion of their day in segregated settings (U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, 2018). Skrtic et al.'s opening line is of import, sharing that negative attitudes of professionals working with students with disabilities can be harmful and affect the service these professionals provide to such students. It is also supported in a study by Barton-Arwood et al. that suggested the personal perspectives of teachers influence the outcomes for students with disabilities (Barton-Arwood, Lunsford, & Suddeth, 2016).

Supporting Skrtic et al.'s view is a study that found special education teachers held more negative views of students with disabilities than their general education counterparts (Parchomiuk, 2015). These teachers were presumed to believe that disability is a "state of overwhelming limitations," that lowers chances of success and quality of life. The author suggests that their findings indicate that negative and stereotypical attitudes are made visible in classrooms, where goals for students are acted upon in light of these attitudes.

Teacher Preparation for Working with Students with Moderate-Severe Disabilities

The preparation of teachers for working with students with moderate-severe disabilities can be explored through their prior experiences with people with disabilities, their teacher preparation program, and their in-service professional development. These experiences develop into an often-implicit framework for what a teacher eventually expects of their students. Because preparation for working with students is continuous in the practice of teaching, in-service professional development has a more immediate impact on teacher behavior but does not always translate into long-term student achievement improvements.

Experiences

The experiences of teachers with relation to people with disabilities may span their entire lifetime. These experiences have been explored using the Attitudes Towards Intellectual Disability Questionnaire and a researcher-created questionnaire to understand the training, experiences, and willingness of teachers to include students with intellectual disability (ID) in their classes in Quebec (Sermier Dessemontet et al., 2014). The ATTID has three components relating to knowledge of the disability, rights for those with the disability, and comfort level with those who have ID. The findings show that teachers feel unprepared to teach students with ID after having been provided pre-service and in-service training. Prior contacts with those with ID are predictive of willingness to interact and increase the likelihood that a teacher will want to include another student ID in the future. Self-efficacy trends positively with an increase in willingness to include students with ID as well. Teachers that previously included a student with ID were over three times more likely to believe that they could teach a student with ID.

Pre-Service and Teacher Preparation Program

Teacher preparation programs have seen changes in focus since the enactment of special education law, currently emphasizing inclusive practices (Rainforth, 2000). Even with this

ideological emphasis, programs have difficulty providing the domain expertise and knowledge base to provide future teachers the problem-solving skills needed to support students with moderate-severe disabilities (Brownell, Sindelar, Kiely, & Danielson, 2010). While there is an often-mentioned teacher shortage for students with severe disabilities, it is also true that it is difficult to find faculty that have enough expertise to teacher courses that prepare students to work with these students (Ryndak & Kennedy, 2000). The preparation of teachers plays an important role in the lives of their future students, and the emphases of these programs impacts attitudes, knowledge, and instructional practices that prepare students for the eventual transition to adulthood.

How moderate-severe teachers are prepared to teach. Several practices in the area of teacher preparation for support of students with moderate-severe disabilities were identified through this review. These practices influence teacher ability to understand the needs of their students.

The first practice is the development of coursework that builds a base foundation and has a philosophy that addresses the needs of students with moderate-severe disabilities (Renzaglia, Hutchins, & Lee, 1997). This foundation is able to impact attitudes about students and to empower teachers to make instructional decisions about them. Coursework should also be value-based, as suggested by Fox and Williams (1992), and include the idea that students with severe disabilities "must be given the respect and opportunities that are provided to other students" (p. 98). The reflective practices addressed by both Fox & Williams (1992) and Renzaglia et al. (1997) encourage teacher preparation participants to consider how coursework aligns to the real-world needs of their students.

Second, fieldwork experiences are identified as an important aspect of teacher preparation programs. These experiences reduce the social distance between future teachers and students with significant disabilities (Barton-Arwood et al., 2016). Fieldwork should be supported with trained mentor teachers that understand the philosophy of the teacher education program and support reflective practices (Renzaglia et al., 1997). Additionally, the authors suggest that fieldwork locations must be selected carefully and supervised by university faculty to ensure a contextual match between goals of the education program and the realities of school structure and administrator expectations.

Third, there is an inability of universities to maintain programs specific to the preparation of teachers for students with high-support needs (Spooner, 1996). The development of distance education programs for low-incidence eligibilities allows universities to reach geographically diverse populations where the number of students with significant support needs might be small. The comparison of effectiveness of distance education programs has been conducted at least twice. Spooner, Agran, Spooner and O'Donnell (2000) conducted a study that found the effectiveness of an online program across multiple success factors was similar to that of an on-campus program. Additional research in 2011 found similar results (McDonnell et al., 2011). Both studies identify the need to continue to have in-person contact during coursework.

What moderate-severe teachers are taught. Shortly after the enactment of EAHCA, when students with more severe disabilities began to attend public schools, the need to develop a core set of competencies was identified for teacher preparation programs (Sontag, 1977). Based on the available research for the first decade after special education law was enacted, Whitten and Westling (1985) conducted a meta-analysis search of studies that suggested such competences. Their identification of 59 competencies were supported through papers that cited

professional consensus and/or research associated with student achievement gains. Broad categories emerged in the areas of general knowledge, planning, assessment, curriculum, behavior management, instruction, physical/medical knowledge, working with other staff, and working with parents. Later competency research yielded similar findings but added knowledge of legal issues for persons with severe disabilities (Fox & Williams, 1992). Case study research by Ryndak, Clark, Conroy, and Stuart (2001b) affirmed earlier competency studies and identified the level to which these competencies were implemented in masters-level coursework for teacher preparation at 20 universities.

Though the thoughtful addressing of competencies during a teacher preparation program is pivotal, not all competencies receive the emphasis that is needed to ensure teacher and student success. June Downing (2006) wrote that, while training to support the individual needs of students is important, more training in core and standard-based content is essential. She adds to this idea by stating the challenge of linking competencies to both academics and functionally relevant content of students is complex and should utilize the concepts of universal design for learning and peer supports. In addition, areas noted in competencies but ill-addressed, such as the use of assistive technology, could expand the ability of students with severe disabilities to learn and interact (Judge & Simms, 2009).

In-Service and Professional Development Opportunities

Professional development is a well-researched topic that, when focused on students with severe disabilities, is often framed around inclusive education. While previous experiences and teacher preparation programs are shown to impact teachers attitudes and instructional practices about students with severe disabilities, the professional development in which teachers participate shows promise in changing practices that affect the students such teachers instruct.

Teachers, while having completed teacher preparation programs focused on students with severe disabilities, report less comfort and ability to provide instruction to students (Ruppar et al., 2016). This indicates a need for continued in-service and professional development that is effective in order to support student success.

Professional development research, generally. The study of professional development has been codified into two large-scale-meta-analyses (Waitoller & Artiles, 2013; Yoon, Duncan, Wen-Yu Lee, Scarloss, & Shapley, 2007). These reviews found that little research in the area meets strict standards, such as employing randomized control trials or quasi-experiemental designs.

In contrast to reviews that focus on thoroughness of research, other studies highlight effective implementation of successful professional development—models that could also support professional development in inclusive education. In a seminal study of professional development practices, three attributes that enhance the effectiveness of such programs were identified (Garet, Porter, Desimone, Birman, & Yoon, 2001). One attribute, content knowledge, is positively correlated with student achievement increases. The active participation of teachers is the second attribute that Garet et al. (2001) identified and improves professional development outcomes by providing teachers time to explore the material more deeply. Coherence with other school programs, the third attribute, relates the current professional development with what is already in place or in development at their school. With professional development focused on the attributes of content knowledge, the active participation of teachers, and coherence in relation to other programs at schools, teachers report significant positive effects in their knowledge and skills related to classroom instruction. Researchers, continuing their work together and across domains, developed these attributes that continue to be refined (Covay Minor, Desimone, Caines

Lee, & Hochberg, 2016; Wayne, Yoon, Zhu, Cronen, & Garet, 2008; Yoon et al., 2007). Later research added to these attributes by including duration measures (length of time on professional development) and collective participation (working with colleagues) (Desimone, 2009). These five attributes of effective professional development provide a conceptual framework that leads to increases in teacher knowledge, changes in attitudes, changes in instruction and improved student outcomes.

A large body of research suggests single workshop-style professional development is not effective. Ball and Cohen (1999) identified these forms of professional development as fragmented. Putnam and Borko (1997) note that the style of these presentations does not often consider the known methods to enhance the learning of adults. The amount of time spent on a specific professional development topic correlates with the amount of change in educator practice (Garet et al., 2001; Yoon et al., 2007). No study prescribes an amount of time that will work in all contexts. Yoon et al. and Desimone (2009) describe positive and significant effects on student achievement when more than 14 hours of professional development are provided. Additional findings by Garet et al. show that professional development that extends over several weeks or months relates to positive teacher attitude changes and implementation increases. These changes increase opportunities for teachers to attempt new techniques in the classroom and gain feedback about their teaching.

Professional Development as it relates to students with disabilities. In Waitoller and Artiles (2013), themes emerged from their review of professional development in inclusive education—a focus on ability differences, adapting the curriculum, and removing barriers to participation and learning. These general categories of professional development in inclusive education correlate with attributes identified by Desimone (2009) and Garet et al. (2001);

professional development about curriculum related to ability differences is the equivalent to a content knowledge focus of professional development that they emphasized in their research. The implications for the instruction of students with moderate-severe disabilities include the expansion of opportunities to learn and to participate.

Several models of professional development for students with disabilities have been identified in the literature. Again focused on inclusion, Waitoller and Artiles (2013) found action research, on-site training, university classes, professional development schools, online courses, and a special educator's weekly newsletter as models of how to support the professional development of teachers. Two additional models stand out in research conducted by Strieker, Logan, and Kuhel (2012). One, the external expert model, utilizes a consultant from outside the community and is associated with small amounts of teaching practice change. A second, the job-embedded professional development model, has similarities to action research and on-site training models identified by Waitoller and Artiles. This model of professional development addresses the need for on-going emotional and technical support, support for belief change, and student-focused work. The researchers conducted a small-scale study on the effectiveness of job-embedded professional development on inclusive practices and found that it yielded positive outcomes in participation when it was implemented comprehensively. Specifically, Strieker et al. (2012) found the job-embedded professional development increased the amount of time students spent in co-taught core academic classrooms rather than in separate special education classrooms.

The work of Waitoller and Artiles, Yoon et al., and Strieker et al. yields information that supports the professional development of all teachers, including those teaching moderate-severe disabilities. The duration and model of professional development provided to teachers in their

schools can influence attitudes and practice in classrooms, thus having an impact on the success of students.

Teaching Students with Moderate-Severe Disabilities

The instructional program for students with moderate-severe disabilities, while based upon IEP team decisions, is guided by research-based methodologies. Early intervention is known to mediate the life-long effects of learning differences and is one strategy to ensure students gain needed skills. The general education curriculum based upon grade-level aligned standards, referred to as core curriculum or simply core, is utilized with students with moderate-severe disabilities to a greater extent and is supported in literature. In addition to the timing and content of the curriculum, highly qualified teachers using known strategies for curriculum access can provide positive supports for these students.

Early Intervention

The idea of early intervention generally means the interventions that happen while a child is an infant or in preschool that are "designed to enhance the developmental competence of participants and to prevent or minimize developmental delays" (Majnemer, 1998). Because the efficacy of acting early is supported in the case of early intervention, the information gained from such work leads to the belief that acting early in a student's education yields bigger academic gains and improved outcomes (Guralnick, 2005). With no identifiable research about the impact of starting transition planning earlier, early intervention research as the basis for starting any intervention earlier is used here to argue that planning for transition earlier is better.

The idea of "infant stimulation" and providing a set of services to people in specific at-risk groups, including students with low gestational weight and physical impairments, predates laws that require such interventions (Denhoff, 1981). These programs expanded with the

implementation of laws at the state and federal level that incentivize early intervention and preschool services for students identified as having disabilities (Bailey, 2000). Additional international support for early intervention programs is provided by the Convention on the Rights of the Child and Convention on the Rights of Persons with disabilities, though the United States has not ratified the language of these documents (Brown & Guralnick, 2012).

Studies of the effectiveness of acting early in the life of a child that is suspected of having or the possibility of developing a disability show larger short-term effects, with the long-term effects less pronounced. In a meta-analysis of 74 efficacy studies focused on early interventions from 1937-1984, Casto and Mastropieri (1986) found large immediate effects for a range of outcome variables. More recent studies by Ramey and Landesman Ramey show both short term and long term positive effects for children who were at risk for intellectual disabilities—one of which included a longitudinal check-in with participants as they turned 12 years old (Ramey & Ramey, 1994, 1998; Landesman Ramey & Ramey, 1999). Methodology of studying early interventions is noted by multiple authors, but some studies do meet standards of research (Casto & Mastropieri, 1986; Guralnick, 2005; Majnemer, 1998). Few randomized control trials for early intervention are available for review, but Hwang et al. (2013) identifies several in the introduction to their study of a randomized control trial in Taiwan that compares the effects of "Family-focused" and "Child-focused" early intervention strategies.

The importance of understanding early interventions effect on the development of all students provides a rationale for acting early in the area of transition-related skills (Ziviani, Darlington, Feeney, & Head, 2011). The research in this area yields ideas that translate into the broader landscape of education, by identifying that intensity, onset, duration, and quality of services play a role in the short- and long-term success of students (Bailey, Aytch, Odom,

Symons, & Wolery, 1999; Gomby, Larner, Stevenson, Lewit, & Behrman, 1995). Additionally, a new focus on working with families toward functional goals emerges in the literature (Hwang et al., 2013). This focus on a student's ability to participate in daily routines and to have appropriate interactions within their community can inform the instruction of students in elementary grades, also.

Curriculum and Assessment for Students with Moderate-Severe Disabilities

The curriculum for students with moderate-severe disabilities is individualized. While core standards are relevant and considered, IEP teams determine the actual goals for which progress is measured for each student. Though many researchers have since developed models and frameworks to focus IEP team discussions, Brown's idea of the "criterion of ultimate functioning" endures in derivations on the same theme—that students with moderate-severe disabilities should work on skills that are age-appropriate and support their independence in future environments (Brown, L., Nietupski, J., & Hamre-Nietupski, S., 1976). The final future environment, consisting of the years that follow time in the public school system, is what all teachers should be focused on each day with students. By having high expectations for students and building on their strengths, the transition to adulthood can be more successful (Carter et al., 2014).

The functional skills-based curriculum models common in the era immediately following the enactment of federal special education law gave way to models of social inclusion, self-determination, and a focus on academics (Browder, Spooner, Ahlgrim-Delzell, et al., 2003; Carter, Owens, Trainor, Sun, & Swedeen, 2009). In their review of curriculum research covering twenty years, Nietupski et al. (1997) found a shift in the research focus for students with moderate-severe disabilities from functional life skills to interactions and social skills. Still, the

need for skills that are relevant to the future of students persists even when other foci have been identified (Snell, 1988). Another review of research by Browder and Cooper-Duffy (2003) found common domains for curriculum planning in the community, vocational, home, and other contexts.

Ayres, Lowrey, Douglas and Sievers (2011) share the difficulty that competing interests present in the current era of educating students with moderate-severe disabilities. Should curriculum be focused on functional skills or academics? They answer with the idea that academic skill should not be achieved at the cost of functional independence. Students have finite time in school, they argue, and that time should be focused on the meaningful individualized needs of the student. In a response to Ayres et al., Courtade, Spooner, Browder, and Jimenez (2012) write that the use of a standards-based curriculum provides students with a "complete educational opportunity" that recognizes there is unknown potential in students with moderate-severe disabilities, that the standards can be made relevant, and that functional skills and standards-based curriculum can coexist. Literature focused on literacy development in students with moderate-severe disabilities supports this model of coexistence, identifying methods to access reading materials and to then apply knowledge in the school, home, and community environments (Browder et al., 2009; Browder, Wakeman, Spooner, Ahlgrim-Delzell, & Algozzine, 2006).

Whether functional or standards-based, another focus of the curriculum of students with moderate-severe disabilities is the generalizability of taught skills and knowledge. One way to ensure generalizability is to teach concepts in the natural environment (Meyer, Eichinger, & Park-Lee, 1987). An extension of this idea is community-based instruction (Dymond & Orelove, 2001; Snell, 1988). This evidence-based practice is described in the literature as one of several

ways to ensure students are learning in the context necessary to be successful over time. The context and the content are what make up a student's educational program, and thus must be considered carefully and evaluated regularly (Ryndak, Moore, Orlando, & Delano, 2008; Snell, 1988).

Access to Core Curriculum. The IDEA 2004 requires reporting by states on the progress of all students toward general education standards. In the era since NCLB (No Child Left Behind Act, 2002) legislation, states are required to develop an alternate assessment for students who are unable to access the standardized assessment in their state. Being required to show progress and provide an assessment, the expectation that all students have access to the general education standards-based curriculum has been the driving force in instructional material development for the past two decades (Petersen, 2016).

Teachers report a wide range of attitudes about the expectation to instruct students with moderate-severe disabilities in the core curriculum. One survey of attitudes revealed that teachers believe that students with moderate-severe disabilities should not be held accountable to the same performance standards as their non-disabled peers (Agran, Alper, & Wehmeyer, 2002). In that same survey teachers did see a benefit to ensuring access to the general education curriculum because it raised education expectations for this student group. In a series of semi-structured focus groups with special education teachers, Peterson (2016) found that access to the general education curriculum is affected by the grade span of the students being taught and the time available to collaborate with general education teachers. Evidence has been found to support efforts in standards-based reading, mathematics, and science learning for students with moderate-severe disabilities (Browder, Spooner, Wakeman, Trela, & Baker, 2006).

Alternate Assessment. One of the core aspects of NCLB was the ability for states to set criteria to determine who was eligible to take the alternate assessment. The alternate assessment allowed states to assess students with moderate-severe disabilities using alternate achievement standards that were aligned to the state's academic standards and based upon professional judgement of what was the highest learning standards possible for students (Browder, Spooner, Ahlgrim-Delzell, et al., 2003). Because the alternate assessments were developed separately in each state, a wide variety of interpretations of what content should be assessed is reflected in research.

Two qualitative studies and one meta-analysis have sought information about the implementation of alternate assessments. One research team developed a survey instrument, the Curriculum Indicators Survey, to compare the alignment of curriculum to state standards and alternate assessments (Karvonen, Wakeman, Flowers, & Browder, 2007). This survey asked participants to compare their own teaching to what was presented on the state alternate assessment and found that a large number of respondents presented high cognitive demand instruction yet expected passive participation. Another researcher worked with semi-structured focus groups to elicit information about their implementation of standards aligned to their state's alternate assessment (Petersen, 2016). Teachers expressed their confusion about whether the alternate assessment was a discrete piece of a larger instructional program or if it should be the core of their program from which other instructional items emanate.

The confusion by the teachers in Petersen's study is addressed by work that was conducted immediately following the enactment of NCLB. Browder, Spooner, Algozzine, et al. (2003) suggest that teachers be informed consumers of information about their state's alternate assessment by knowing whether the assessment is based on academic, functional, or a

combination of both types of standards. The authors also posit that one of the promises of the alternate assessment is an increase in expectations for students no matter what standards the assessment is based upon. To understand which standards states chose to focus on, a review of 6 such assessments found that the majority of tasks were developed to reflect academic knowledge in a functional way, highlighting the emphasis that is placed on academic skills for students with moderate-severe disabilities (Browder, Spooner, Ahlgrim-Delzell, et al., 2003). With the alternate assessment focused on academics functionally, and the increase in expectations for students throughout their time in school, it is probable that teachers would need to weave functional skills into academics and academics into traditionally functional-only areas of instruction while considering the long-term impact of these choices for individual students.

Expert Teaching for Students with Moderate-Severe Disabilities

Expert teaching for students with moderate-severe disabilities is not just teacher dependent—the team approach to educating such students is essential to the generalizability and long-term success of these students (Browder & Cooper-Duffy, 2003). Several traits of expert teachers for students are identified in the literature while considering their need for a team approach to education (Bredberg & Davidson, 1999). Teachers who have high levels of self-efficacy, employ competencies known to be effective, and use evidence-based strategies are considered experts in their field (Ruppar, Roberts, & Olson, 2017). These traits and competencies are important to consider in the teaching practice of students with moderate-severe disabilities as their use is known to affect student learning.

Self-efficacy. Research in the area of self-efficacy has been conducted with special education teachers to identify how this phenomenon impacts instructional practice (Allinder, 1994). As their survey revealed, teachers with higher levels of self-efficacy use innovative

teaching strategies, are more professional with students, are more organized, elicit higher levels of fairness, and are confident and enthusiastic while teaching. These findings are supported by the review of self-efficacy literature written by Soto and Goetz (1998). One additional and important piece of information revealed through Allinder's survey is that teachers in self-contained classrooms, directly instructing students for the majority of the school day, are less flexible in meeting individual needs of students than other teachers. Considering that students with moderate-severe disabilities are typically in classrooms with one teacher and other support staff for most of their school day, it can be assumed that they are instructed using less innovative and less evidence-based lesson styles.

Other research identified skills and qualities of expert teachers. The most relevant research that attempts to identify the nature of expert teaching of students with moderate-severe disabilities is also some of the most recent. In their small-scale reputational sampling of teachers believed to be experts in educating students with severe disabilities, Ruppar, Roberts, and Olson (2017) conducted interviews that yielded the identification of four expert teacher skills and four expert teacher qualities. The skills they identified are advocacy, systematic instruction, individualization/adaptation, and collegial relationships, while identified qualities are high expectations, positivity, flexibility/creativity, and continual improvement. These two categories are supported through previous research conducted by Browder and Cooper-Duffy (2003) along with Ryndak et al. (2001a).

Prior to their interviews with teachers, Ruppar, Roberts, and Olson conducted an investigation of expert teaching practice among special education teaching faculty at universities (2015). Special education faculty noted that expert teachers have energy and confidence in their classrooms, sharing an optimism and a vision for the future of their students. They identified

guiding principles such as a focus on lifelong learning, advocacy for their students, and the ability to collaborate with those necessary to ensure student success. Faculty also noted that purposeful, systematic instructional practices keep the student at the focus of their instruction, reiterating the findings of Pennington (2016) and Browder, Wakeman, et al. (2006).

Traits of quality programs for students with moderate-severe disabilities. The expected traits of any instructional program in a school are also expected for a program for students with moderate-severe disabilities (Meyer et al., 1987). Their validation of quality indicators identified nearly 30 years ago continue to influence teachers in programs today. While they named categories of integration/inclusion, professional practices, staff development, instruction, and the criterion of ultimate functioning, current research uses the same general categories to compare the opinions of teachers, parents, and teacher educators about program components and reveals that all three groups care about every aspect of a student's development (Filce, Sharpton, & Ryndak, 2008). Additional specific items called out in research that support student learning are the development of a safe, respectful environment; teaching in natural environments; focusing on independence; working toward communicative competence; using an age-appropriate and broad curriculum; the systematic deliver of instruction; and continual evaluation of effectiveness of practice (Meyer et al., 1987; Pennington et al., 2016).

While the "how" of teaching students with moderate-severe disabilities is reviewed above, some specific strategies are known to be effective and are evidence-based. Direct instruction of students with disabilities, including the use of evidence-based strategies like mnemonics and applied behavior analysis techniques, is a widely used instructional technique (Burns & Ysseldyke, 2009). The use of task analysis appears in numerous studies by Browder and collaborators on research related to reading instruction (Browder, Spooner, et al., 2006;

Browder, Wakeman, et al., 2006). The focus on task analysis in their work also provides insight into methods of prompting students for responses, using systematic prompting and fading the use of that prompting to build independence in students. Increasing active, pivotal response rates through partial participation, with expectations supported through the use of prompting and task analysis, is also identified in a review of literature by Browder et al. (Browder & Cooper-Duffy, 2003). Hollowood, Salisbury, and Rainforth (1994) conducted a survey of time use in programs for students with and without disabilities and found that students with more severe disabilities spent less time actively engaged in learning, though they identified through previous research that time allocations for instruction and engagement of learners is predictive of achievement.

Life-Long Outcomes for People with Moderate-Severe Disabilities

While the six years between ages 16 and 22 can be an effective time to focus on student life-long outcomes, many IEP teams miss the transition opportunities for students earlier in their education. Earlier, longer, and more intense educational interventions were found to increase success for students with disabilities (Casto & Mastropieri, 1986), yet current law focuses IEP teams on these services after more than ten years of educational service have been provided. While the interventions that Casto and Mastropieri reviewed addressed students with less severe disabilities, their work supports considering the impact of focusing on transition-related skills earlier in a student's educational career.

National Disability Statistics: Transition to Adulthood

Employment. People with disabilities[3] in the United States are twice as likely to be unemployed than their non-disabled peers (U.S. Bureau of Labor Statistics, 2017). In 2016, the

[3] Employment statistics do not describe disability in the same manner as schools. Eligibility through IDEA is based upon the identification of a specific disability, such as intellectual

labor force in the US consisted of an estimated 151 million individuals, and of the over eight and a half million unemployed, over one million of them had a disability (United States Census, 2016). While statistics show high levels of unemployment for people with disabilities, people with disabilities also make up one-third of those not actively looking for work. Of the 45 million adults listed as "not in labor force," 12 million are those with disabilities. Consistently, the largest groups of people with disabilities that are unemployed or are not looking for work are those with cognitive, ambulatory, and independent living difficulties.

In California, the number of adults identified with disabilities topped two million in 2016, an increase of 150,000 since 2009. In the group of those with disabilities, 1.2 million were not looking for work, while a little more than 700,000 were employed.

Post-Secondary Education. The range of participation in post-secondary education (PSE) varies based upon disability type. Post-secondary education is half as likely for people with intellectual disabilities[4], autism, and multiple disabilities when compared to others forms of disability (Newman et al., 2011). When students with disabilities were enrolled in PSE, 2-year colleges show the biggest number of enrollments from these three groups. Those with intellectual disabilities were least likely to be enrolled full time or to be enrolled consistently in post-secondary activities.

Social Interaction. Less than sixty percent of those surveyed with intellectual disabilities, autism, and multiple disabilities saw friends outside of work at least once a week during the prior year (Newman et al., 2011). Additionally, only 19 percent of respondents with intellectual disability reported being involved in a volunteer or community service activity.

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disability or autism. Disabilities in employment statistics are based upon the function that is impacted, such as having difficulty with concentrating or difficulty dressing or bathing.

[4] Mental retardation in NLTS2.

Employability

With the changing focus of schooling for students with moderate-severe disabilities from a functional skills-based to a standards-based curriculum (Ayres et al., 2011), the perception of some teachers is to move away from teaching skills that assist a student in achieving long-term employability. Employability is difficult to measure (Harvey, 2001), but most generally consists of skills, attitudes, competencies and the ability to adapt to changes (McQuaid & Lindsay, 2005; Van der Heijde & Van Der Heijden, 2006).

Former Secretary of Labor Elizabeth Dole formed the Secretary's Commission on Achieving Necessary Skills (SCANS) to address the question of what skills were needed to have specific jobs (Whetzel, 1992). The "Skills and Tasks for Jobs" (Department of Labor, 1991) were released to support the development of programs in schools that helped students gain the skills and competencies needed to be employed after leaving high school. This set of skills and competencies were developed through a review of research and the input of successful corporations. An update to the SCANS-developed skills came later with the "Workplace Essential Skills" (2000) that included information to connect skills to newer jobs and to the Occupation Information Network (O*NET), a resource for employers and job-seekers. The development of both SCANS and O*NET shed light on the nature of what is expected for adults to get jobs and can guide the development of such skills in students with moderate-severe disabilities.

Other research into the skills needed for employability reveal a focus on soft skills—those skills that are not technical or technological (Ellis, Kisling, & Hackworth, 2014). The emphasis on skills that are less measurable, such as the ability to use critical social thinking (Grossman, Thayer, Shuffler, Burke, & Salas, 2015) and personal adaptability, are due to the past

century's change in the nature of "career" being person-centered and directed, whereas it was previously tied to a single company for most individuals (Fugate, Kinicki, & Ashforth, 2004). Additionally, the ability of employees to feel more competent increases their success and job satisfaction (De Vos, De Hauw, & Van der Heijden, 2011). These are important points to consider when developing transition-related goals for a student with moderate-severe disabilities, as the ability to communicate and think socially could be taught from an early age in support of employability.

When considering literature specific to employability of people with disabilities, few studies provide information about how to develop the skills needed for success. Employers were surveyed by Ju, Zhang, and Pacha (2012) to compare their expectations of employees with and without disabilities and found that, for both groups, basic skills (e.g., reading, writing, communicating) and basic work skills were the most important skills groups. In a follow-up study, Ju, Pacha, Moore, and Zhang (2014) compared employer and educator perceptions of necessary employability skills for entry-level employees with and without disabilities. They found that the top skills identified by both groups were timeliness, showing respect for others, having personal integrity, and following instructions. In another study, the employment of adults with severe disabilities transitioning from school to work found that the duration of community-based training and age-appropriate access to non-disabled peers were predictors of employment success.

Conclusion

The ability for students to become adults that have the transition skills needed to be successful in employment and activities of daily living is the purpose of schooling. The years that students spend in special education programs should yield students with these skills. This

study argues that the conditions are available for increased levels of employment by those with moderate-severe disabilities. The perceptions of the public and teachers more specifically reveal barriers to an increase in employment. Teacher preparation and professional development can be used to address these perceptions and to improve the beliefs in the possibilities for students with moderate-severe disabilities to successfully transition to work and independence. By teaching skills identified by employers as essential to the team-based work environment of today in the context of standards-based curriculum, schools can support the development of their students with moderate-severe disabilities.

CHAPTER 3

Students with moderate-severe disabilities typically spend multiple elementary school years instructed by the same teacher. Teachers' perceptions of these students' abilities have a lasting effect on their educational outcomes as they transition from elementary and secondary education to adulthood. Current special education law mandates that planning for transition to adulthood begin at age 16, but earlier interventions are shown to yield significant, positive effects for students with disabilities (Casto & Mastropieri, 1986; Mastropieri & Scruggs, 2005). The instructional choices of elementary teachers impact the life-long transition abilities of students in post-secondary education, vocational education, employment, independent living, and community participation (Carter et al., 2009).

This study examines how elementary special education teachers' beliefs about the life-long, transition-related learning potential of their students impact their instructional choices. This study uses the conceptual framework of the Pygmalion effect, which correlates higher levels of teacher expectations with higher levels of student achievement. Additionally, the work of Ayres and associates (2011) and subsequent response by Courtade and associates (2012) show the difficult balance in schools today between the forces of standards-based and functional-skills curricula. The perception of what students will do after they leave school and of what is expected to be taught impacts the urgency with which teachers instruct. Understanding the factors that influence these instructional choices may lead to improved outcomes for students with moderate-severe disabilities.

My research examines elementary special education teacher self-reported attitudes about their students with disabilities and their instructional choices related to transition-focused skills.

The following research questions guide my study:

1. What are elementary special education teachers' perceptions of the prospects for the future of their students with moderate-severe disabilities?
2. What information sources do elementary special education teachers use to make instructional decisions for students with moderate-severe disabilities?
3. How are teacher perceptions of student disabilities associated with instructional choices of independence and transition skills?
4. What independence and transition related skills are most important to life-long achievement according to teachers?

Research Design and Rationale

This study uses a qualitative phenomenological approach to understand the complexities of the influence of teacher expectations and the impact those expectations have on instructional choices in elementary grades.

Research Design Rationale

I used qualitative methods for this study. By using a short questionnaire that guided an interview, data was collected about students and teacher perceptions that were expanded upon using probing questions in the interview. As Merriam and Tisdell (2015) suggest, this form of study design focuses on the experience of participants and how that experience is transformed into consciousness. Questionnaire data allows for efficient and standardized data collection from the sample and was used as a support during the interview. The interview allowed for the collection of data about behaviors and feelings that cannot be found through other methods (Merriam & Tisdell, 2015). Qualitative methods of analysis allow for meaning to be developed across the responses and in relationship to the information provided by multiple participants.

The choice of qualitative methods is supported by several key characteristics of this research method (Creswell & Creswell, 2017). The ability to conduct interviews in the natural setting of the teacher's classroom meant going "to the people" and allowed participants to use the environment to enhance their participation (Given, 2008). Inductively building categories and patterns throughout the interview process allowed for the development of themes. Qualitative methods provided the opportunity for the researcher to ascertain participant meaning, allowing for the open-ended collection of data that focused on "learning the meaning that the participants hold about the problem" (Creswell & Creswell, 2017, p. 182). Qualitative data collection through interviews allowed for the collection of information about the relationship of teacher perspectives to teacher instructional choices for students with moderate-severe disabilities.

Strategies of Inquiry

Site and Population

I chose a large, urban school district that enrolls students with moderate-severe disabilities. The size of the school district also provided access to many teachers that focus exclusively on the education of students with moderate-severe disabilities. State reporting for the district reveals that over 19% of students with disabilities spend the majority of their school day in separate classrooms or in separate schools, away from their peers without disabilities. These numbers are significant since students with moderate-severe disabilities are most likely to be taught in separate and segregated settings; thus, it is the teachers in those settings that are the focus of this study ("IDEA Section 618 Data Products," 2018). In addition, the district serves this large number of students with moderate-severe disabilities in a diverse range of communities. The schools within the district are typical of large urban environments, including a high number

of Title I schoolwide program sites, large numbers of English learners, and a variety of school configurations.

Site Rationale. I chose this site because of its size and comparability to other school districts in diverse metropolitan areas. Data gathered through publicly available information on the district's website reveal a large number of students in special education programs designed for students with moderate-severe disabilities. Having such a large number of students in programs named for specific moderate-severe disabilities yields the possibility of a large number of teachers to survey and interview.

To gain access to this site, I submitted a request to conduct research to district leadership. To be approved, a study must provide clear, direct, and immediate benefits for the district. This study benefits the district because it addresses the district's graduation and completion goal, focusing on equitable access to high quality curriculum and instruction. As an employee of the district, I clearly outlined the importance of my ethical separation of job and researcher roles in my request to conduct this research.

Included in my submission to the district, I noted that I would contact principals of school sites to gain access to the teachers of moderate-severe disabilities. As information was shared, teachers began to contact me for more information about and to enroll in the study.

I presented this study to teachers as an opportunity to discuss their students, what they were teaching them, and their reasoning in determining what they teach. Participants were also informed that the use of the information gathered by this study will be shared to benefit the school district in planning for curriculum and instructional programs. They were assured of the confidentiality of their responses. Data was coded anonymously, removing or replacing references to student, teacher, school, and other unique names in all data and subsequent reports.

Sample Population. Due to the specificity of the research questions, a purposeful, criterion-based sample was required for this study. Merriam (2015) describes this kind of purposeful sample as a "unique sample." The population for this study was special education teachers who teach the moderate-severe population of students at elementary schools. The focus for the sample narrowed to just teachers who have students in a grade transitioning to middle school—typically these teachers also teach students in other grades. This was the focus because it is in the grades prior to a transition that teachers are likely to be preparing for expanded independence, generalizability of skills, and life-skill needs important in the next educational environment. All teachers in the sample for this study had students preparing for middle school, but some participants taught students in kindergarten through fifth grade.

Teachers of students with moderate-severe disabilities who are transitioning to middle school comprise a specific and small number of teachers in any school district. I sought to recruit 10 teachers for this study and was able to complete data collection with 11. A total of 16 contacts were made with possible participants, though not all of them were able to commit to the interview process. Recruitment ceased when additional interviews no longer yielded new information or insights (Charmaz, 2018). Teacher participants were provided informed consent prior to the date of the interview through email contact.

Role Management

As an administrator at the district's central office, the researcher's position was a potential threat to this study. While not in a supervisory role over any of the potential participants, their knowledge of the researcher's work or previous interactions may have played a role in the decision to participate. To ensure the emotional safety of participants, questions were framed to focus on what teachers think of their specific students and not about their effectiveness

with instructing those students. The interview allowed teachers to describe and justify their instructional choices without the perception of judgment from the researcher. During interactions prior to and during study participation, participants were reminded of the voluntary nature of their participation, of the role of the researcher, of the confidential nature of their answers, and of the anonymity of the data analysis.

Data Collection Methods and Analyses

Questionnaire Data and Analysis. Questionnaires were conducted as the first step in the teacher interviews and assisted in framing the conversation about students. Through the use of a computer, questionnaires were provided to participants at the beginning of the interview session and consisted of demographic information collection and questions regarding perceptions of the students in their classes currently (See Appendix B). Participants were informed that the data would assist in guiding the accompanying interview.

The demographic data questions included items such as years of teaching and type of teacher education program (traditional with student teaching, university intern, etc.). Prior to data collection it was thought that the type of teacher education program would indicate an influence on the teacher's initial exposure and perceptions of people with moderate-severe disabilities—data collected was not sufficient to warrant claims or findings for this. The questionnaire also asked about teacher perceptions of their individual students. These perception questions were informed by the Attitudes Toward Intellectual Disability Questionnaire (ATTID), the Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS), and the Attitudes Toward Disabled Persons (ATDP) as references. The questionnaire was expected to take approximately 15 minutes, allowing the participant to dedicate one to two minutes per student

and to complete the demographic questions. In implementation, the questionnaire took between 10 and 20 minutes for most participants.

Interview Data and Analysis. The interview protocol aligned with the questionnaire to expand on information provided by participants. The interviewer was able to refer to the survey responses during the interview through use of a computer. The interviewer asked questions specific to students described in the survey and responses provided insight into perceptions and instructional choices. The format of using the questionnaire as a priming tool to inform the interview allowed participants to share deeply about the students they work with. All interviews were conducted in teacher classrooms to add to their level of comfort and to allow them to use the space as a means for support of memory recall. During interviews, teachers referenced materials in their classrooms by gesturing and gathering items to show to the interviewer. Items that teachers referenced included student work samples, bulletin boards, and the classroom seating arrangement. Interviews were recorded with two recording devices and were transcribed using a secure online transcription service. Interviews were expected to take approximately 45 minutes after the completion of the introductory questionnaire—some were much longer than the original estimate and a few were shorter (Table 1).

Interview data was coded using the method described by Tesch (1990). Through this process, an initial sample of interviews was used to identify and organize emerging themes. Following this initial coding, additional interviews were analyzed to develop additional codes. Expected codes, surprising codes, and codes that were of conceptual interest were developed based upon the initial set of interviews, and the use of a researcher-created codebook maximized the coherence among codes throughout the process (Creswell & Creswell, 2017). During the

coding process, a second coder was able to achieve good agreement (.64) and excellent agreement (.94) based on the work of Fleiss (1971).

Ethical Issues

The most important ethical consideration for this study is the researcher's role as a district administrator, though not in a supervisory role with the participants. Furthermore, I worked to ensure my role as researcher was expressed and emphasized through this study. Also, my relationship to the participants and their administrators was addressed by reminding them that study participation was voluntary, and that informed consent was provided. Survey and interview data remain anonymous. Survey and interview protocols were tested with two teachers outside of the research site to address any possible risks that they could have produced prior to conducting the study.

Credibility and Validity

Credibility

Several methods were employed to ensure credibility of this study, specifically to address my own bias, reactivity, and relationship of data to prior research. As the study began with participants completing a questionnaire, its credibility framed the discussion that followed in the interview. Questionnaire items were influenced by previously validated surveys such as that ATTID, MAS, and ATDP to reduce threats to validity. The use of these surveys to inform the questionnaire provides the opportunity to make comparisons to data with previous research studies. Systematic data collection ensured that all participants were asked the same set of questions. To address reactivity of participants in the interview, the researcher practiced interviewing with two teachers outside of the sample population and practiced ways to direct conversation back to the semi-structured interview protocol. Participants were assured that their

participation would most benefit their students and the profession if they provided candid and thorough answers. The use of direct quotes from participants help to minimize my bias in the reporting of the data collected.

The sample was restricted to a small subset of teachers and not intended to be indicative of all teachers of students with moderate-severe disabilities. There remains a possibility that there was bias of participants to opt-in to participate in this research. Using literature to compare responses to studies on related topics (special education, teaching students with moderate-severe disabilities) provides a means to triangulate findings and address bias.

Qualitative Validity

The researcher checked for accuracy of the findings of this study by using multiple validity procedures. Themes were established by using a convergence of perspectives shared by participants. The researcher's bias is addressed in comments that address reflexivity related to past experiences and how those experiences shape interpretations of the data collected.

CHAPTER 4

Introduction

This qualitative study examined the perceptions of elementary teachers of students with moderate-severe disabilities—specifically their thoughts on what was possible for their students when they transitioned out of the public K-12 school system. The study was conducted in a large urban school district in California and focused specifically on elementary teachers with students who had been determined by an IEP team to not be diploma bound. These students are most often eligible for special education due to an intellectual disability, autism, or multiple disabilities. Through interviews that included a short demographic questionnaire and questions about their students, the eleven participants, each from a different public school, shared about their students, their thoughts on the skills that would help them to be successful later in life, and the challenges they face as educators working with this population. Following the interview, participants were offered the opportunity to write additional thoughts that may have come to mind after the interview was conducted—four participants shared these added thoughts with the researcher.

The primary goal of this study was to gain an understanding of elementary special education teachers' beliefs about the life-long, transition-related learning potential of their students as they turn twenty-two and age out of special education. The following research questions were addressed in this study:

1. What are elementary special education teachers' perceptions of the prospects for the future of their students with moderate-severe disabilities?
2. What information sources do elementary special education teachers use to make instructional decisions for students with moderate-severe disabilities?

3. How are teacher perceptions of student disabilities associated with instructional choices of independence and transition skills?
4. What independence and transition related skills are most important to life-long achievement according to teachers?

In order to address these questions, I analyzed the information written by the eleven participants about their students, transcriptions of the interviews in which they participated, and the writings from four participants following the interviews. While analyzing the data collected, the following findings emerged:

1. Participants identified social skills as the key to success for their students
2. Participants reported that students are more successful when expectations are high
3. Participants utilize the curriculum and their intuition to guide them instructionally
4. Participants are unaware of what awaits their students when they transition

In this chapter, an overview of the data collection process is presented. Findings are then presented with associated themes for support. The themes are sometimes explicitly developed from the specific things that participants shared, while some themes are found by piecing together the ideas that were shared throughout the entirety of data collection.

The Data Collection Process

Information about this study was shared with special education support staff throughout the district who, in turn, shared about the study with elementary teachers. The researcher's contact information and study information sheet (Appendix A) were provided to support personnel and coworkers to share with possible participants. Fourteen interested teachers contacted the researcher through email, phone calls, and text messages to ask questions about the study and to arrange for interview times. Of the fourteen, eleven agreed to participate in the

study. Individual interviews took place at eleven different schools during April and May 2019. Table 1 provides information about each of the participants including pseudonym, gender, years of teaching experience, and class information. All participants are currently teaching at Title I schools, and ten of them noted that their teaching credential was earned while employed full-time as a teacher. Only one teacher completed their teacher credential with student teaching prior to their hiring.

The participants in this study were asked to write a short description about each of their students. It was suggested that they write between two and three sentences, though some participants chose to write more. Next, participants identified two students—their most and least skilled. For these two students, participants were asked to respond in writing to the question, "What characteristics of the student above indicate a high/low level of skill?" They selected the life-long potential expectations in the areas of adult living, employment, transportation, and self-care from a field of options, and then shared about their students that they felt had the most and least skills currently. Additional questions were asked in order to develop supporting evidence to answer the research questions, but the bulk of the interview focused on these two students. Embedded in the interviews about the students was a discussion about teacher answers to four questions from the survey (Appendix C) that addressed the specific potential of students in the areas of adult living, employment, transportation, and self-care (Tables 3-6). These areas were derived from the National Longitudinal Study of Transition II (Newman et al., 2011) and included choices for participants that mirror those reported in the prior study.

Table 1. *Overview of Study Participants*

Name	Gender	Length of Interview (minutes)	Years Teaching Students with Moderate-Severe Disabilities	Primary Disability in Classroom	Students in Class at Time of Interview
Aaron	M	65	20	Autism	6
Becca	F	34	21	Intellectual Disability	10
Cindy	F	41	20	Multiple Disabilities	2
Diane	F	50	17	Intellectual Disability	14
Edgar	M	79	12	Multiple Disabilities	8
Farah	F	47	5	Autism	6
Grant	M	40	20	Autism	8
Helen	F	55	7	Autism	9
Ilene	F	35	17	Multiple Disabilities	5
Jadyn	F	41	7	Autism	7
Katie	F	49	23	Intellectual Disability	12

Findings

The findings from this study are identified from the data collected and the answers that address the research questions are interwoven in this reporting.

Finding 1 – Participants identified social skills as the key to success

When conducting the interviews, the first question asked of participants was about which skills they felt were most important for life-long success for the students they teach. This general question yielded a variety of responses, mostly falling into a few broader categories of "social skills" including the ability to communicate, "academics" such as reading and math ability, and "activities of daily living" referring to skills like using the restroom and dressing themselves. These categories of responses and their specific skills were also used to analyze the written and

spoken responses from participants about their students identified as having the most and least skills currently. The Skills for Independence and Success table (Table 2) provides the data associated with how many of the participants mentioned a specific skill, and also how often that skill was mentioned by all participants.

Social skills were identified by all participants as a key to success. Participants shared about social skills in different ways, addressing both expressive and receptive social skills as important for success. One participant (Diane) considered two students as most skilled prior to starting the interview recording, and ultimately indicated that she chose the student with more social skills. When asked about the most important skills for success, she shared:

> Without a doubt social skills because I think you can find a job and be part of the community if you have those social skills. You can do it if you can't read, you can do it if you can't write, but if you do not have those social skills in terms of being able to interact with people, then I think that's an issue. (Diane Interview)

When asked to share more specifically about the meaning of social skills, she listed a number of areas that were also addressed by other participants, such as interacting with other people, getting along, following directions, expressing yourself, communicating needs and wants, asking for assistance, and respecting personal space boundaries. The perception that teachers shared most often was the importance of social skills as the key to student success.

The ability to interact with others was expanded on by another participant who took the practical implications of social skills beyond other participant responses:

> Having the ability to communicate and express their wants and needs, and *just have friends and develop relationships* [emphasis added] is very important. Either developing that or providing them with a way to communicate for my nonverbal students is

important. The more gains they make in that area ... the better outcome I see for them in their life. (Farah Interview)

Farah shared about the possibility for her 3rd through 5th grade students with autism to have friends. Her identification of friendship saw beyond the simple question about important skills for success. Social skills that participants noted are discrete and often contextual, but for a teacher like Farah, they are important for life-long success that extends beyond school and work and into the real lives of her students.

In addition to what was reported by participants as specific skills that aid in success, several themes emerged in support of the finding that social skills are thought to be the key to student success later in life. The students that were most skilled were also noted as being verbal communicators while students with the least skills were identified as non-verbal. Other success skills that were shared by teachers are addressed later in these findings.

Table 2. *Gender of Students Selected as Having the Most and Least Skills*

Gender	Most Skills	Least Skills
Female	4	3
Male	7	8

Students identified as most skilled often referred to as "verbal communicators." For the majority of participants (9 out of 11), some level of verbal communication was noted as a descriptor of the student they chose as having the most skills currently. All of the participants shared something that referred to "social appropriateness" also, but their specific comments indicated a perception that student ability to express their thoughts verbally was important.

"If she needs something, she'll come and tell me," (Katie Interview). The importance of verbal communication was shared in discussion and teachers highlighted the need for students to be able to "communicate [their] need and wants" (Ilene Interview). To emphasize the importance

of verbal communication in being able to readily and spontaneously communicate, the first response that Cindy provided about important skills was:

> Some form of communication and self-advocacy. Some form of easily understandable communication, not like an eye gaze computer… it's okay, but that doesn't go everywhere with you, so that's not going to get you out of trouble. (Cindy Interview)

Cindy's experience with students with multiple disabilities, some of them using low-tech and some using high-tech eye gaze communication systems, provided the background to share that these systems are not "easily understandable" for those who are not familiar with the student or with their individualized means of communicating.

Table 3. *Prompt Response: Which living situation is most likely?*

	MOST SKILLS	LEAST SKILLS
Living independently, with a spouse, partner, or roommate	2	0
Living semi-independently, in a college dormitory, military housing, or a group home	4	0
Living with family, in an institution, or a group home	5	11

Table 4. *Prompt Response: Which employment level is most likely?*

	MOST SKILLS	LEAST SKILLS
Competitively employed (in a job that was open to all applicants)	2	0
Supported employment	6	1
Volunteer work	1	3
Unemployed/Unable to participate in labor force	2	7

Table 5. *Prompt Response: Which transportation method is most likely?*

	MOST SKILLS	LEAST SKILLS
Driving independently	3	0
Using public transit independently (including walking)	4	0
Relying on caregivers or Access Paratransit for travel	4	11

Table 6. *Prompt Response: Which living situation is most likely?*

	MOST SKILLS	LEAST SKILLS
Independently caring for self, including hygiene and nutritional needs	8	0
Partially able to care for self	1	5
Dependent upon others for all or nearly all hygiene and nutritional care	2	6

Students identified as having the least skills often referred to as "non-verbal" and/or non-communicators. While verbal communication was identified as a trait of students seen as having the most skill, the students that were described as non-verbal, limited verbal, unintelligibly verbal, or as non-communicators were thought to have the least skill (10 out of 11). Ilene, in sharing about her student identified as having the least skills, said, "He has no means of communication, although he's non-verbal. But some non-verbal kids can really sign but not him" (Interview). For her student, also described as using a wheelchair and unable to feed, bathe, or actively participate in any activities of daily living, Ilene noted that his refusal of support by shoving caretakers away was his most common means of communication.

Interviews with several participants identified students who try to communicate but are unable to be understood by listeners. Diane and Aaron shared that their students with the least skill attempt communication, but the sounds produced sound like "babbling."

> Her speech is basically babbling. She will say some words like, "Bye. Mama." She will use a few signs. Shark, shark. Oh my gosh, if it weren't for the shark, I couldn't get her to

> do anything, but this is a child that will always need to be taken care of… but she does try to use signs and she'll come up to me and she'll just try to carry a conversation, but you can't understand her, which may partly contribute to her negative behaviors. (Diane Interview)

Aaron also wrote in his description of his student with the least skill that the "Student is nonverbal, completely nonverbal. Babbles a little bit with a few signs, like ASL, like signing yes and no" (Questionnaire). Both Diane and Aaron's students express a want to communicate, but their inability to do so contributes to the perception associated with "least skill" labelling.

Some students with the least skill and described as non-verbal also showed a lack of communicative intent with their teachers. Becca, sharing about her least-skilled student, said, "If you were to look at him and you were to ask him something, [there's] just like no response." No matter the specific descriptor of the student, the inability to express themselves through speech was identified by participants as a key barrier to success for students.

Social skills also noted often, interrelated with communication. Participants shared consistently about the need for social skills and communication ability—identifying the importance of knowing how to communicate and to understand the contexts in which they participate.

Sometimes social skills were identified as the ability to read the room and follow along with what peers are doing. When talking about the end of tablet use time for a student, Grant shared that his student identified as the least skilled "sees her peers getting up to turn over the iPad to us, and she'll do the same." Grant's description of the student was framed positively because for him, even though she doesn't verbally communicate, she is able to follow peer and adult models in order to participate. Becca expressed the thought that her students were not

Table 7. *Skills for Independence and Success*

Skill	Participants that noted skill as important	Number of times noted by all participants
Social Skills	**11**	**39**
Asking for assistance	2	2
Communication	4	4
Expected behaviors and social norms	4	4
Following directions	6	7
Initiating conversations	1	1
Interacting with peers and coworkers	3	5
Other social skills	1	5
Regulating emotions, feelings, reactions	2	3
Self-advocacy	6	6
Understanding non-verbal cues	1	2
Academic Skills	**7**	**16**
English – General ability	1	2
English – Reading	5	7
Math – Calendar	1	1
Math – General ability	1	1
Math – Money & finance	3	3
Math – Time	2	2
Activities of Daily Living	**10**	**19**
Decision making	1	1
General activities of daily living	1	1
Meal preparation, eating	4	4
Mobility	1	1
Navigation / getting places	3	3
Organization	1	1
Self-care, hygiene, restroom use	6	6
Technology use	1	1
Work tolerance	1	1

getting explicit support at home to address social skill needs that she addresses in the classroom—skills such as understanding when people are being rude, how to excuse yourself to care for personal needs (passing gas noted specifically), and respecting personal space boundaries.

In discussion about her student with the least skills, Farah identified social skills as the key for her student to move from a potential of "unemployed" to "supported employment." She described him as currently making "rude comments and kind of making people uncomfortable." In order to address the current state of her student's social skills,

> We are working a lot on social skills with him of what's expected and unexpected, and how expected behaviors make people feel comfortable and uncomfortable. We use that curriculum a lot here. I see you're upset, I see you're frustrated, but what else can you do? Instead of this, what else can you do? He's starting to understand. On his own, he'll say, "I'm sorry" now and then, so he's starting to understand how he's making others feel, which is a start. (Farah Interview)

The need to have social skills is expressed as being about communication, but adds the depth of practical application in real-world contexts. For these teachers, they want their students to understand that what isn't said may be just as important as what is said—unspoken, hidden communication found in facial expressions, body language, etc.

Other skills that were noted by teachers. Activities of daily living and academics were also shared as important for success for students with moderate-severe disabilities. The academic skills that teachers mentioned were focused on reading at a basic level, such as the ability to read environmental print like "exit" and "stop" signs, but also a bus schedule. Math skills like telling time and understanding a calendar were mentioned less than money skills. Teacher participants shared hypothetically about students who would be able to ride the bus by reading a schedule, go to a store, make a choice of what to buy, and then be able to use money to make the purchase.

Finding 2 – Participants reported that students are more successful when expectations are high

Much like the findings by Rosenthal and Jacobson (1968), participants identified the concept that students who are expected to be more independent are, in fact, more independent. The examples of high expectations, counterexamples that illustrate how learned helplessness and prompt-dependence keep students from independence, and the expressed fear of lowered expectations as students transition to their next schools support the general view that higher expectations lead to better skill acquisition.

Students whose parents and teachers "treat them like they don't have a disability" were reported as more skilled. Three participants identified situations in which they observed parents or felt that their own treatment of a student, somewhat ignoring their disability, was a reason for higher levels of independence or behavioral self-management.

In his interview, Edgar talked about his most skilled student at length. She was described by Edgar in this way:

> I worked with high school students who had multiple severe disabilities at another school for seven years. These are students ranging in age from 12 to 22. Most of them were nonverbal. In fact, there was only one student who could speak and then he also had difficulty with speech because of his cerebral palsy. In terms of academic success, no one has come close to the student I have now, student number three and she's only in kindergarten… I keep telling the parents that I'm learning so much and this is really challenging for me because I've never had a student who had such severe physical disabilities yet cognitively she's so high. (Edgar Interview)

In addition to the descriptors identified by the teacher as success indicators (seeking social interactions, academic skill), Edgar noted that the student's parents "are amazing because they don't talk about her disability. They don't treat her as if she were disabled. They don't use kid gloves with her and they let her go everywhere."

Keeping the expectations "realistic." The individualized nature of deciding "realistic" expectations for students came up in interviews, explicitly stated by two participants but alluded to by others. Teachers shared their struggles to explain why expectations are different for some students, to keep realistic expectations focused on the growth of each student, and to share realistically with parents.

The differentiation of expectations among a group of students in class can be hard to explain. This kind of realism about student ability leads to a common student complaint heard in schools—"that's not fair." Diane described her method for both addressing the differentiation of consequences and her explanation to other students in her class:

> I have kids that can sit and read and write and follow directions and those are the kids, "If you run off, oh my gosh, you are in so much trouble because this is a safety issue." And then, I have a little girl that's been, a chart is up there (points at wall), we're charting her behavior, hitting, pushing, scratching, whatever and we're working on the behavior, but we need to work with her. We need to teach her. My expectations are lower. She can get away with more stuff and I will tell them, I will tell the kids because some of them will notice. I will say, "You know what? We're still teaching her. She's learning. She's younger than you. You need to be a good role model. Life's not fair, okay? … Some people get a pass and some don't." (Diane Interview)

While Diane's example focused on being realistic in behavioral intervention, Helen shared her method for growing student skills by removing support gradually. She shared,

> I still have some kiddos at hand over hand. We try...I tell everybody, we're backing off from this, they need to be held responsible. And then by fifth grade if I notice that they are still struggling, I go to OT or we talk. And I'm like - maybe we're at the point we just, as long as they can write their name. If we need to get a stamp that says their name and just to acknowledge it, they can say, "What's your name?" And they know, pull my stamp out. (Helen Interview)

The planned and systematic removal of supports that Helen described, along with the possibility of changing the expectation of what some students focus on, allowed her students to grow into their individual abilities.

This realistic approach was also noted by Edgar when discussing his student with the least skills in his class.

> I think we have to be realistic and say, okay, so this is where they're at. So expecting them to balance their own checkbook is not realistic, but could they go shopping and could they have the money? Could they pick out their own item? I think it's a possibility of going to a store, picking out an item of her choice… (Interview)

This is a student that Edgar mentioned having lost speaking ability since being diagnosed with autism. The mother of this student shared that she was hoping that someday her daughter would speak again. Edgar shared his thoughts about this:

> For the mom … who said, I want her to talk, I almost said she's not going to. Let's get real here. She's not going to talk, but she can communicate. I think saying it like that would just crush the mom. So that's why I don't say it, but you know, if we just had to be

> blunt about it, that's what I would say. She's not going to talk but she can learn to communicate, but the mom won't hear the second half because she'll still be focused on what I just said.
>
> That could create a lot of problems with the relationship between us because you got to build up trust and confidence and telling the parent your dream is not going to happen. Yeah, I just can't do that but, maybe we can, over time, get them to see there's another dream that's possible and that it's communication. That it's less dependency. (Interview)

Edgar noted his realistic approach to working with both students and parents, saying that he is not a "miracle worker," something that Diane had mentioned in her interview also.

Learned helplessness, prompt dependence noted as reasons for a lack of current student independence and of future potential. A unifying theme among participant responses was that some of their students appear to be prompt dependent, waiting for adults to prompt them before taking action. In addition to that, a frustration was expressed that, in some families, students capable of being more independent were being coddled into learned helplessness--teachers expressed that this lowers their ability to see success with the student in school.

For three of the eleven study participants the issue of prompt dependence arose in interviews, most often when asked about the reason they had selected a specific level of independence for a student. Farah, Helen, and Jadyn each shared about students who "want you to do everything" (Farah Interview) for them, ask for help before attempting work on their own (Helen Interview), and wait for acknowledgement of each step of a task before moving on to the next step (Jadyn Interview). One focus of instruction for participants, repeated in some manner

by Edgar four times during his interview, is how to make students “less dependent, not necessarily independent.”

Discussion of prompt dependence led to additional sharing about why participants thought students had such difficulties. Adults providing instructional support and behavior intervention in the classroom were noted by two participants as a source of development for prompt dependence. Bigger than that, though, was the seven of eleven participants that shared about low expectations from family members contributing to prompt dependence and learned helplessness. Jadyn shared about her student:

> So we have been working on [prompt dependence] for almost two years, but we still can't get him because I do talk to parents and I tell them, “We're working on this.” But parents do say, “Well, you know, at home he does wait for us for everything.” So I do tell parents, “You can't do that. You need to give him some independence and of course you're still watching him but don't go to his rescue.” (Jadyn Interview)

Edgar also shared about a student that he spent considerable effort teaching how to feed himself, sharing a video with the family of the moment he did it independently for the first time at school. “Look at this video of your son,” he said, “he's starting to learn how to eat on his own.” The parent replied, “Oh, but I like feeding him. I love that connection.” Edgar followed this comment with his understanding that, while his goal was higher levels of independence, families have shared with him that feeding their children is akin to bonding.

Navigating his professional expectation to increase independence while also accounting for family expectations was on Edgar’s mind when he shared:

> She will always need her parents around and that's the scary part is what happens when the parents die. I've heard parents say, I hope my child dies before I do and it's just so

> heartbreaking. It's a complete flip for everyone else who's a parent. Who would want their child to die before them? Parents with students who have such a severe disability that they wonder, 'Who's going to take care of my kid when I'm dead?' Nobody, nobody can do it. Nobody can do what I'm doing. So I want my child to die before me. (Interview)

He is the only participant that stated that parent expectations of their child's independence has sometimes altered his instructional emphasis—that his work to get a student to feed themselves, if not sustained or generalized to the home, may not be worth it.

> So it's sort of being realistic about expectations and maybe my expectations were not realistic of the family too. Maybe for them, they're completely fine with having a 25 year old who to them is still their baby but it just breaks my heart because when I think about, okay, what happens when you're 65 and your daughter's 45 and you can't lift her anymore. (Interview)

"Sheltered, "babied," "coddled," "tendency not to challenge," "never let go," "not allow to try new things," "want to do everything for him" – teachers shared these thoughts about families and how it impacts the development of independence.

Finding 3 – Participants utilize the curriculum and their intuition to guide them instructionally

For the teachers of students with moderate-severe disabilities, it is sometimes hard to determine what students know. As was reported by participants, each of them has a student who they refer to as non-verbal, and some have students with limited ability to respond to instruction in other ways as well. The question asked of each of them was, "How do you know what your students know?" and it yielded a variety of answers. The teacher participants in this study shared

about using curriculum as a guide for what to focus on with students, along with experience they have informally observing student progress, utilizing standards, and constantly adjusting to the needs of those in their classroom.

Curriculum. Each participant noted their use of curriculum that their school district provided. They shared about the "basic" or "functional" academic skills that are addressed in the curriculum—skills like counting numbers and money, telling time, reading short passages for comprehension, and science. Becca responded in depth about how she uses the curriculum:

> The student comes into school and we do a beginning assessment and we do checklists on skills and our opinion on how he is… we use our work samples and we get lessons every month… it's not how I would assess them, because it's two questions on this [topic], and you could either give them, or you could read all the assessment and it'll still count as, still give them the same grade as them reading themselves… Every single worksheet of the [curriculum], I change into an assessment and I do an independent assessment… (Interview)

All but two of the teachers shared that the curriculum they use has formative and summative assessments for units. Teachers also provided responses that showed both an acceptance of the curriculum and a critique that mirrored the arguments of Ayres et al. (2011). After describing the curriculum and discussing his student with the most skills, Aaron stated, "I love the [curriculum] but on the other hand, I wish there were a little bit more life skills activities in there. There's a lot of good things in there but not as much emphasis on the life skills aspect as I would like," (Interview).

In addition to their thoughts on the curriculum they use, teachers shared about their expectations for students to gain academic knowledge while in their classroom versus social skill knowledge when included in general education settings.

> I tell the teachers, I'm responsible for the curriculum. I said, you don't teach the alternate curriculum. I'm responsible, the one responsible for Math, Reading, Writing, Social Studies, Science. That's mine, because they don't work at the level of your students. I said, now if they're there for that, they can participate. I said, but I don't expect them to do the work. I don't expect you to provide them with any more than you have to, because you already have 32 students in this class. That's more than enough for you to worry about. Just include them. With [most skilled student], that was the important part, was her being included. During mainstreaming, the girls, she learned to be more, a little friendlier with the girls in the general ed class. That was a good thing for her. That helped her social skills a lot, mainstreaming. (Katie)

This sentiment was noted by Diane also when she shared, “I think they're losing valuable academic time [when included in general education] because there's really nothing that they could do in that class, I would prefer to have them here where I can work on their specific goals,” (Interview). Becca added to the topic of inclusion taking away from “basic” academic skill time when she noted that her students can also be socially isolated because of their disabilities in general education classrooms.

> You're significantly below, you're going to go into the sixth grade classroom to do any kind of reading, writing or math, you're sitting there, you don't understand what's going on, you feel inferior, it's embarrassing, you're not learning anything, all the kids are looking at you because you're that special kid, and it's different from SLD and RSP, it's

different. "Oh, here comes the kids with Down syndrome and he's going to just be sitting here ... " They don't need a to be a classroom pet. (Becca Interview)

While other teachers in the study shared that their students only participate in non-academic areas like arts or physical education with their peers in general education, Becca, Diane, and Katie each shared their curricular reasoning for limiting such inclusion.

Intuition. Given the multitude of learning profiles of the students they work with, some teachers shared that they choose to address skills based upon their experience and what's "in their heads" as they observe students either achieving or struggling with concepts.

> It probably doesn't sound very professional to say it's in my head. I'll do something and if he gets it, then in my head I'm going, "Okay, we're done with that. Let's take it up a notch. Let's give him three things to sort. Let's make them all the same color, let's have him sort color and size at the same time." (Cindy Interview)

During interviews, each teacher participant was asked about their experience with students with disabilities prior to working with their most and least skilled student currently. The depth of experience with students with moderate-severe disabilities, between five and twenty-three years, meant that the participants did not depend solely on one source of data. They explicitly shared using published formal assessments (6 of 11), content standards developed specifically for students with moderate-severe disabilities (3 of 11), work samples (3 of 11), and observations (9 of 11) to form their ideas for what students should work toward. Diane referred to her ability to utilize experience as "using [her] own common sense to see, 'Well, how can I get her from this point to that point.'" Becca said, "Because I've done it for so long and I use the old [assessment] … I already know what that is, so I can just sit there and give a student boom boom boom boom

boom boom boom," suggesting that her familiarity with an assessment made it possible to understand and assess a student's skills more efficiently.

For this study's participants, except for the specifics of curriculum use that were shared, a more fluid approach to developing and addressing student learning needs, based on experience, was key. Though Cindy referred to this method as not "very professional," it is the was revealed to be the standard that was shared by the professionals interviewed.

Finding 4 – Participants are unaware of what awaits their students when they transition

Three key transition points were brought up during the interviews—the transition to middle school, what students do between ages 18 and 22, and what follows when students age out of the K-12 special education system.

The transition from elementary to middle school is uncertain. For most teachers, the movement of students from one grade to another yields expected and known differences in expectations. The standards a student is expected to master in the fifth grade are published, shared, and discussed at elementary schools. When that student transitions from the fifth to the sixth grade, the general education elementary teacher can assume that the student will be taught using the next grade level standards. For the teachers of students with moderate-severe disabilities, the inevitability of progress based upon standards is not so certain.

Two teachers shared differently about their thoughts on this transition to middle school. Becca shared her own personal frustration with the rigor of instruction for her students after they leave her class and move to a middle school program that is less than a quarter of a mile away.

> Hopefully, when he goes to the next program, they'll continue doing what we're doing here. It's very frustrating… unfortunately sometimes my kids go to other programs where the parents will come back to school and be like, "Look, they're not doing anything that

> you were doing before. The money, the skills, and the counting money and making change, they're sending them addition worksheets," and then when I go and I look they're not doing anything and there's a substitute here, there's a substitute there, there's all these different substitutes. So, if he gets consistent instruction and the quality of the teachers and the rigor of the curriculum continues, at his ability level, he could, I see him working at Target, I see him doing any kind of typical maybe non-degree-holding job. (Becca Interview)

The association that Becca shared between consistency of instruction and life-long success revealed something not explicitly mentioned by other participants. Each participant was asked to share what they thought a "next level skill" was for their most and least skilled student and the bulk of them shared about the expansion of a current skill they are focusing on. Becca's comment about the importance of consistency aligns to other participant's expressed beliefs that growth can continue from where their instruction leaves off. Farah shared a similar sentiment about middle school:

> I got the chance to observe our other middle school and I was not impressed with what I saw. I felt like we do a lot of work in here and I wish they'd continue it, but I didn't see that happening. That was concerning for me. Just wanting more, more for them. (Interview)

Farah, whose students matriculate to more than one school, and Becca were both able to observe the classroom that awaited their students when they went to middle school—both shared a worry about the instruction that might not continue to help their students grow.

Lack of familiarity and knowledge of what comes after high school. Of the teachers that participated in this study, Becca is the only one that shared a depth of knowledge of what

life after special education looks like for students with moderate-severe disabilities. Her knowledge stemmed from a job she held before becoming a teacher in which she worked with adults with intellectual disabilities. Edgar also had more information than other teachers due to his prior experience working with students in a secondary setting.

Aside from Becca and Edgar, a common response was to name "regional center" as a known support for adults with disabilities, but not to know about the services or supports offered (6 of 11). The California Department of Developmental Services contracts with private, independent non-profit corporations known as regional centers to provide life-long services to individuals with developmental disabilities. Regional centers are one resource for the student population that teachers of students with moderate-severe disabilities serve. Ilene and Katie both discussed services that the regional center in other counties provide, but they did not have knowledge of what was available in the community in which their students live. Though they were unaware of what was available to regional center clients, the six participants who named the regional center as a service did show more knowledge of adult supports than other participants.

Lack of consideration of future possibilities. The focus on current needs and skill development showed up in comments by participants. Their clarity of purpose was focused on skills that increased independence in the school and community.

> I got to be honest, because of the age they're at, I'm not really thinking about what's going to happen when they turn 22. For me, it's how independent can I make them in this environment and then show the parents, look at what they can do and let's keep this going and let's just keep trying to be an advocate for them to be less dependent rather than independent. (Edgar Interview)

The same question was posed to Grant, asking what he knew about life after students in his program leave special education. He said:

> To be truthful, I don't know that much. And that's why I was drawn to this. I was interested to know what my students in future years are going to be doing … I've had [students] on either end of the spectrum. Some that are independent that I could see independence for them, and then others that are extremely challenged. And that's where I see I'm curious, say, when their parents are no longer here who's going to fend for them, whether a sibling or if they're going to have to live in some sort of a group home because their whole life they're going to need that support. So that is something that definitely does interest me as to what is out there for some of my students more than others, especially the ones that are more challenged. (Grant Interview)

Whether participants knew a little or had a depth of experience about the adult lives of people with moderate-severe disabilities, the information that they mentioned during interviews lacked depth. Their unease at the final question's point—what waits for students when they become adults—lead participants to ask the researcher questions about programs, agencies, and possibilities for the students in their care.

Summary

The participants in this study shared their thoughts about the life-long potential of their students through the lenses of skill attainment and high expectations. They use curriculum and their intuition when instructing students, but lack knowledge of what is possible for their students when they become adults. Chapter five addresses these findings as they relate to research.

CHAPTER 5

Overview

This study involved eleven teachers, each working with elementary students with moderate-severe disabilities. They participated in an interview that focused on the students they identified as having the most and the least skills at the time of the interview. Their descriptions of student skill levels most often focused on the ability for the student to participate socially, and verbally, in the classroom. Their identification of these social and verbal students coincided with responses to another question they were asked: What are the most important skills for student life-long success?

They shared about the curriculum they use in their classrooms, noting that it guides instruction and assessment of their students. They identified the curriculum as a tool for knowing what their students currently know, and, in combination with their experience, a means to discover what to focus on next for these students. When they noted the curriculum's focus on math and English instruction, the conversation consistently returned to the need for "soft skills" for students they teach—skills that are about relations with others through social skill and communication, or what Ellis et al. (2014) describes as "skills that are not technical or technological."

This chapter reviews the findings identified through analysis of study data, focusing specifically on what teachers shared about skills important to success and their beliefs about what their students will do as adults. Recommendations for teachers working with students with moderate-severe disabilities are also presented, based upon findings and literature. The limitations of the study are also addressed, along with recommendations for future research.

Summary of Findings

The potential of students with moderate-severe disabilities is rooted in the expectations of parents and teachers. Their knowledge of what is needed for these students to be successful is critical to the development of skills that lead to increased independence. The interviews with participants, along with the associated literature, weave a narrative about what is possible for these students. This summary focuses on this association to address expectations for students as they prepare for life after special education service ends.

The focus on "soft skills"

When participants began to share about the skills they saw as most important for their students to be successful, the focus on skills that were not academic or technical emerged quickly. Each teacher shared some version of the idea of soft skills as most important during their interviews, and most elaborated in ways that related to the literature on the topic.

When Ju et al. (2014) conducted their study to ask both educators and employers what skills were needed for employability, they identified skills that were similar to those of participants in this current study—following instructions and having interpersonal skills. In support of this non-academic focus, Nietupski et al. (1997) noted that their review of two decades of curriculum research, there was a significant shift from even functional "life skills" to skills focused on interactions between people (social skills).

Because participants focused on soft skills, most notably the ability to communicate, additional literature was considered. Participants used the word "verbal" to describe students who could use their own voices to produce spoken language and "non-verbal" for those who could not. Their emphasis on the ability to speak is supported by the analytic work of Carter, Austin, and Trainor (2012). They used the data from the first four waves of the National

Longitudinal Transition Study-2 and found that "youth who had little or no trouble communicating with others had almost 3 to 4 times the odds of being employed after high school than youth who had a lot of trouble."

While the study by Carter et al. (2012) supported other aspects of this current study's findings also, such as the need for students to be able to care for themselves and travel independently, their communication finding gets at the heart of what participants shared—higher levels of success are associated with higher levels of communication ability. Missing from participant interviews was evidence that their students utilize low-, mid-, or high-tech assistive technology solutions in support of communication. This missing piece of information is consistent with the finding of Judge and Simms (2009) that teacher competencies in the area of assistive technology are ill-addressed in teacher education programs.

Expectations are pivotal to success

Though the general public may have low expectations of what people with moderate-severe disabilities are capable of (Werner, 2015b), the ability of teachers to influence public attitudes has been identified and supported across decades (Antonak & Livneh, 2000; Skrtic et al., 1973). The teachers in this study shared about their work with parents, providing support outside of school hours, sharing messages about the success of students during the school day, and their goal for these successes to positively influence the expectations of parents for their children. The teachers believed that by sharing new knowledge about the possibilities for their students they would begin to see expanded possibilities for them to participate in their community. The idea that their intervention could change parent perceptions about their students is supported by previous work concerning changing perceptions of the general public by Lindau et al. (2018), Timms et al. (1997), and Walker and Scior (2013).

It was unexpected to hear multiple participants mention the influence of parent expectations on what they believed were possibilities for students as they became adults. Additional review of research on the topic of the effects of parent expectations found that Carter, Brock, and Trainor (2012) identified a strong association between parent expectations of their children during high school and the likelihood of them working after leaving the public school system. For this current study, there is evidence of the influence of parent expectations affecting teacher instructional choices in elementary school, also.

This study was originally framed by the thought that teacher expectations of students played a central role in their success as was identified in "*Pygmalion in the Classroom"* (Rosenthal & Jacobson, 1968) and in the idea of "self-fulling prophecy" (Good, 1987). Even though some of the data identified in interviews provides support for low expectations that create self-fulfilling prophecies of lowered independence, teachers also shared about the importance of expectations on their students so they can have opportunity to succeed and be respected by their peers, similar to Fox and Williams's (1992) findings. Carter et al. (2014) suggest that high expectations built upon student strengths while in school are what is needed for success in adult life.

What students should be taught

This study's participants identified skills needed to be successful later in life and what they are teaching students currently. What they shared was a mix of academic and social skills, but the focus was clear—their students were not expected to address grade level general education standards because of the nature of their disabilities. Several participants expressed the sentiment that they were the provider of academic content for their students, even if they were included for subjects such as English language arts or mathematics. Time included with their

peers in general education settings was intended to increase social outcomes—a finding that Carter and Hughes (2006) also identified. Their deep sense of responsibility for the curriculum could lead to less time with peers in general education and may be a topic of interest for future research.

The interest in addressing students' highly-individualized needs while exposing them to standards-based content was not addressed by the teachers in this study. They shared about modified curriculum they use and mentioned functional academics as essential and being addressed in their classrooms (telling time, reading signs, etc.). The academic community is divided over emphasis on functional academics and standard-based academics, and the message that teachers expressed is that it is one or the other for the most part. The work of Courtade et al. (2012) suggests that standards can be addressed in a functional way that allow them to coexist, and Downing's (2006) previous work encourages an increase in training for teachers to be able to accomplish this task.

Now what?

"I'll never forget one student with severe disabilities at my last school, the mom, with tears in her eyes, turned to the principal on the day of his culmination and said, 'Now what?'" (Edgar Interview). Given the responses by participants about their knowledge of what happens when students are no longer eligible for special education services, parents are not alone in wondering what comes next for their children with moderate-severe disabilities. Though IDEA 2004 provided a base for addressing transition needs of students with disabilities (Ayres et al., 2011), the work largely remains focused on students who are sixteen and older. Employment law changes also address the need for increasing the education and employment opportunities for

students (Carter et al., 2014), but as evidenced by participants, knowledge of these changes have not permeated all levels of the K-12 system.

From the researcher's perspective, "now what?" is a question that is best addressed one student at a time, throughout the entirety of their education career. Comparing to the general education teacher experience with automatically incremented grade-level based standards, the experience of both students with moderate-severe disabilities and their teachers is so uniquely individualized that the process of moving between grades and schools needs to be individualized also. While participants were asked to identify their students with the most and least skills currently, the very question was framed to cause consideration of what comes next. They may have the least skills now, but what is the expectation for their growth and development of independent skills? The most skilled students were more likely to be thought of as living outside of their family home, travelling more independently in the community, and caring for themselves—the need is clear that for those with the least skills, educators must set goals that move them in this direction also.

Beyond the transition to middle school and high school, parents and teachers need to know there is a system of supports that exists for their children when they become adults. Certo et al. (2008) wrote about the possibilities of support from an integrated system of school districts, rehabilitation, developmental disabilities, and medical services. These ideas, realized in California by the California Competitive Integrated Employment Blueprint, are increasing the opportunities for students to participate in their communities. Spreading knowledge of these changes in transition to parents and teachers could alleviate some of the anxiety associated with transition to adult life.

Recommendations for Educators

The teachers that participated in this study shared extensively about their students with disabilities. The way they considered their answers was apparent in their reflective pauses, explanations, and expressed want to improve the lives of students with moderate-severe disabilities. Some participants, encouraged because this research allowed them to share their thoughts in a safe environment, expressed that they felt energized by the interview and were interested in learning more about transition for their students. For them, and readers in a similar teaching situation, the following recommendations are crafted to support students become more independent and see success as adults.

Recommendation 1

Because both literature and this current study note communication as a need for a successful adult life, a focus on developing a communication system for every student at an early age is needed. Teachers identified students who could use their voices as more skilled than their non-speaking peers, and with advances in the development of augmentative and alternative communication (AAC), this may be more attainable today than ever before. While there is no one-size-fits-all solution to aided AAC, the early development of a communication system for students with complex communication needs is associated with positive student outcomes (Biggs, Carter, & Gilson, 2018).

Research supports the teaching of aided AAC to students by modeling its use in meaningful and motivating activities (Biggs, Carter, & Gilson, 2019). Aided AAC could be a simple communication board or book or a complex technological solution on a touchscreen tablet or other device. What Biggs et al. suggest is that, when expecting a student to

communicate using aided AAC, teachers, paraprofessionals, peers, and parents as models of communicative behavior should utilize the same aided AAC.

An early focus on communication for all students may yield results that lead to increased access to general education peers, reduced behaviors that arise from frustration at the lack of being able to express thoughts, and enhancements to self-determination.

Recommendation 2

The juxtaposed views of Ayres et al. (2011) and Courtade et al. (2012) highlight the difficulty teachers of students with moderate-severe disabilities face in choosing curriculum. As the pendulum swings between a focus on functional skills and a focus on standards-based skills, often left out is specific focus on social skill programs. Teacher participants and current research on the topic of workplace success focus on the need for social skill development (Agran, Hughes, Thoma, & Scott, 2016). Teachers noted their use of curriculum that addressed math and English skill, but their descriptions of social skill lessons took on an ad-hoc and reactive approach to these skills. Reactive strategies to address situations are common and can provide great context for social skill lessons, but what could be missing is a systematic set of lessons that address age-appropriate expectations of peers.

The suggestion for a focus on social skills is to encourage the use of both proactive and reactive lessons both in the classroom and in the natural settings. A systematic approach to addressing the expected behaviors of students means the need for a curriculum or guide to such skills is needed. The goal for these lessons should be skill generalizability across people and environments.

Recommendation 3

One of the most surprising findings of this study is that teachers are unaware of what is possible for their students when they become adults. This means that they do not have information to share with parents. The question for teacher educators and school districts must be, "How best can we give teachers information that they will want to also share it with the parents of their students?" Teachers of this population of students need to have a depth of knowledge of the supports that are available for parents throughout the lifespan of their children. Teachers with this knowledge will be able to develop expectations that are rooted in the possibilities that exist for their students as adults. As the participants in the study shared, their knowledge of adult life for their students is limited, making it more difficult to set goals that push their students into greater levels of independence.

The most practical means to address this is to share the knowledge of current personnel from schools, rehabilitation, developmental services, and other predictable sources of support for students with moderate-severe disabilities in new ways. For example, California's regional centers are participants in IEPs, but rarely have the opportunity to share about their programs to elementary teachers outside of this venue. Other sources of support for the students do not typically connect with elementary school teachers either, reducing the teachers' ability to share about all of the possibilities for students. This lack of information could cause teachers to share from their personal experience, their inclinations, and possibly outdated or inaccurate information.

Another option to keep teachers informed of current practices and expectations for their students may be found in the continuing education unit (CEU) system that other professional groups utilize. To remain certified or licensed for a number of professions like board-certified

behavior analyst (BCBA), speech-language pathologist, or even medical doctor, it is required to complete some amount of continuing education. Other subject matter teachers at schools have peers who know about current trends in teaching math and English, but teachers for students with moderate-severe disabilities are often the only certificated staff member working with such students closely at their campuses and have no one to draw knowledge from. Requiring CEUs would make it possible for all teachers to gain current knowledge in the current context of school where there is too little money and too little time for professional development that effects this type of change.

Limitations of this Study

The limitations of this study are similar to those found in other qualitative studies. For the purposes of this study, the timeframe for conducting interviews was limited, though the sample met the needs of data gathering until saturation. The sample size, eleven participants, is such that it does not allow for generalization beyond outside of this study. In the sample there is some variability in years of teaching, but over half of participants had 17 or more years working with the population in question and just three had less than 10 years of experience. It is unknown if the other reported demographics of the participants are indicative of the population of teachers who work with students with moderate-severe disabilities.

The participants who took the effort to contact the researcher showed an interest in the substance of this study. They self-reported their knowledge of what is possible for students after high school, something that could have been influenced by any number of unknown factors. They shared their views on the topic, but the views not expressed are unknown. Additionally, the views of teachers who did not choose to participate are missing from this study. Unable to report

on these unknown viewpoints, future research could address the topic in a broader or generalizable manner.

Another set of limitations stem from the questions that were not asked of participants or gathered about their students. Participants were not asked to explicitly state the gender, race, ethnicity, or other characteristics of themselves or their students. Additionally, this research did not explore if other factors such as family income, whether a student was in a foster home, or what the makeup of their family and support structure is. These details could be a way to readdress this topic through additional research.

Recommendations for Future Research

This study focused on a group of teachers about which there are not a large number of studies. The focus on research related to inclusive education for students with moderate-severe disabilities is abundant and supports the goal of IDEA to consider special education as a service and not a place. The reality for students with moderate-severe disabilities is much more segregated than inclusive, though. This is not the ideal, but it is the current reality for students across the nation. In data collected from 2016, students with intellectual disability, multiple disabilities, and autism continue to have some of the highest levels of segregation (U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, 2018). Knowing this reality, research is needed for how best to proceed in providing elementary teachers with the tools necessary to develop student trajectories for life-long success. A broader study that is nationally representative of current perceptions of teachers of students with moderate-severe disabilities would also be helpful in providing generalizable information.

Another avenue of research outside of the K-12 education context could be in support how best to assist parents in setting expectations for the children from birth. Doctors and nurses are often the first people to introduce the topic of "disability" to families, and their knowledge of the possibilities for and potential of children with disabilities is unknown. What medical professionals share with families could be of interest for both the education and medical community.

Conclusion

In this study, the perceptions of teachers about their students' life-long potential revealed commonalities among their knowledge of life after high school and skills needed for life-long success. Expectations, both their own and those of their student's parents, emerged unexpectedly and became a point of import for moving forward that extends beyond the teaching community. A knowledge void about life after special education for students appeared during interviews also—one that could affect instructional choices.

For parents of elementary students with moderate-severe disabilities, teachers are often a resource and support. They are viewed as the experts on many things, and their work is never done. The goal of this study was to ask these professionals about their students and to report what they shared without any judgement. Some may note that the focus of IDEA is inclusive education, but the participants here are part of a system that expects them to have a class. This research respects their context and sought to keep the focus on students. The teachers in this study expressed hope for continuing to improve the lives of people with complex needs.

The future for students must be collaborative, informed, and guided by high expectations.

Appendix A: Study Information Sheet

UNIVERSITY OF CALIFORNIA LOS ANGELES

STUDY INFORMATION SHEET

Elementary Special Education Teacher Perceptions of the Life-Long Potential of Students with Moderate-Severe Disabilities

James Koontz, M.A., Principal Investigator (PI) and Dr. Connie Kasari, faculty sponsor, from the Graduate School of Education and Information Science at the University of California, Los Angeles (UCLA) are conducting a research study.

You were selected as a possible participant in this study because you are an elementary special education teacher for students with moderate-severe disabilities in grade 5. Your participation in this research study is voluntary.

Why is this study being done?

This study is being conducted to understand what teachers consider as possible life-long outcomes for their students with moderate-severe disabilities.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:

- Complete a short survey to gather information about you and your students
- Participate in an audio-recorded individual interview to share thoughts about what the future holds for your students and expand on survey answers
- Interview can be conducted in your classroom after school, through video conferencing, or on the telephone
- Reply to a follow-up email one week after the interview with additional thoughts you have about the topic.

How long will I be in the research study?

Participation will take a total of about 1 hour for the survey and interview. The email response after the interview is expected to take no more than 15 minutes.

Are there any potential risks or discomforts that I can expect from this study?

- There are no anticipated risks or discomforts."

Are there any potential benefits if I participate?

You will not directly benefit from your participation in the research.

The results of the research may provide insight into teaching methods that enhance the education opportunities of students with moderate-severe disabilities.

Will I be paid for participating?

- You will receive a $10 Target gift card for your participation in this research.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by removing identifying information from transcripts and destruction of audio recordings.

What are my rights if I take part in this study?

- You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
- Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.
- You may refuse to answer any questions that you do not want to answer and still remain in the study.

Who can I contact if I have questions about this study?

- **The researcher:**
  If you have any questions, comments or concerns about the research, you can contact:

  James Koontz at 424-261-3399 or jameskoontz@ucla.edu

- **UCLA Office of the Human Research Protection Program (OHRPP):**
  If you have questions about your rights as a research subject, or you have concerns or suggestions and you want to talk to someone other than the researchers, you may contact the UCLA OHRPP by phone: (310) 206-2040; by email: participants@research.ucla.edu or by mail: Box 951406, Los Angeles, CA 90095-1406.

Appendix B: Questionnaire

Directions: The purpose of this survey is to gather information for use during the interview that follows. There are no right or wrong answers. Some responses are labeled as required to complete the survey and are noted with a red asterisk.

Questions about your special education program

1. How many years (total) have you taught?
2. In what kind of teacher education experience did you earn your special education credential?
    a. Student Teaching while completing credential units
    b. University or District Internship (Earning credential while teaching full time)
    c. Other
3. How many years have you taught students with moderate-severe disabilities?
4. How many students are in your program today?
5. What kind of program do you teach?

Please prepare for the next questions by writing the student first and last initials on the provided sheet.

6. Type a short description of each student without using identifiable information (name, initials, etc.). Consider academic, communication, social, and independence skills.

Thinking about your students…

7. Which student would you describe as having the most skills currently?
8. What characteristics of the student above indicate a high level of skill?

When thinking about the potential of the student with the most skills currently, after completing grade 12...

9. ... which living situation is most likely?
    a. Living with family, in an institution, or a group home

b. Living semi-independently, in a college dormitory, military housing, or a group home
c. Living independently, with a spouse, partner, or roommate

9. ... which employment level is most likely?
    a. Competitively employed (in a job that was open to all applicants)
    b. Supported employment
    c. Volunteer work
    d. Unemployed/Unable to participate in labor force
10. ... which transportation method is most likely?
    a. Driving independently
    b. Using public transit independently
    c. Relying on caregivers or Access Paratransit for travel
11. ... which level of self-care is most likely?
    a. Independently caring for self, including hygiene and nutritional needs
    b. Partially able to care for self
    c. Dependent upon others for hygiene and nutritional care

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12. Which student would you describe as having the least skills currently?

13. What characteristics of the student above indicate a high level of skill?

When thinking about the potential of the student with the least skills currently, after completing grade 12...

14. ... which living situation is most likely?
    a. Living with family, in an institution, or a group home
    b. Living semi-independently, in a college dormitory, military housing, or a group home
    c. Living independently, with a spouse, partner, or roommate
15. ... which employment level is most likely?
    a. Competitively employed (in a job that was open to all applicants)
    b. Supported employment
    c. Volunteer work
    d. Unemployed/Unable to participate in labor force
16. ... which transportation method is most likely?
    a. Driving independently
    b. Using public transit independently
    c. Relying on caregivers or Access Paratransit for travel
17. ... which level of self-care is most likely?
    a. Independently caring for self, including hygiene and nutritional needs
    b. Partially able to care for self
    c. Dependent upon others for hygiene and nutritional care

Appendix C: Interview Protocol

The interview phase of this study will be conducted immediately following participant survey completion. Student descriptions from the survey will be available for use to guide both participant and researcher during the interview.

Script

Thank you for your willingness to share about your work with students with disabilities. The survey and interview responses you provide today are confidential. Your participant number will be kept separate from other identifying information. All information gathered today is assigned number and your name and other identifying information will not be associated with this number.

Open-ended interview questions:

1. You teach a group of students with some of the most intense needs. What skills are most important for life-long achievement for this student population?

You wrote descriptions for # of students today and identified a student with the most and least skills in your class. Let's start by discussing your identified student with the most skills.

2. Tell me about your student
    a. Specifically about their disability
    b. What is your experience with students with this disability?
3. What do you think this student will be able to do when they leave school? Why?
    a. Tell me more about living situation, employment, post-secondary education
4. What information sources do you use to make instructional decisions for this student?
    b. How do you use them?
    c. Why do you use them?
5. When you plan for this student's instruction, what part of your planning addresses your thoughts for their future after they leave school?
    d. What data do you collect about these goals?

Now let's discuss your student with the least skills currently.

6. Tell me about your student

    a. Specifically about their disability
    b. What is your experience with students with this disability?
7. What do you think this student will be able to do when they leave school? Why?
    a. Tell me more about living situation, employment, post-secondary education
8. What information sources do you use to make instructional decisions for this student?
    b. How do you use them?
    c. Why do you use them?
9. When you plan for this student's instruction, what part of your planning addresses your thoughts for their future after they leave school?
    d. What data do you collect about these goals?

Questions about life after high school

10. What kind of services/supports/agencies/programs exist for students who are 18-22 in your school district?
11. What kind of services/supports/agencies/programs exist for students after they are no longer eligible for special education services at 22?

(Listen for the following)

1. What kind of skills does the student have in…
    a. Communication
    b. Social skills
    c. motor control
    d. academic English
    e. academic Math
    f. other
2. What can your student do independently?
3. When you plan for this student…
    a. Is it independent work?
    b. Group work?
    c. Work supported by an adult?
    d. other
4. Describe the support needed for the student to…
    a. Write
    b. Move between portions of the campus
    c. Use the restroom
    d. Eat
    e. Other
5. You chose levels of independence for adult-hood… why?
6. Thinking about what you teach this student now, how do you address independence?
    a. Support transition to adult hood

Appendix D: Study Follow-up Email

Hi Aaron,

Thank you for being a part of this study! It was great to be able to discuss your students and the potential that they have as adults.

This email is the follow-up to the research interview you participated in recently.

If time allows, in a reply to this email, please respond to the following questions by typing in the reply next to "Response - "

Answers sent via email will be copied without identifiable information and the return email will be deleted to ensure anonymity.

Thank you again for your participation and have a great rest of the school year.

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1. Prior to our conversation, what were your thoughts about the life-long potential of your students? Did you consider that potential in your planning?

Response -

2. Following our conversation, what are your thoughts about the life-long potential of your students?

Response -

3. Some participants shared about a special connection to a person with a disability, such as a family member or child-hood friend with a sibling with a disability. If there is such a person in your life and you weren't able to share during the interview, please share below.

Response -

4. Please write any other thoughts about the study topic of life-long learning potential in the response space below.

Response -

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