SPECIAL EDUCATION IN IDAHO VIRTUAL SCHOOLS: AN ANALYSIS OF THE EFFICACY OF SERVICE DELIVERY

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AUTHORIZATION TO SUBMIT

DISSERTATION

This dissertation of Terri Linn Sorensen, submitted for the degree of Doctor of Philosophy in Education with a major in Educational Leadership and titled "Special Education in Idaho Virtual Schools: An Analysis of the Efficacy of Service Delivery," has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

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DEDICATION

The dissertation is dedicated to all the educators I have had the privilege to work with and learn from. Your committment to our children is astounding.

ABSTRACT

Virtual education is expanding exponentially across the country while steeped in controversy. This dissertation analyzes parent and teacher perspectives on how four Idaho virtual schools educate students with disabilities. Two research questions examine parent roles in developing valid IEPs and providing special education services aligned to IDEA regulations. Two additional research questions inquire about strategies used by special education teachers to carry out a valid IEP process and provide appropriate special education services aligned to IDEA regulations. While the literature on virtual or special education is plentiful, information about students with disabilities in virtual schools is less prevalent. Most literature reviewed indicates a need for more research to help all educational stakeholders better understand how virtual schools can effectively serve students with disabilities while meeting IDEA regulations. The researcher chose to perform a qualitative study to capture an understanding of the phenomenon in the natural setting. The data was collected from semi-structured interviews with nine special education teachers and eight parents, researcher observations of eight IEP meetings, and document analysis of eight IEPs. The results of the study reported IEPs and special education services complied with IDEA guidelines although some areas presented challenges. Increased parent involvement was noted throughout the study and appreciated by all research participants. Lack of parental involvement was trying for students with disabilities and teachers in a virtual school, frequently leading to failing grades, truancy, and frustration. The data from this study reported both strengths and challenges faced by students, parents, and teachers working with students with disabilities in a virtual setting. Although this study provided several applications for current practice, areas for additional research are numerous. Moving forward, these students deserve all educational stakeholders working together collaboratively to meet their needs.

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Chapter I - Introduction

The expansion of full-time virtual schools is increasing the controversy that surrounds online education for students in both elementary and secondary education (Miron & Urschel, 2012; Stahl, Rank, East, Rice, & Mellard, 2017). Despite the small amount of existing research-based evidence about accountability, cost, and academic outcomes, there seems to be a sudden appearance and growth of virtual schools in different parts of the United States (Evergreen Education Group, 2016; Miron, Shank, & Davidson, 2018). News organizations, rather than educational researchers, have taken the lead in conducting investigations and reporting on the effects of virtual schools (Barth, Hull, & St. Andrie, 2012; Basham, Stahl, Ortiz, Rice, & Smith, 2015; Wearne, 2016). Education is an essential vehicle in our society when it comes to leadership, economic, political, environmental, and individual development (Ballantine & Hammack, 2017). In this regard, it is crucial that educational issues receive proper attention and focus through valid and reliable research. Such a focus forms the foundation of this particular research to help ascertain the legitimacy and any possible challenges of serving students with disabilities in a virtual educational setting (Armstrong, 2012; Ballantine & Hammack, 2017; Stahl et al., 2017).

It is important to note that despite the limited research evidence on the educational outcomes of virtual schools, legislation is being passed in numerous states to allow full-time virtual schools, as well as to remove the restraints restricting their growth (Basham et al., 2015; Evergreen Education Group, 2016). Through these legislations, the enrollment in full-time virtual schools has increased rapidly. In 2015, there were 528 full-time virtual schools in the United States enrolling 278,511 students (Molnar et al., 2017). Molnar et al. (2017) also revealed thirty-four of the fifty states had full-time virtual schools and established that although private

education management organizations (EMOs) operated approximately 29.4 % of the full-time virtual schools in the country, they accounted for about 69.5% of all the students enrolled in virtual education programs. Virtual schools operated by for-profit EMOs reportedly enrolled an average of 1,309 students per school, while those that were run by non-profit EMOs enrolled an average of 248 students (Molnar et al., 2017). The majority of virtual educational organizations are structured as charter schools. However, several districts and state education agencies are starting full-time virtual schools (Evergreen Education Group, 2016; Molnar et al., 2017). One of the components of virtual learning receiving limited research attention is the impact of online education on students with disabilities (Carnahan & Fulton, 2013; Tindle, East, & Mellard, 2016). Therefore, this dissertation research seeks to provide valuable insight regarding parental perceptions of their roles pertaining to the special education process, the valid development of a student Individualized Education Plan (IEP) pertinent to a virtual environment, and the implementation of special education services in an online learning environment.

Behavioral problems and learning delays are some of the myriads of challenges negatively impacting the learning process for students with disabilities (National Council for Special Education, 2014; Sakiz, 2017). These students require personal attention and constant reassurance that an instructor teaching in a public or private setting may not be in a position to deliver (Alamri & Tyler-Wood, 2017; Rice & Carter, 2015). The physical, mental, and emotional challenges of students with disabilities may act as a barrier to their academic achievement. These students may need to be given more time to learn, one-to-one attention, and a variety of accommodations or modifications to break these barriers and positively facilitate their educational experiences (Lake & Gross, 2012; Lubienski, 2013). Some of these accommodations include alternative ways to demonstrate learning, curriculum modifications, and assistive

technology (Meloncon, 2013; Radford, Bosanquet, Webster, & Blatchform, 2015). According to Burdett, Greer, and Woods (2013), some parents feel schooling their children who have special needs at home is a valid educational option since it provides students with an environment whereby they will be able to learn and thrive. Virtual education offers a setting where students can be educated at home, have an opportunity to get specialized support (even for students with disabilities), and have access to a structured curriculum (Miron & Urschel, 2012; Ortiz, Rice, Smith, & Mellard, 2017; Wearne, 2016).

Some previous research has shown that parents who educate their children with special needs in a home setting provide them with the best form of education (Cook, Bennett, Lane, & Mataras, 2014; Gloeckner & Jones, 2013; Miron & Urschel, 2012; Wearne, 2016). In a virtual environment, the home becomes the general education classroom. Several factors support the notion a child's home is an ideal environment for learning (Waters, Barbour, & Menchaca, 2014). Rice and Carter (2015) found the child feels more comfortable and better cared for at home. The love provided is an important factor and can help with the child's learning process (Rice & Carter, 2015). Parents also know the strengths and weaknesses of their children and this will determine the approach they take to facilitate their child's education (Waters et al., 2014). The seating arrangement of the teacher and the student is also important, and in schooling at home, the teacher to student agreement is either face-to-face or side-by-side approximately 50% of the time. On the other hand, in a public-school setting, this arrangement for students with disabilities is only provided approximately 6% of the time (Ballantine & Hammack, 2017). Based on the student-instructor seating arrangement, students with disabilities can become more attentive and improve overall academic skills (Miron & Urschel, 2012; Thomas B. Fordham Institute, 2013). Additionally, schooling at home can provide parents with an opportunity to

teach their student with special needs what they consider to be important. Some parents felt studying at home assisted their children in developing good study habits and self-discipline (Forlin, Chambers, Loreman, Deppeler, & Sharma, 2013; Kathi, 2012; Thomas B. Fordham Institute, 2013).

While some parents feel educating their children at home is beneficial, this is not the best scenario for all students with special needs (Bhatt, 2014; Cook at al., 2013). Parents have a wide variety of options to choose from for their child's educational setting, such as home, virtual, charter, public, and private schools (Halqachmi, 2013; Miron & Urschel, 2012). These options create a challenge for educators and policymakers as they attempt to build appropriate policies and guidelines for different educational settings (Bhatt, 2014; Saiger, 2016). One challenge for parents of students with disabilities is finding reliable, valid data as the various stakeholders from different educational settings constantly advocate for their options (Lake & Gross, 2012; Lubienski, 2013). Additional research will assist educators and policymakers in creating better guidelines surrounding different school options and satisfying the needs of students with disabilities.

This study focuses on special education services provided to students in four Idaho virtual schools. The dissertation aims to conduct qualitative research on how this choice of learning for students with disabilities affects their educational experience and to point out the challenges and solutions currently impacting these students in virtual schools. The study will also provide reliable research pertaining to parent and school roles in the special education process of students with disabilities in a virtual environment. It is important to point out that both parents and educators want to utilize a system that maximizes the potential of students with disabilities

and provides them with an engaging learning environment surrounded by a framework of support (Basham et al., 2015; Bhatt, 2014; Wearne, 2016).

Statement of the Problem

In the growing environment of school choice, policymakers and educators are fighting to keep up with the myriad of options offered by virtual, charter, homeschool, public, and private education settings (Ballantine & Hammack, 2017; Thomas B. Fordham Institute, 2013; Wearne, 2016). Parents are seeking schools that provide their children with quality instruction in core subjects and science, technology, engineering, and mathematics (STEM) courses while instilling good study habits and self-discipline (Office for Economic Co-operation and Development (OECD), 2012; Thomas B. Fordham Institute, 2013). With limited reliable research available to them, policymakers pursue legislation to increase oversight and create funding formulas aligned to new school structures (Molnar et al., 2015; Waters et al., 2014). School administrators attempt to create educational settings that meet both parents' and students' needs while struggling to provide quality teachers and educational leaders, maintain balanced budgets, and meet the demands of accountability measures (DuFour, 2015; Richardson, LaFrance, & Beck, 2015). As part of the changing landscape, educational management organizations aim to improve learning opportunities through privatization of some educational services (Halqachmi, 2013; Lubienski, 2013).

As all stakeholders' advocate for their position, it becomes clear there is a need for more reliable research on alternative educational settings and the impact on the students with disabilities (Burdette et al., 2013; Carnahan & Fulton, 2013). Policymakers and other educational stakeholders are concerned about understanding the systems and the consequences of expanded school choice as it relates to alternative, charter, home, virtual, and private schools (Bhatt, 2014;

Lubienski, 2013; Molnar et al., 2017). To make informed decisions about how to best support and regulate new school structures, all participants need valid data and current research on each educational setting, including information on how schools can effectively serve students with disabilities. This goal can be challenging to accomplish in an atmosphere where each side has advocacy groups endorsing their cause and educational management organizations promoting their product (Halqachmi, 2013; Lake & Gross, 2012; Molnar et al., 2017).

During the academic year 2016-2017, full-time virtual schools in the United States admitted 295,518 students, and educational management organizations ran 35.9% of those schools accounting for 61.8% of all full-time virtual school students (Miron et al., 2018). In the 2013-2014 school year, approximately 5% of the school-age population or 2.5 million students attended one of 6,500 charter schools in the United States (Barrows, Cheng, Peterson, & West, 2017). The Evergreen Education Group (2016), in their yearly *Keeping Pace with K-12 Online Learning* report, indicated perhaps as many as 20% of students attending full-time virtual schools were formerly homeschooled, but have since become public school students. Charter schools account for the majority of full-time virtual schools and serve students across entire states. However, public school districts operate a growing number of virtual schools (Evergreen Education Group, 2016; Halqachmi, 2013).

Although the literature on school choice options is plentiful, research on how these alternative school settings are legitimately serving students with disabilities is lacking (Burdette et al., 2013; Rice & Carter, 2015). Idaho has joined the race to provide virtual school options to public school students. According to the Idaho State Department of Education (2017a), eight full-time virtual charter schools are serving K – 12 students statewide in Idaho. Research on how these schools serve students with disabilities can provide policymakers, educators, and parents

with information to assist them in making better data-driven decisions concerning children. The solutions for school choice issues lie in listening to different perspectives and forming strong partnerships to create effective education models for all students (Bakia et al., 2013; Carnahan & Fulton, 2013; Waters et al., 2014).

Background

Students with disabilities have a specific learning disability or other defined impairments making it more difficult for them to learn the things other children their same age can learn (Reid, Lienemann, & Hagaman, 2013). In some cases, the disability also affects the way students behave and communicate both with their peers and adults, such as teachers and parents (Halqachmi, 2013; Miron & Urschel, 2012). Special education services meant to address the issues affecting their learning in the classroom are provided to students with disabilities. According to the American Disabilities Act (ADA) (1990) and the Individuals with Disabilities Education Act (IDEA) (2004), virtual schools are required to support students who are considered to have academic prowess and those with academic struggles. It is also essential for each school to have curricular programs (general and specialized) to satisfy the needs of all the learners they serve (Barrows et al., 2017; IDEA, 2004; United States Department of Education, 2016).

Special education is a service provided to the students with disabilities who have various developmental, social, and emotional needs different from those of typical students. Students with disabilities have individual differences which, if not addressed, will have a negative impact on their education (Carnahan & Fulton, 2013; Thompson, Ferdig, & Black, 2012). Therefore, special education is designed to provide specially designed instruction and appropriate accommodations in the least restrictive environment to ensure the student has the best

opportunity to learn (Cavanaugh, Repetto, & Wayer, 2011; Fernandez, Ferdig, Thompson, Schottke, & Black, 2016). Special education services are meant to help students with disabilities become self-sufficient and have an opportunity to be successful in school, community, and post-secondary education (IDEA, 2004; Noel, Stark, & Redford, 2013). Meeting the needs of students with disabilities can be a personnel intensive, time-consuming, and expensive challenge for any educational organization (National Council for Special Education (NCSE), 2013; Wills, Morton, McLean, Stephenson, & Slee, 2014). Some parents believe the traditional public or even private school setting may not be capable of making all the accommodations and adaptations needed to create the most significant positive effect on a student's learning process (Miron & Urschel, 2012; Wills et al., 2014). Educators in different settings believe they are capable of providing students with disabilities the support they need to be successful in the classroom. These various educational settings include virtual schools, public schools, and blended learning models (Armstrong, 2012; Molnar et al., 2017).

Virtual education can be defined as a mode of learning whereby both the teacher and the student are separated by time, space, and on many occasions, both (Beck & LaFrance, 2017). The school provides course content via various learning management systems and video conferencing as well as other support, such as technology, certified teachers, and special education services (Kanna, Gillis, & Culver, 2009; Molnar et al., 2017). Due to technological advancements (ease regarding the availability of computers and internet connection in approximately every household), the number of virtual K-12 schools has increased over the years. It is estimated about 5 million of the 54 million K-12 grade students in the United States have completed at least one online class (Evergreen Education Group, 2016; Fernandez et al., 2016). In 2016-2017, 34 states had full-time virtual schools with an estimated enrollment of

39,000 students with disabilities in K-12 virtual schools (Miron et al., 2018). Fernandez et al. (2016) showed the number of students with disabilities in virtual education programs is significantly low when compared to enrollment of other students. Some research indicates it is difficult to determine accurate enrollment figures of students with disabilities attending full-time virtual schools because some parents let IEPs developed in the brick-and-mortar school lapse when they start schooling from home (Thompson et al., 2012; Stahl et al., 2017).

It is important to point out a state-level virtual program is a public and not a private school. There has been some misconception about public virtual schools because they frequently contract private vendors to provide curriculum and management services (Molnar et al., 2015). Public virtual schools are, however, created through legislation, administered by a state education agency, and directly funded by state governments (Fernandez et al., 2016; Toppin & Toppin, 2016). Some of the state-level virtual school programs are conducted as supplemental and not full-time programs. Therefore, they offer a few courses to learners who are also registered in traditional schools (Carnahan & Fulton, 2013; Molnar et al., 2017).

Moreover, there are different factors in the state-level virtual school programs. The geographic scope of the programs is not the same. There are regional, state-wide, and multi-state programs throughout the United States (Molnar et al., 2017). Another fluctuating aspect of virtual education is the synchronous or asynchronous delivery of instruction (Bakia et al., 2013). The level of interaction between the students, peers, and instructors varies with the way in which different programs are designed (Torre, 2013). The organizational structure of the virtual K-12 public school curricula varies in different states. Programs can operate within the state board of education, local education agency (LEA), independent entities, or under an institute of higher education (IHE) (Bakia et al., 2013; Fernandez et al., 2016; Molnar et al., 2017).

There has been limited research about the academic outcomes of virtual K-12 education programs in the United States (Forlin et al., 2013; Molnar et al., 2015). However, the few studies comparing academic achievement of students from the traditional classrooms and K-12 virtual programs have found there is little or no difference between academic performances in these two settings (Chingos & Schwerdt, 2014; Tonks, Weston, Wiley, & Barbour, 2013; Whitinger, 2013). Tonks et al. (2013) conducted a study of high school students participating in a virtual program and established there was no substantial variation in academic achievement between the virtual students and the students in traditional schools. The independent variables in this study include gender, grade point average, the autonomy of the learner, and instructional dialogue in the course. Chingos and Schwerdt (2014) compared the performance of students taking core courses in algebra and English through Florida Virtual School, the largest state virtual school in the United States, to students taking the same classes in traditional Florida high schools. This study found Florida Virtual School students performed about the same or slightly better than their conventional counterparts. Ethnic background greatly influenced the performance of students with a disability in virtual schools. Black and Hispanic children performed marginally weaker compared to their White counterparts. This difference in performance could be because White children had access to more specialized services as a result of higher family incomes. Similarly, girls performed better than boys (Chingos & Schwerdt, 2014; Molnar, 2015; Tonks et al., 2013; Whitinger, 2013)

Various benefits have led parents to enroll their children in K-12 virtual schools, such as a more flexible schedule, a safe learning environment, and more options for personalized and accelerated learning (Barrows, 2017; Saiger, 2016). Virtual schools can provide an opportunity for a more individualized approach to the instructional process by offering a wider variety of

courses using different presentation formats and instructional methods allowing some students to be more successful (Kathi, 2012). Also, the lessons or courses are delivered at the student's own pace. This means the student with learning difficulties or slow learners could benefit more when they feel no pressure to move on before they have mastered a concept (Oritz, 2017; Tonks et al., 2013).

According to the National Council for Special Education (2014), there are approximately 2.3 million students in the U.S. who are schooled at home. Education experts also believe the population of students schooling from home will continue to grow in the next few years at an estimated pace of between 2% to 8% per annum (OECD, 2012). People who choose to school from home come from diverse religious affiliations, political beliefs, economic positions, educational and racial backgrounds (NCES, 2014). Noel et al. (2013) concluded 32 % of students being schooled at home come from the Black, Hispanic, and Asian backgrounds. This study indicated minority populations are becoming more willing to select schooling at home as the primary option for their children's education.

There are various reasons as to why the popularity of schooling at home has increased in the last decade. Most parents feel educating from home provides their children with an opportunity to study under a customized curriculum and this favorable learning environment will help a child excel in his or her future careers (Bhatt, 2014; Rice & Carter, 2015). Take, for instance, a child actor or musician. He or she can be schooled at home to provide adequate time for studio sessions or touring events to promote an album or a movie without disrupting his or her education by missing class. Schooling at home has also been shown to help some general education and students with disabilities accomplish more from an academic perspective than either public or private schools (Burdette et al., 2013; Gloeckner & Jones, 2013).

Schooling at home also provides a parent with the opportunity to use a pedagogical approach different from the one most learning institutions practice and therefore help some children have a better understanding of what they are learning in class (Barrows, 2017; Lubienski, 2013). Many parents who educate their child at home lean more towards a social constructivism approach initially introduced by Vygotsky in the early 20th century where students learn through experiences and reflecting on those experiences (Neuman & Guterman, 2016; Vygotsky, 1978). Some parents also feel educating their child at home enhances family relationships because students spend more time with family members than children who go to public and private schools (Cook, 2013; Medlin, 2013). In addition, this form of education is seen to offer a more secure and safe atmosphere for students, especially the ones vulnerable to physical violence, psychological abuse, and racism (Lubienski, 2013; Medlin, 2013).

Some research studies show home-educated students also perform well regarding social, emotional, and psychological development. Different aspects have been considered, such as peer interaction, leadership skills, family cohesion, self-concept, self-esteem, and participation in community service (Cavanaugh et al., 2011; Rice & Carter, 2015). It has been determined that in-spite of the widespread belief that children schooled at home do not interact with other people apart from members of their family, home-educated students perform better in these social aspects (Medlin, 2013; Neuman & Guterman, 2016). Many children who are schooled at home are frequently involved in different events, for instance, community volunteer work, political drives, field trips, church ministry, and scouting which enhances or improves their social skills (Kathi, 2012; Kendall & Taylor, 2014; Rice & Carter, 2015).

Research Questions

The primary purpose of this research is to determine the validity and challenges of serving students with disabilities in a virtual school setting. As such, the following research questions will guide the study.

1. What do parents of students with disabilities in a full-time virtual school perceive to be their role in developing a valid IEP aligned to state and IDEA regulations?
2. What do parents of students with disabilities in a full-time virtual school perceive to be their role in providing special education services aligned to state and IDEA regulations?
3. What methods are Idaho virtual school special education teachers using to carry out a valid IEP process aligned to state and IDEA regulations for full-time students with disabilities?
4. What strategies are Idaho virtual school special education teachers using to provide appropriate special education services aligned to state and IDEA regulations for full-time students with disabilities?

No matter the public-school setting, districts are required by the Individuals with Disabilities Education Act (IDEA) to provide children with a disability who need special education and other related services with a free and appropriate public education (Idaho State Department of Education, 2016; Rice & Carter, 2015; United States Department of Education, 2016). According to Ferdig and Kennedy (2014), virtual schools have a standards-based curriculum, state-certified teachers, required state assessments, and are subject to fiscal and academic accountability for effective service delivery. Research on the equity, access, and compliance of the special education process for students in a virtual school environment will provide valid data for use by all stakeholders.

Description of Terms

One of the challenges most scholarly works face is the ability to contextualize various terminologies used in a research work (Jonsen, Fendt, & Point, 2017). This section sets forth the contextual application of multiple terms considered significant in this research work. Terms relevant to both virtual and special education are reviewed to provide understanding for a broad audience.

Americans with Disabilities Act (ADA). A civil rights law that forbids any form of discrimination against people with disabilities in various areas, such as public accommodations, employment, communications, transportation, education, and access to local and state government programs and services (Americans with Disabilities Act, 1990).

"Brick-and-Mortar" School. A traditional public-school setting where students attend regularly in physical classrooms with a face-to-face certified teacher and an administrator located inside the building (Cook et al., 2013).

Constructivism. A theory about how people learn. This term refers to a theoretical framework in which cognitive development is dependent on social interactions and social learning (Vygotsky, 1978). Constructivism emphasizes the significance both culture and environment have on our cognitive development. Constructivism is the approach an individual utilizes to build knowledge from their understanding (Aubrey & Riley, 2016).

Educational Management Organizations (EMO). An organization that manages at least one school receiving public funds and operates that school under the same rules required for all public schools within a state (Lubienski, 2013).

Free Appropriate Public Education (FAPE). Essential Individuals with Disabilities Education Act (IDEA) regulation requiring special education and related services be offered at

public expense and in adherence to the appropriately developed IEP while under public supervision and direction (Idaho State Department of Education, 2016).

Full-time Virtual School. A school providing all educational services virtually to students that attend full-time at the school. Virtual schools differ from traditional brick-and-mortar schools only through the physical medium linking administrators, teachers, parents, and students (Molnar, Huerta, et al., 2015).

Individualized Education Program (IEP). A legally binding agreement outlining goals, accommodations, services, and support schools are required to provide for the benefit of children in their special educational program (Idaho State Department of Education, 2016).

Individuals with Disabilities Education Act of 2004 (IDEA). The act which establishes the rights under federal law for persons with disabilities to get a free and appropriate public education in the least restrictive environment. This act also outlines special education and related services which shall be delivered by trained personnel under the guidance of an IEP (Individuals with Disabilities Education Act, 2004).

Home Schooling. A traditional setting where a child is educated inside the home. Home schooling is usually directed by a parent or tutor. Parents choose curriculum, determine schedules, and oversee educational decisions without being required to meet all public-school requirements (Bhatt, 2014).

Least Restrictive Environment. An educational setting provided to a student with a disability allowing for inclusion with non-disabled students to the greatest extent possible as determined by the IEP (Individuals with Disabilities Education Act, 2004).

Public School. In the United States, a K – 12 public school is defined as a school maintained at public expense (taxpayer funding) to provide a free education for the children within a specific district (Lubienski, 2013).

Schooling at Home. Students are educated mainly at home by utilizing a wide variety of virtual and blended options obtained through private and public-school organizations (Neuman & Guterman, 2016).

Special Education. The practice of educating a student with a disability in ways that address their individual needs as determined by an Individualized Education Plan (IEP) (Idaho State Department of Education, 2016).

Special Education Related Services. Support services offered to help students with disabilities benefit from special education, such as speech, occupational therapy, physical therapy, and so forth (Idaho State Department of Education, 2016).

Students with Disabilities (SWD). Children between three and 21 years old determined to have a disability that significantly affects their developmental and functional processes and requires special education and related services according to established federal regulations (Idaho State Department of Education, 2016).

Virtual Education. Instruction delivered through the internet to learners on personal computers. Students may complete all or part of an educational program in a geographical location separate from the educational provider. Terms used interchangeably with online learning include distance learning, virtual education, and e-learning (Barth et al., 2012).

Zone of Proximal Development (ZPD). The difference between what a student can do by themselves and what they can do with adult guidance. ZPD is the foundation of modern scaffolding and links between teaching and assessment (Aubrey & Riley, 2016).

Significance of the Study

The findings in this study will provide evidence on how IDEA requirements are being carried out in the virtual environment in Idaho. Moreover, these findings will be of significant value to various stakeholders in the education sector including policymakers, state and district educational organizations, teachers, parents, and most importantly, students with disabilities. Successful research will add credible knowledge to existing frameworks and theories and lead to the establishment of new knowledge or both (Molnar et al., 2015; Whitinger, 2013). The researcher will aim to provide a review of existing literature and conduct further investigation to support the previous findings, as well as identify any new body of knowledge that would be of relevance in the field of virtual and special education.

First, this study will be beneficial for educators and policymakers as they work to create appropriate educational settings to meet the needs of children and parents, especially in the case of students with disabilities (Basham et al., 2015; Lake & Gross, 2012). Stakeholders will be able to make data-driven decisions as they create appropriate policies to provide the best educational settings for students who have special needs (Miron & Urschel, 2012; Tindle, East et al., 2016). Therefore, they will be able to create accountability measures and effective best practices for the different educational settings.

One existing problem in determining the most appropriate educational setting for students, especially the ones who have special needs, is the immense amount of information provided by advocates of the different school choices (Lubienski, 2013; Waters et al., 2014). Therefore, it is essential to conduct reliable research on alternative educational settings and how they affect students with disabilities to give educational stakeholders unbiased and valid data to use in making decisions (Lake & Gross, 2012). This research will assist educational stakeholders

(policymakers, school administrators, teachers, and parents) in developing a better understanding of online education and how to best serve students with disabilities in a virtual environment. All educational stakeholders will be able to make better-informed decisions regarding how they can support and regulate these new school structures (Basham et al., 2015; Carnaham & Fulton, 2013; Stahl, 2017).

This dissertation will provide information on how virtual schools offer special education services to their students with disabilities. It will give substantiated facts about the impact of virtual education on students with disabilities in Idaho. It is important to conduct valid research on how these schools serve students who have disabilities and ensure when parents choose a particular education alternative, their decision is based on facts and not intuition or speculations (Barth et al., 2012; Burdette et al., 2013; Stahl, 2017; Thomas Fordham Institute, 2013).

Overview of Research Methods

This research will use a qualitative approach to collect, analyze, and integrate data. To respond to the research questions, the researcher will use semi-structured interviews with parents and special education teachers, observations of virtual school IEP meetings, and analysis of IEP documents created for virtual school students. In this case, the researcher will randomly sample for virtual school parents and special education teachers from four Idaho virtual schools and conduct interviews asking a variety of questions related to their experiences, understanding, and perspectives from working with students with disabilities in a virtual school. Observation of IEP meetings conducted by virtual IEP teams will allow the researcher to gather data pertaining to the four research questions. Analysis of IEP documents created for virtual school students will provide additional data to be used in establishing answers to identified research questions (Creswell, 2014; Marshall & Rossman, 2016).

The data will be collected using three qualitative research methods. Interviews with special education teachers and parents from four virtual schools will be the main method of collecting data in this study. Online video conferencing software will be used to conduct and record the interviews (Peters & Halcomb, 2015). The second method of data collection will be observations of eight IEP meetings (two from each school) by the researcher using an observation protocol aligned to the four research questions. Additionally, eight IEP documents will be analyzed by the researcher using a protocol aligned to the four research questions to obtain data (Marshall & Rossman, 2016; Taylor et al., 2015).

Qualitative methods of data analysis will be used to analyze data in this research and make sense of large amounts of data from various sources to shed more light on the research questions. Interviews, observations, and findings from documents will be transcribed, sorted, and coded for overreaching themes. The qualitative data analysis methods will help convert interview, observation, and document analysis data into useful information by describing patterns, connections, and relationships (Chowdhury, 2015; Saldana, 2016).

Chapter II - Review of Literature

Introduction

Virtual schools are rapidly gaining popularity in K-12 education throughout the United States (Miron et al., 2018) In 2016-2017, 34 states had full-time virtual schools with an estimated enrollment of about 300,000 students (Miron et al., 2018). The 2016 Keeping Pace with K-12 Online Learning report tracked the enrollment of 24 state virtual schools serving as intermediate suppliers of online learning programs to schools in their state. The enrollment data for these states showed 720,815 students registered in 2012 and 934,968 in 2016, a 23 % increase in enrollment (Evergreen Education Group, 2016). The emergence of virtual learning in K-12 environments represents the merging of various factors, such as expansions of technology infrastructures and increased access to the Internet as well as the integration of technology in education (Chingos & Schwerdt, 2014; National Forum of Education Statistics, 2015; Whitinger, 2013). The National Forum on Education Statistics (2015) claims the increase in enrollment to virtual schools is due to the positive impact of technology on educational outcomes. A meta-analysis indicated virtual education produced better student achievement compared to the traditional face-to-face instruction (Molnar et al., 2015). Several researchers have found a relationship between the integration of optimal, evidence-based instructional strategies and the educational outcomes of students with special health care needs, intellectual disabilities, and autism in virtual environments (Beck, Egalite, & Maranto, 2014; Fernandez at al., 2016; Reid et al., 2013; Thompson et al., 2012). However, there is limited research literature on the best practices in virtual learning, with many publications refraining from including specific statistics since data is at risk of being outdated before publication (Barth, 2012; Beck & LaFrance, 2017;

Whitinger, 2013). This research aims to establish the efficiency of service delivery for special education in Idaho virtual schools.

Theoretical Framework

Following the Russian Revolution in 1917, Lev Semyonovich Vygotsky began his career as a psychologist and would develop theories that transcend time and culture to influence contemporary educational philosophies (Vygotsky, 1978). The idea of a learner's environment playing a critical role in helping him or her acquire knowledge is the basis of Vygotsky's Sociocultural Theory of Learning. Vygotsky proposed the learning process normally involves three essential themes: (a) culture, (b) language, and (c) zone of proximal development (Aubrey & Riley, 2016; Vygotsky,1978).

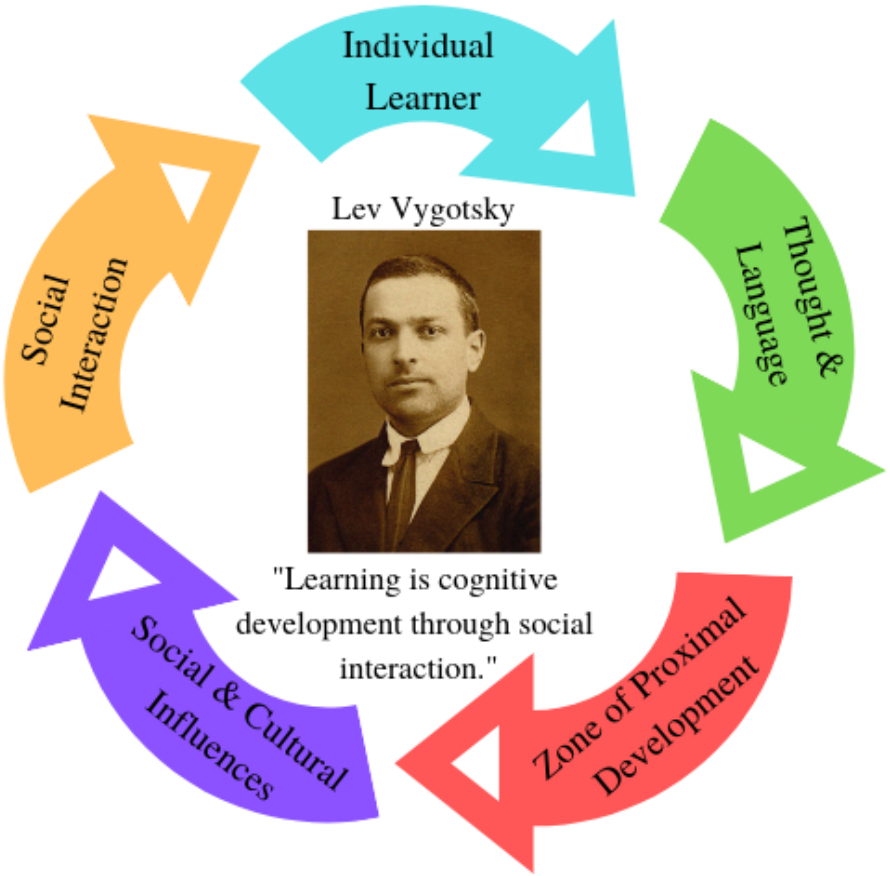

Figure 1: Vygotsky's Sociocultural Theory of Learning

Culture. Vygotsky (1978) held the view culture formation is based on the use of tools and symbols and is the key distinction separating humans from animals. A learner extends intelligence when he or she gains skills in using these symbols and tools existing in their cultural setting (Daniels, Cole, & Wertsch, 2007; Fani & Ghaemi, 2011). When the tools exist in a certain cultural setting evolve or new tools emerge, the learner's ability to grow individually and increase or improve his or her knowledge base broadens (Fani & Ghaemi, 2011; Whitinger, 2013). The sociocultural learning theory notes the importance of instructors being able to understand the human mind both from a historical and cultural point of view.

Language. Proponents of the sociocultural learning theory feel language is a direct result of the symbols and tools existing within a specific cultural setting. An individual can learn a particular language based on various factors, such as social events, scenarios, and processes (Roth & Lee, 2007; Vygotsky, 1978). In sociocultural learning theory, a learner has to undergo three stages to be fluent in a particular language: First, learners have to engage in the social environment, which is referred to as 'social speech'. For a child, 'social speech' normally begins at the age of two; second, the next step for a child to learn a certain language is 'private speech', where the learner can voice his or her thoughts aloud. This step normally begins at the age of three; third, the last stage is referred to as 'inner speech' and takes place when a learner can formulate ideas which remain within his or her mind. The ideas that a child normally formulates will remain in his or her mind and have a direct effect on the child's behavior or thoughts. This stage begins at the age of seven (Daniels et al., 2007; Karpov, 2014; Whitinger, 2013).

Zone of Proximal Development. The Zone of Proximal Development (ZPD) is the distance existing between a learner's possible educational development and the development that is taking place (Aubrey & Riley, 2016; Fani & Ghaemi, 2011; Vygotsky, 1978). During the

learning process, a learner can perform various skills independently without the assistance of a teacher or a mentor. However, there are other skills which a learner is only able to achieve if the individual is provided with some form of aid (Lantolf & Poehner, 2014). An individual's ZPD is described as the skills that can be performed only when a learner is provided with assistance. The ZPD is considered the theoretical basis of scaffolding. It ensures teachers determine what a student is not yet capable of doing but can achieve if he or she is provided with the proper instruction (Fani & Ghaemi, 2011; Karpov, 2014; Roth & Lee, 2007; Vygotsky, 1978)

Application of the Sociocultural Learning Theory. Sociocultural learning theory is relevant in the 21st-century classroom, taking into consideration a student's peers and the social scenarios to which they are regularly exposed impact their capability to acquire knowledge or a new skill (Karpov, 2014; Lantolf & Poehner, 2014). Educators who apply this theory in their instructional design evaluate how learners affect each other in the learning process and assess how a student's cultural 'norms' change his or her learning behavior (Daniels et al., 2007; Karpov, 2014). Applying the sociocultural learning theory will assist teachers in creating lesson plans which integrate the principles of sociocultural learning and enhance the effectiveness of their curriculum. It is also important to point out instructors who use this theory realize the student is more important than the teacher in terms of determining what is appropriate for learning (Lantolf & Poehner, 2014; Roth & Lee, 2007; Vygotsky, 1978).

History of Special Education

Currently, students with disabilities regularly attend the same public-school systems as their counterparts without disabilities, which was not always the case. Before special education legislation provided rights for children with emotional, physical, or cognitive disabilities, some parents had few options other than to homeschool their children or pay for expensive private

schools (Hallahan, Kauffman, & Pullen, 2014). Special education started in the early 20th century when parents created advocacy groups to help address educational needs of children living with disabilities in the public domain. In mid-century, these advocacy groups gained momentum (Osgood, 2008; Spaulding & Pratt, 2015). In 1948, Mrs. Edythe Ibold gave birth to a daughter she named Midge who was diagnosed at that time as a mongoloid (now referred to as Downs Syndrome). Mrs. Ibold placed a small ad in the St. Petersburg Times in 1952 inviting parents of disabled children to attend a meeting in the St. Petersburg City Hall. From the 26 concerned parents attending the meeting, the Pinellas Association for Retarded Children (PARC) was formed. This organization successfully opened the Peter Pan School for moderately retarded children in 1953 and has remained an advocate for students with intellectual and developmental disabilities for 65 years (Hallahan et al., 2014).

In 1961, President J.F. Kennedy formed the President's Panel on Mental Retardation. The panel came up with recommendations that included federal aid to states for the support of special education. In 1965, the Elementary and Secondary Education Act was signed to provide funding for primary education of students with disabilities. The advocacy groups saw this move as a means of promoting access to public schools for students with disabilities (Hallahan et al., 2014; Smith, 2016). The 1954 decision in Brown vs. Board of Education gave civil rights advocates a clear sign that exclusion of students with disabilities from public schools was unconstitutional, but by 1969, many states were still excluding disabled students (Finn, Rotherham, & Hokanson, 2001). Two court cases defined the rights of students with disabilities and set the wheels in motion for subsequent legislation. In 1972, parents of mentally retarded children filed a class-action law suit claiming Pennsylvania statues that barred mentally retarded students from schools violated the 14th amendment guarantees of equal protection and due process. The findings of

Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania outlines the state's duty to educate the mentally retarded children and set forth rules and regulations to protect student's rights (Finn et al., 2001). The 1972 case of Mills v. Board of Education of District of Columbia involved a broader range of students with disabilities including those with behavioral problems and emotional issues and Mills also alleged equal protection and due process violations. The Board of Education of District of Columbia acknowledged their responsibility to educate all children but argued they did not have the resources required. The court indicated The Board of Education of District of Columbia could not be excused from their obligations because of a lack of funds (Finn et al., 2001). These two court cases set forth three principles that have directed special education law since 1972: a) the Constitution's equal protection and due process guarantees prevent schools from excluding students with disabilities in any way; b) parents are guaranteed a range of opportunities to challenge decisions regarding their child's education, and c) exorbitant costs do not constitute a reason to exclude students with disabilities from public schools (Finn et al., 2001; Griffith, 2015; Hallahan et al., 2014).

In spite of these significant events, in 1974, only a small number of children with disabilities were being enrolled in public schools. However, in 1975, the scenario changed when the Education for All Handicapped Children Act (EAHCA) was enacted (Osgood, 2008; Smith 2016). EAHCA mandated public schools to offer special education for children with disabilities and created a right to public education for all children including those with disabilities (Katsiyannis, Yell, & Bradley, 2001; Voulgarides, 2018). In the 1970s and 1980s, various court decisions mandated states offer special education services to children who qualified for assistance. These decisions completely changed the special education landscape in the United

States (Hallahan et al., 2014; Osgood, 2008, Smith 2016). The EAHCA was renamed the Individuals with Disabilities Education Act (IDEA) in 1990.

The 2001 and 2004 No Child Left Behind (NCLB) acts provided additional accountability to schools and furthered technological assistance to help schools acquire the much-needed resources for special education (U.S. Department of Education, 2004). The federal government has only in the past few years increased its share of special education funding to more than 12% despite the promise by the Congress in 1975 to pay 40% of the cost for providing education to students with disabilities (Hallahan et al., 2014; Smith, 2016). Despite the IDEA's success in extending special education to millions of students who previously lacked appropriate education, numerous complaints regarding special education continue to be voiced by parents of students with disabilities and special education teachers, as well as local and state education officials (Burdette et al., 2013; Cook et al., 2013; Tindle, East et al., 2016).

Today, special education is considered a necessity for all children with special needs (Voulgardies, 2018). The 39th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2017 (2018) reported 6,683,283 students with disabilities ages 3 through 21 being served in the United States. The technological advances in the United States currently afford a wide range of educational opportunities for students with disabilities. Students with special needs can significantly benefit in traditional classrooms from differentiated lesson plans and adaptive technologies that work with their individual challenges (Armstrong, 2012; Chingos & Schwerdt, 2014; NCSE, 2014). Special education services can also be provided in the comfort of the student's own home, an environment conducive to helping students with special needs feel comfortable as they continue with their successful educational path (Lake & Gross, 2012; Noel et al., 2013; Ortiz, 2017).

Overview of Special Education

Child Find, Referral Process, and Evaluation. Local school districts, through Child Find activities, identify children suspected to have a disability under the 2004 IDEA. Additionally, parents and the school administration may refer the child to the relevant bodies for evaluation to find out if the child has a disability as defined under IDEA (Idaho State Department of Education, 2016; Smith, 2016). Children ages 0 to 3 who have been receiving early intervention services through Health and Welfare Infant Toddler Program are also automatically referred to local school districts for continuing services after they turn three years of age (IDEA, 2004)

A referral team holds a meeting in the school in which the child suspected to have the disability is enrolled. However, if the child is not enrolled in any schools and was referred for evaluation through the Child Find activities, the referral meeting will be held by the resident school (Idaho State Department of Education, 2016; Smith, 2016). At the recommendation of the referral team, the school district will then evaluate the child in all areas relating to the suspected disability. Parental consent is required before the child is assessed by the evaluating institution which is done by the 60th day from the day of parental consent (Idaho State Department of Education, 2016; IDEA, 2004).

Eligibility. An IEP team, at a minimum, includes a district representative, parents, special education teacher, evaluators, a regular education teacher, and other relevant educational stakeholders invited by the school or parent (Idaho State Department of Education, 2016). After the IEP team reviews the assessment results, they decide together whether the child requires special education and other related services. If the parents do not agree with the eligibility decision of the team, there is a process outlined by IDEA for parents to dispute the decision

(Smith, 2016; Voulgarides, 2018). After evaluating the assessment results, if the IEP team decides the child needs special education and related services, the team meets again within 30 calendar days to write an IEP for the child (Idaho State Department of Education, 2016).

IEP Development. At the IEP team meeting, which includes the parents, student, regular education teachers, special education teacher, related service personnel, and a district representative at minimum, the team will discuss the current levels of educational and functional performance and needs before writing the child's IEP (Idaho State Department of Education, 2016, Smith 2016). The parents of the child are required to give consent to the implementation of the child's IEP before the school begins to provide special education and other related services to the child. After the receipt of parental consent, the child starts receiving special education services and supports (Individuals with Disabilities Education Act, 2004; Voulgarides, 2018). The IEP team is responsible for the full implementation of the child's IEP. Each of the child's service providers and teachers will have access to the IEP and will know their responsibilities in implementing it, which includes tracking progress on goals, providing required accommodations, and carrying out all specified services in the IEP (Idaho State Department of Education, 2016; Smith, 2016). A recent court case decided in March 2017, determined for a district to meet their obligations under IDEA, "a school must offer an IEP reasonably calculated to enable a child to make progress appropriate in light of the child's circumstances" (Endrew F. v. Douglas County School District, 2017, p. 16)

The Compliance Model. As far back as 2001, it was estimated $35-60 billion is spent annually to provide special education services to children with disabilities in the United States. 9% of those costs come from federal funds, 45% from state funds, and local education agencies support 46% of the cost of special education (Finn et al., 2001; Griffith, 2015). The broad range

of cost estimates offers a hint to the insufficient levels of accountability in special education programs and at the same time raises concerns of what taxpayers are receiving in return from the substantial investment. Researchers have focused mainly on the compliance model of accountability that governs special education programs (Rice & Carter, 2015; Voulgarides, 2018). They argue the current model fails to ensure extensive compliance with related regulations and laws while generating unwanted outcomes and ineffective incentives. The mandates defined in the recent IDEA amendments are vague, allow several exclusions, and do not represent a real change from the procedural compliance model (Collins, Green, Nelson, & Madahar, 2015; Voulgarides, 2018).

Within the compliance model, effectiveness is defined in terms of whether or not the procedural models were satisfied with the right steps taken and the right paperwork processed. Traditionally, the compliance model concentrates on organizational processes and activities. What people do, how they do it, and how much they do is what tends to be the most significant under the compliance model (Idaho State Department of Education, 2016; Voulgarides, 2018). The compliance model prescribes the formulation of intricate rules and clear regulations to direct the organization's behavior. The model necessitates some form of accreditation, for instance, special education instructors need to receive certification before they are allowed to operate within the special education systems (Collins et al., 2015; Voulgarides, 2018).

Related Services. Schools are required by federal law to offer certain kinds of services that are not strictly educational but are necessary so students can benefit from special education (IDEA, 2004; Idaho State Department of Education, 2016). These are called related services. For instance, a child with dyspraxia may require one-to-one sessions with an occupational therapist to improve his/her handwriting. Mental health counseling is another form of a related service in

special education offered to children and parents. Families and children who need help in creating some positive behavioral interventions are offered support through specialists trained in this area. Additionally, speech and language therapy are used to enhance communication skills that impact learning. Transportation of students with disabilities to and from the school is also another service students enrolled in special education are entitled to receive (Collins et al., 2015; Idaho State Department of Education, 2016; Mellard, Rice, & Carter, 2018).

Application of Vygotsky's Theory of Learning in Special Education

In special education, comprehending the nature of an individual's disability and the means in which educators accommodate for a student's special needs is a core principle (Collins et al., 2015; Hallahan et al., 2014). This determination helps determine which systems may be more successful than others and is one reason why Vygotsky's approach to learning is viewed as unique (Murphy, Scantlebury, & Milne, 2015). Vygotsky (1978) promoted the definition of disability as not being a biological impairment limited to various psychological penalties, but also a socio-cultural developmental phenomenon.

Vygotsky (1978) indicated a disability is only viewed as an abnormality when placed in a social context. When someone considers different body parts of an individual, such as eyes, ears, and even human brains, they are not just physical organs; they serve unique functions (Murphy et al., 2015; Vygotsky, 1978). Therefore, when there is an impairment of any of these organs it usually leads to the reorganization of social relationships and displacement of the system's behavior. It is also important to note a defect will vary from a psychological perspective in different cultural and social environments (Smagorinsky, 2016; Vygotsky, 1978). The way a hearing impairment will affect a student living in a suburban community in the United States is

not the same way it will affect a student who lives in a rural or low-class town in the United States.

The social understanding of disabilities leads to a discussion on the severity of different deficiencies. For instance, from a survival point of view, a visual impairment may be considered more life threatening than a hearing impairment. However, in the social world deafness can be seen to be more of a severe disability than blindness because it prevents an individual from mastering speech, therefore acting as an impediment to verbal communication. One can argue being deaf can disrupt an individual's social networks more severely than blindness (Smagorinsky, 2016, Vygotsky, 1978). Vygotsky (1978) provided the argument any form of impairment should be perceived based on its social implications because it affects the way a person interacts with the world. When a teacher is dealing with a student who has a certain disability, he or she should not deal only with the biological factors that are a result of the impairment, but also the social consequences. For instance, when dealing with a blind student in the classroom, the teacher should address both the physical and social aspects brought about by blindness (Karpov, 2014; Smagorinsky, 2016).

Regarding the social nature of disabilities, Vygotsky introduced the following core concepts: (a) primary disability, (b) secondary disability, and (c) interactions from a social and education point of view. He defined a primary disability as an organic impairment resulting from biological factors affecting organs. A secondary disability is described as the distortions of the higher psychological functions, which are a result of social factors (Smagorinsky, 2016; Vygotsky, 1978). When a child has a primary disability, it acts as an obstacle in terms of a child mastering various social skills and acquisition of knowledge in an appropriate manner and rate. In some cases, a child who has a certain disability will take more time in class than typical

children their age to grasp a certain concept being taught. However, Vygotsky (1978) pointed out it is a child's social milieu which will determine his or her course of development and can eventually lead to distortions or delays. From an educational perspective, the main problem of a disability is not in its organic damage, but its social implications (Karpov, 2014; Roth & Lee, 2007).

An organic failure is typically observed from the societal context as a social abnormality to behavior (Murphy et al., 2015). The negative attitude of society towards children with disabilities limits their access and opportunities to help them develop and improve their psychological skills. Secondary developmental complications are brought about by parents and teachers who because they feel pity for a child, will go out of their way to help or assist children with disabilities perform a certain task (Murphy et al., 2015; Vygotsky, 1978). These parents and teachers view students with disabilities as helpless and this either limits or hinders their zone of proximal development leading to secondary disabilities (Fani & Ghaemi, 2011).

One of the primary goals of special educators is to change the negative societal attitude towards children who have disabilities (Armstrong, 2012; Murphy et al., 2015). It is important for society not to look at disability as a form of tragedy; instead, it should be viewed or assessed from the point of strength leading to positive differentiation. To help students with disabilities learn and develop mentally, they need a level of independence instead of continually being provided with assistance (DuFour, 2015; Murphy et al., 2015, NCSE, 2014).

Implication of Vygotsky's Theory of Learning in the Research. Idaho virtual schools, which are the focus of this study, are required to offer special education and related services to students with disabilities (Basham et al., 2015; IDEA, 2004; Idaho State Department of Education, 2016). It is essential to assess how Vygotsky's theory of learning can be applied to

meet the needs of students with disabilities in a virtual setting. Even though special education played a primary role for Vygotsky in terms of data collection and led him to develop the theory of social learning emphasizing inclusion for students with disabilities, the application of Vygotsky's approaches has been challenging to employ in the special education sector (Sakiz, 2017; Wills et al., 2014). Vygotsky (1978) was against the idea of segregation and ultimately 'watering down' the education content that was taught to students with disabilities. He felt it limited their potential as learners. Today special education programs use different teaching strategies to meet the learning needs of students who have differing abilities and are at a similar educational level. Differentiation ensures a student's potential is maximized and will allow them to experience growth and individual success by meeting their educational goals (Forlin et al., 2013; Karpov, 2014; Kurz et al., 2014).

The online teaching process should involve taking into consideration various aspects of learning (Basham et al., 2015; Collins et al., 2015). For instance, instructors first assess the individual student's level of knowledge and determine their learning styles based on student responses to shape the lessons for each student. This process can be implemented efficiently and integrated into a virtual learning environment because each student is dealt with as an individual instead of a group (Beasley & Beck, 2017; Bottcher & Dammeyer, 2016; Reid et al., 2013; Tindle, East, et al., 2016). It is also important to point out special education, in any environment, should not be considered a diminished version of general education where the student is only exposed to a simplified version of what the students in general education are taught (Carnahan & Fulton, 2013; Radford et al., 2015). Special education should be a specially designed learning process where the entire teaching staff is placed in a position to exclusively meet the needs of the

students (Forlin et al., 2013; Sakiz, 2017; Whitinger, 2013). In this case, a student's disability is viewed as his or her strength in the learning process as was proposed by Vygotsky (1978).

Importance of Learning Alternatives. Some students with special needs are not adequately served (in relation to their needs) in the traditional brick-and-mortar education system (McShane, 2015; Whitinger, 2013). This has contributed significantly in some districts to the lower academic achievement and a higher dropout rate for students with disabilities in comparison to the students who do not have special needs (McShane, 2015; Will et al., 2014). Whitinger (2013) showed 12th grade students with disabilities in public schools earn three credits fewer than other students, and this had a negative impact on their rate of graduation. According to the data collected from the National Center for Education Statistics (2014), only about 60% of students with disabilities aged 18 to 21 graduated with a diploma.

There have been some significant improvements over the past few decades in terms of the creation of legislation to support students with disabilities and their educational rights (Bhatt, 2014; Hallahan et al., 2014; Spaulding et al., 2015). This has primarily been due to the formation of influential lobbying groups that have advocated for the improvement of the federal Individuals with Disabilities Education Act (IDEA). However, there is still a high level of dissatisfaction by families of students who have unique educational needs (Cook et al., 2013; Wills et al., 2014). Many parents of students with disabilities feel there is still a lot of improvement to be made in traditional brick-and-mortar schools to make them more effective in helping their students with disabilities in the classroom (Bhatt, 2014; Lake & Gross, 2012; McShane, 2015).

Alternative educational settings are seen to be more effective in working with students with disabilities because of the following factors (Cook et al., 2013; Thomas B. Fordham Institute, 2013; Wearne, 2016). These settings are seen to be designed in a way that can

efficiently serve students with disabilities who do not fit in the traditional context of public brick-and-mortar schools (Barrows et al., 2017; Miron & Urschel, 2012). Alternative configurations are also seen as an avenue used to create more options for parents who have for years struggled to find an appropriate fit about the special needs of their children and the learning environment (Bhatt, 2014; Ortiz, 2017; Wearne, 2016). However, many questions remain about teacher and parent roles when it comes to developing an appropriate IEP and providing specially designed instruction to students with disabilities according to IDEA requirements. There are proponents and advocates of serving students with disabilities in alternate settings (Basham et al., 2015; Saultz & Fusarelli, 2017). This study aims to provide valid data to help formulate policies to assure students with disabilities are receiving adequate instruction and services in virtual environments.

Virtual Education

Historical Perspective. In the United States, virtual public schools were first established in 1997 after a federal grant of $7.4 million created the Virtual High School (VHS) and the Florida Virtual School (FLVS) (Chingos & Schwerdt, 2014; Evergreen Education Group, 2015; Molnar et al., 2017). Over time schools with an online-based curriculum have grown, and today virtual schools can be found in all the 50 states. According to Molnar et al., (2017), virtual schools in the country fall into one of the following categories:

- State Level: These are the virtual schools that have been sanctioned by the state to be recognized as an extension of the public-school system.
- Regionally Based: This is a virtual school consortium that allows national, multi-state, state, and regional courses to be offered from Kindergarten to 12th grade.

- Local Education Agency-Based: These are public schools that have created a virtual curriculum to supplement or act as an alternative to the traditional curriculum offered by the institution.
- Virtual Charter School: These include public school districts, profit, and non-profit organizations.
- Private virtual schools: Although these schools are considered similar to the virtual public schools regarding course supplements to the traditional courses, they are run by private-based institutions.

There are various misconceptions or inaccurate perceptions when it comes to virtual schools, especially public ones, and how they operate (Barth et al., 2012; Evergreen Education Group, 2016; Saiger, 2015; Toppin & Toppin, 2016). Public virtual schools are not private institutions, even though in some cases they may contract with private vendors to provide both curriculum and management services that are needed to operate. Most of the virtual school programs in the United States are run by private companies who have contracted with state and local educational agencies (Evergreen Education Group, 2015; Halqachmi, 2013; Molnar et al., 2015;). Virtual schools adhere to rules and guidelines under the governance of various public entities such as school districts and state education agencies (Torre, 2013; Waters et al., 2014).

Virtual public schools are different from homeschools, and the students who attend virtual schools should not be considered to be homeschooled (Davis, 2013; Kunzman, 2012). For instance, public virtual schools have state-certified school teachers, the students are provided with state assessment tests, and students adhere to attendance policies and academic progress requirements. These schools follow certain curriculum standards established by the state education agencies, and this means family members cannot select or eliminate various subjects

for the student, even in special needs situations (Bhatt, 2014; McShane, 2015; Waters et al., 2014). The number of homeschool students moving from traditional homeschool to virtual education is growing steadily with approximately 20% of current virtual school students being formerly homeschooled (Evergreen Education Group, 2015; Miron & Gulosino, 2016).

Current Scope of Virtual Schools in the United States. According to Molnar et al. (2017), in 2015, there were 528 full-time virtual schools, and they had enrolled 278,511 students. The study also revealed thirty-four of the fifty states had full-time virtual schools. Wearne (2016) also established although private education management organizations (EMOs) operated approximately 29.4% of the full-time virtual schools in the country, they accounted for about 69.5% of all the students enrolled in virtual education programs. Virtual schools operated by for-profit EMOs reported they enrolled on average 1,309 students, while those run by non-profit EMOs enrolled an average of 248 students (Wearne, 2016). Additionally, the independent virtual schools enrolled an average of 256 students. Wearne (2016) found only half of all virtual schools are considered charter schools, however, they account for approximately 82% of the enrollment. An increasing number of public school districts are creating their own virtual schools, but they are enrolling relatively fewer students than charter schools (Evergreen Education Group, 2016; Halqachmi, 2013; Molnar et al., 2017).

Compared to the national public-school enrollment, virtual schools have recruited fewer students from minority races and low-income families (Miron & Gulosino, 2016; Molnar et al., 2017). The number of black students in virtual schools was 13% lower and the number of virtual students qualifying for free or reduced lunch status was 17% lower than the national average of public school students (Miron & Gulosino, 2016). While the population ratio between boys and girls in public schools is relatively even, in virtual schools, they have enrolled approximately

53.4% more girls than boys (Molnar et al., 2017). Also, the student-teacher ratio in virtual schools is more than twice that reported by public schools. The average student-teacher ratio in the national public schools was 16 students per teacher, while in virtual schools the student-teacher rate is approximately 34 students per teacher. The virtual for-profit EMOs reported a student-teacher ratio of 44, while in the virtual non-profit EMOs the student-teacher ratio was said to be 19.5 (Evergreen Education Group; 2015; Saultz & Fusarelli, 2017).

Miron and Urschel (2012) conducted a study on the demographic composition of virtual school students. This study established there were more white students in virtual schools operated by K12 Inc. than in public schools. In states where there are K-12 virtual programs, 9.4% of the students enrolled have disabilities. This is in comparison with 11.5% of students with disabilities who have enrolled in traditional public schools in those states and 13.1% nationally (Miron & Urshel, 2012; Saultz, & Fusarelli, 2017; Topin & Topin, 2016). In a more recent study, Molnar et al. (2017) indicated the proportion of students with disabilities enrolled in virtual schools is now close to that of the national average. Virtual education in both elementary and secondary levels is growing at an annual rate of between 20% and 30%. If this trend continues, enrollment in virtual schools will soon be higher than traditional K-12 brick-and-mortar schools (Saultz, & Fusarelli, 2017; Stedrak, Ortagus, & Wood, 2012).

Despite the notion virtual schools improve the academic performance of students, the results of some studies show virtual schools underperform academically (Miron & Gulosino, 2016; Molnar et al., 2017; Saultz, 2017). Molnar et al. (2017) established only approximately 37.4% of the full-time virtual schools received acceptable performance ratings. Despite the low enrollment in the non-profit and independent virtual schools in comparison to the for-profit EMOs, they outperformed the for-profit EMOs (Molnar et al., 2017; Saultz & Fusarelli, 2017).

For the non-profit EMOs, they achieved acceptable performance ratings of 33.6%, independent virtual schools reported 43.6% satisfactory ratings, while for-profit EMOs achieved only a 25.7% adequate rating. The graduation rate of virtual schools is considerably lower in comparison to that of the national average; it was reported to be 43.4% and 82.3% respectively (Beck & LaFrance, 2017; Molnar et al., 2017; Saultz & Fusarelli, 2017).

Perspectives on Virtual Learning. The various views shared by parents and other educational stakeholders provide valuable insight into the rapidly changing landscape of virtual education (Barrow et al., 2017; Noel et al., 2013; Tindle, East, & Mellard, 2015). Modern education is changing tremendously as far as modes of delivery are concerned, providing students and parents with greater flexibility and choice. The advancements in internet use and technology, in general, have supported tremendous improvements in many sectors, education being one of the significant beneficiaries (Toppin & Toppin, 2016; Waters et al., 2014). Parents find virtual learning to be an advanced form of schooling at home as it exposes children to an educational setting in which there are standardized approaches and curriculum that gives students more insights and competitive knowledge than purely homeschooling. Parents consider the system more flexible while allowing them an opportunity to keep an eye on their children (Barrows et al., 2017; Beasley & Beck, 2017; Ortiz, 2017). Studies have documented the benefits of parents establishing positive attitudes towards digital or online learning include: (a) the system being seen as more student-centered; (b) providing an opportunity for collaborative learning; (c) delivering a platform with easy accessibility of resources globally; (d) enabling learners to have relationships with non-traditional students; and (e) enhancing the ability of students to think creatively and innovatively (Beck, Maranto, & Lo, 2014; Higgins, Xiao, & Katsipataki, 2012; Wearne, 2016).

Parent Perspectives. For a student enrolled in a virtual school program to progress and find success, educators need to establish strong parental involvement (Curtis & Werth, 2015; Rice, Ortiz, Smith, & Mellard, 2017; Tindle et al., 2015; Whitinger, 2013). The parents need to be active participants in their children's education and develop a working partnership with the teachers (Kendall & Taylor, 2014). Parents can be involved in various roles such as guiding their children through their daily lessons and helping their children complete their homework. Parents can also be included in monitoring their children's academic progress and communicating with the teachers in relation to the students' learning and academic achievements (Barrows et al., 2017; Beck, Maranto, et al., 2014; Rice et al., 2017). As in all educational settings, parents should be actively involved in student activities, school functions, and parent group meetings (DuFour, 2015; Noel et al., 2013; Ortiz et al., 2017).

Virtual public schools have grown in popularity over the past 20 years, and some parents feel they are an excellent alternative to traditional brick-and-mortar schools (Barrows et al., 2017; Beck, Maranto, et al., 2014; Toppin & Toppin, 2016). Virtual schools have also been promoted by various school choice advocates who see them as a good option that provides students with the ability to complete their coursework online, at their own pace, and in their location of choice (Davis, 2013; Halqachmi, 2013; McShane, 2015). The virtual school setting can be beneficial for students (including students who have learning disabilities) because it allows students to have more flexible academic schedules and individualized instruction (Alamri & Tyler-Wood, 2017; Beasley & Beck, 2017; Carnahan, 2013). Virtual schools have been seen to represent transformational trends in K-12 education (Evergreen Education Group, 2016; Miron & Gulosino, 2016; Molnar et al., 2017; Posey, Burges, Eason, & Jones, 2010).

According to IDEA (2004), parents of students with disabilities are regarded as critical educational stakeholders and therefore, should be involved in the decision-making process pertaining to their children's education (Tindle, Mellard, & East, 2016). However, many parents of students in traditional brick-and-mortar as well as virtual schools feel they are not empowered enough to advocate for their children's educational needs because the school officials who are involved in the development of the Individual Education Program (IEP) normally make most of the decisions (Bøttcher & Dammeyer, 2016; Collins et al., 2015; Rice et al., 2017). In addition, even though the parents or guardians of a special needs student in a virtual environment agree they have additional roles and responsibilities, they are not defined (Burdette & Greer, 2014; Ortiz, 2017; Tindle, Mellard, et al., 2016; Waters & Leong, 2014). Parents may receive conflicting messages from different sources such as the school, the curriculum vendor, and even from other parents who have their children enrolled in a virtual school regarding their role in the special education process (Molnar et al., 2017; Rice & Carter, 2015; Toppin & Toppin, 2016). Most virtual schools want the parents to be physically present during their child's daily educational process, ensuring they log-in on a regular basis and are working as required by the online teacher. However, even though they are advised to be involved in the learning process, schools insist they are in-charge of both the curriculum and assessment (Beck, Maranto, et al., 2014; Cavanaugh, Repetto, Wayer, & Spitler, 2013; Waters & Leong, 2014; Whitinger, 2013).

Curtis (2013) conducted a study to assess the perceptions of parents regarding their roles in the virtual school setting. Findings indicated parents of students with special needs enrolled in virtual programs emphasized the need for proper communication to help them understand their engagement level with the students. The transparency provided by the learning management system (LMS) is important in terms of assisting the parents to be in a better position to help their

children learn effectively. The transparency of the LMS communication was often not enough to prevent the students from failing (Curtis, 2013). Therefore, parents have to ensure their children log on to the classes, participate in the learning process, and are motivated and focused on their online coursework (Curtis & Werth, 2015; Ortiz, 2017; Tindle et al., 2015; Waters & Leong, 2014). Parental involvement has shown to have a positive effect in a child's education through numerous research studies, including John Hattie's 252 Influences and Effect Sizes Related to Student Achievement (Curtis & Werth, 2015; Hattie, 2012; Noel et al., 2013; Schneider & Coleman; 2018; Tindle et al., 2015). Given the virtual school setting's demand for increased parental involvement, this research becomes important for educational stakeholders.

Teacher Perspectives. In a virtual public school, all the students are assigned a state-certified public-school teacher (Crouse, Rice, & Mellard, 2018; Posey et al., 2010; Molnar et al., 2017). Even though the teachers work remotely with the students, they are responsible for overseeing and managing the student's educational process. The teachers' role in this type of environment is to provide the students with instruction, guidance, and support (Beasley & Beck, 2017; Murphy et al., 2015; Rose, 2014). Teachers are provided with the task of monitoring student attendance and academic progress on a regular basis. It is their responsibility to evaluate student work, develop a strong partnership with the parents or guardians, and recommend enrichment or intervention programs (Beasley & Beck, 2017; Borup & Stevens, 2017; Pace, Mellard, Smith, & East, 2017).

Many teachers feel virtual education has made it easier for students with special needs, especially those who may have visual, auditory and any other physical limitations (Coy, 2014; Marteney & Bernadowski, 2016). DiPietro et al. (2010) established when teachers are using the virtual learning platform, they are in a better position to handle various programs and

interventions meant to promote as much independence as possible for the student. This scenario can have a positive impact on the student's academic success (Coy, 2014; Greer, Rowland, & Smith, 2014). Through online learning, the virtual teachers can offer students the potential to become more self-directed in their learning opportunities. Instructors can also engage with self-directed students on multiple levels to enhance their educational development due to an increase in student autonomy level, self-direction, and emotional independence. Those students lacking in these areas can be offered support to improve these valuable skills (Beasley & Beck, 2017; Crouse, Rice, & Mellard; 2016; Kováčiková, 2015; Rice & Carter, 2016).

Some teachers have reported the virtual educational environment has helped students with disabilities have positive results in their courses (Borup & Steven, 2017; Marteney & Bernadowski, 2016; Radford et al., 2015). Students with disabilities often struggle in the traditional brick-and-mortar learning setting to match the academic performance of their peers who are not disabled, and this leads most of them to perform below average (Beck, Egalite, et al., 2014; Bøttcher & Dammeyer, 2016; Rice & Carter, 2016). The online learning environment can be seen or projected to provide a compatible alternative to maximize student learning and improve their academic performance. Optimized learning and improvement in academic performance take place when a student actively engages with the content he or she is studying in class (Borup & Stevens, 2017; Bøttcher & Dammeyer, 2016; DiPietro et al., 2010). Therefore, a student with a disability who has shifted from a traditional brick-and-mortar school to a virtual learning environment will experience a shift from a teacher-directed to a learner-centered teaching style. This change will provide the student with a new way of learning which can lead to improved academic performance (Alamri & Tyler-Wood, 2017; Crouse et al., 2018; Kendall & Taylor, 2014). Both the asynchronous environment and self-paced learning can attribute to the

improvement of academic success for a student with a disability in a virtual learning environment. The student does not feel the pressure to meet deadlines in class, and therefore can spend quality time mastering the learning content (Alamri & Tyler-Wood, 2017; Kang & Im, 2013; Smith, Ortiz, Rice, & Mellard, 2017)

Teachers also point out a virtual learning environment can be ideal for students with learning disabilities that feel they need of a safer climate, free from bullying or harassment (Cavanaugh et al., 2013; Ferdig & Kennedy, 2014). In a teacher survey conducted by Marteny & Bernadowski (2016), 40% of the teachers surveyed indicated a decrease in bullying and cyberbullying in an online teaching environment. Greer & Deshler (2014) noted unless the affected student or their parents raise the issue, virtual teachers might not be able to establish whether their students are bullied or not. Although physical bullying may not occur, virtual environments can lead to an increase in cyber-bullying, and this will have an adverse emotional effect on the student, disrupting their learning process (Alamri & Tyler-Wood, 2017; Ferdig & Kennedy, 2014). However, due to the decreased levels of face-to-face bullying, teachers feel the virtual environment creates a more appropriate learning environment for the students with disabilities to develop academically (Bøttcher & Dammeyer, 2016; Marteney & Bernadowski, 2016; Whitinger, 2013).

Some teachers indicate a virtual learning environment improves student motivation and has a positive impact on their engagement levels (Alamri & Tyler-Wood, 2017; Coy, 2014; Greer & Deshler, 2014). Instructors can provide the students with prompt and meaningful feedback about their learning course. They can reply to the students' queries quickly, constantly engage them in the discussion boards, and ensure they establish their presence online to the point students feel teachers are there for them in a way that can be difficult to replicate in a traditional

classroom (Crouse et al., 2016; Dipietro et al., 2010; Greer et al., 2014). Students in most cases feel the teachers are supporting them and it increases their satisfaction levels, therefore motivating and improving their engagement levels (Crouse et al., 2018; Kovacikova, 2015; Marteney & Bernadowski, 2016). To meet the needs and increase the completion rates of students in an online environment, schools and teachers will need to support evidence-based instructional practices such as the 5 Cs of Student Engagement Framework which includes themes to address: a) curriculum, b) caring community, c) control, d) climate, and e) connection (Cavanaugh et al., 2011; Ferdig & Kennedy, 2014; Repetto, Cavanaugh, Wayer, & Liu, 2010)

The virtual learning environment can provide teachers with an easier platform to implement some of the required accommodations for the students with IEPs while accommodations are more difficult in this setting (Alamri & Tyler-Wood, 2017; Allday & Allday, 2011; Cavanaugh et al., 2013). Some of the accommodations required by IEP that are easily implemented in a virtual environment include the availability to take as many breaks as a student feels necessary, extended time for completion of assignments, decrease in the required amount of writing assignments, and flexibility of course selection surrounding a student's interest level. Other accommodations such as frequent checks for understanding, repeating back directions, and sensory breaks can be more difficult for a teacher to oversee in a virtual setting (Allday & Allday, 2011; Crouse et al., 2016; Greer & Deshler, 2014). Although most teachers feel the virtual learning environment is beneficial for students, they have noted most of the students with disabilities do not utilize all the classroom resources provided in the online platform (Crouse et al., 2018; Greer & Deshler, 2014). Increased independence and a lack of teacher oversite, may contribute to this scenario. If students use these resources, it will put them in a better position to achieve their academic goals (Coy, 2014; Greer et al., 2014; Pace et al.,

2017). The resources will help them in the student-centered approach, conducting collaborative learning, assisting in student discussion, and improving student inquiry levels. Therefore, as in any educational setting, using all available online resources will have a positive impact on their academic performance (Dipietro et al., 2010; Kennedy & Archambault, 2013; Marteney & Bernadowski, 2016).

Student Perspectives. A student's satisfaction level in relation to his or her learning environment is a significant determinant in relation to academic growth and development (Beck, Maranto, et al., 2014; Kováčiková, 2015; Marteney & Bernadowski, 2016). Students are more satisfied with classes or lessons that engage them in various classroom activities and give them a sense of control over their learning environment. When students think they are treated fairly in the classroom, it increases their satisfaction level (Barker & Gossman, 2013; Cavanaugh et al., 2011; Kováčiková, 2015). Students are more comfortable in classrooms where they feel there is a positive and academically oriented climate (Borup & Stevens, 2017; Cavanaugh et al., 2013). Other influential variables include the level of teacher and peer support throughout the learning process (Borup & Stevens, 2017; Crouse et al., 2016; Fernandez et al., 2016).

In the traditional brick-and-mortar classes, a student with disabilities may in some cases feel the odds are stacked against him or her (Alamri & Tyler-Wood, 2017). For instance, the student may believe the teachers do not consider their needs during the teaching or pedagogical process; therefore, they are less engaged in the classroom activities (Armstrong, 2012; Kováčiková, 2015; Sakiz, 2017). Also, due to their disabilities, they may receive ridicule from their peers, and this may further affect their ability to learn (Medlin, 2013). Most of the students feel a virtual education program is designed in a way that enhances their learning process, and therefore increases their student satisfaction level (Bakia et al., 2013; Marteney & Bernadowski,

2016). For instance, the student may feel more comfortable reaching out to a teacher in a virtual setting than in front on an entire classroom to receive individualized help on a specific area of concern. Also, in this learning environment the student feels he or she is receiving support from the teacher and is not a target of ridicule and bullying, increasing his or her satisfaction level and overall improving the student's academic performance (Barker & Gossman, 2013; Beck, Egalite, et al., 2014; Ferdig & Kennedy, 2014).

State Perspectives. Educators feel there is a need to conduct more research on the impact of virtual education on the academic performance of students, whether they are disabled or not (Basham, Carter, Rice, & Ortiz, 2016; Beck & LaFrance, 2017; Dipietro et al., 2010; Richardson et al., 2015). Virtual education has been seen as a good alternative for students with disabilities, providing them with an opportunity to control the pace of what they are learning (Allday & Allday, 2011; Alamri & Tyler-Wood, 2017; Whitinger, 2013). While supporters see virtual education as a positive avenue for students' academic performance, some studies show this may not be the case (Miron & Gulosino, 2016; Molnar et al., 2017; Saultz & Fusarelli, 2017). The lack of face-to-face interaction with the instructor and other peers is a disadvantage for both the instructor and the student while some instructors have expressed they lack time to serve the large number of virtual students in their classrooms (Saultz & Fusarelli, 2017; Posey et al., 2010). One consistent theme that arises in research on online learning is the need for more valid research studies to determine the effectiveness of K-12 virtual education (Basham et al., 2015; Beck & LaFrance, 2017; Richardson et al., 2015). The inconsistence and confidential nature of special education data pose challenges to researchers as they move forward in conducting studies pertaining to virtual education (Basham et al., 2015; Stahl & Karger, 2016)

Miron & Urschel (2012) conducted a study for the National Education Policy Center to determine academic performance levels of students enrolled in K12 Inc., a private education management organization enrolling more students than any other such organization. During the 2010-2011 school year, 27.7% of K12 Inc. schools met Annual Yearly Progress (AYP) as compared to 52% of public schools in the states were K12 Inc. operates. On grades 3 through 11 state reading assessments, between 2% and 11% of the K12 Inc. students scored lower than their public-school counterparts while between 14% and 36% of K12 Inc. students scored lower on state math assessments with the gap increasing drastically in higher grades. Another alarming finding was the on-time graduation rate of K12 Inc. students was 49.1% while public schools in the states served by K12 Inc. had a 79.4% graduation rate. A similar study supported by the National Education Policy Center was conducted in 2017 with the same or slightly worse results (Molnar et al., 2017). While these results are partially explained by the fact AYP does not adequately apply to virtual schools and virtual school funding falls below the level of traditional brick-and-mortar schools, the possibilities of ineffective or misaligned curriculum, inadequate instruction, or misplaced students need to be investigated further (Basham et al., 2016; Beck & LaFrance, 2017; Miron & Urshel, 2012; Molnar et al., 2017)

Dennis Van Roekel, past president of the National Education Association, stated one of the reasons why students in virtual schools perform below those in the traditional brick-and-mortar schools is because there is more to learning than content acquisition (Barker & Gossman, 2013). In his view, teachers in the traditional school setting can socialize, discuss different issues with the students in the classroom, and quickly read the mood of the students. Many educators feel teaching in a virtual platform limits the interactions of the teachers and students (Barth et al., 2012; Coy, 2014; Crouse et al., 2016). They can only use the chat box and microphone to

interact, and especially the teacher may not be able to determine the emotions of the student. This is despite the use of emoticons by the student because he or she can lie about his or her feelings and it is difficult for the teacher to ascertain the actual emotional state of the student (Bøttcher & Dammeyer, 2016; Dipietro et al., 2010; Molnar et al., 2017).

Online learning presents both challenges and potential success for school staff and most states are scrambling to provide quality teacher and administrator preparation programs to better prepare virtual school staff to face the challenges and harness the potential (Abrego & Pankake, 2010; Kennedy & Archambault, 2013; Smith, Basham, Rice, & Carter, 2016). Teacher and administrator preparation programs must also include training on how to work with at-risk and students with disabilities in an online environment (Crouse et al., 2016; Rice & Mellard, 2016; Voulgarides, 2018). Moving forward, issues of teacher autonomy, teachers and parents as co-educators, delivery of quality instruction, student engagement, and teacher/student online communication need to be addressed as states prepare staff to work in their virtual schools (Coy, 2014; Ferdig & Kennedy, 2014; Oberfield, 2016; Waters, 2014). According to Richardson et al. (2015) the top six challenges facing virtual school administrators include: a) funding, b) staff, c) accountability, d) time, e) parents, and f) professional development. For online learning to improve and meet the needs of all learners, states will need to better prepare educators to work with students in a virtual school setting (Abrego & Pankake, 2010; Richardson et al., 2015; Smith et al., 2016)

Overall, state educational stakeholders believe quality online learning is cost-effective (Basham, 2016; Burdette et al., 2013). In a traditional brick-and-mortar school accommodating students with various learning needs, the school will have to invest in different learning materials, expert teachers, and other resources to meet the needs of the students with disabilities

(Barth et al., 2012; Wills et al., 2014). However, in an online setting the real costs incurred by the state include expert teachers and administrators, content acquisition and development, technology and infrastructure, and student support services (Stedrak, Ortagus, Wood, 2012; Evergreen Education Group, 2015). Virtual schools allow the state to offer and deliver courses traditional schools were unable to afford. This setting can also satisfy parent choice and serve students with unique learning needs without having to incur the cost of building a new school or institution (Barth et al., 2012; Carnahan, 2013). However, the inclusion of students with disabilities in virtual schools does affect the cost of online learning as schools are required to provide quality special education services to qualifying students, leading to the concern of students with disabilities being excluded from virtual schools (Basham et al., 2015; Bernstein, 204; Burdette et al., 2013; Carnahan, 2013).

Many full-time virtual schools are funded through the use of the state's per-pupil funding formula (Barth et al., 2012; Stedrak at al., 2012). However, it is important to point out different states have different funding models for their virtual schools. For instance, in Idaho, the virtual programs are funded based on student's average daily attendance (ADA) (Idaho State Department of Education, 2017b). In Colorado, based on October 1st enrollment online students are funded at a similar level as face-to-face students (Toppin & Toppin, 2016). Some researchers advocate for funding systems that reflect the actual cost of educating a student in a virtual school and not the same scale as the cost of educating students in traditional schools (Miron & Urschel, 2012; Toppin & Toppin, 2016). There are significant costs the state incurs to ensure a virtual public school operates at a high level. Public virtual schools generally receive approximately 30% less in terms of funding in comparison to the traditional schools (Battaglini, Halderman, & Laurans, 2012; Molnar et al., 2017).

Relationship of Virtual Education and Vygotsky Theory. The socio-cultural theory Lev Vygotsky proposed is applicable in virtual education in different ways. This theory emphasizes the interaction between the instructor and the learner to foster educational development (Daniels et al., 2007; Karpov, 2014; Murphy et al., 2015). The teacher is regarded as a mentor in the learning process and can use both synchronous and asynchronous methods to interact with the students. To enhance or improve the interaction process, educators can assign students projects requiring them to seek professional help from the teachers to complete certain aspects of their assignments (Crouse et al., 2016; Bøttcher & Dammeyer, 2016). In addition, the teacher can also create an open environment that allows students to be willing to provide information about their experiences in relation to the topic they are learning in a particular subject. Sharing experiences or ideas can help a student internalize the issue and lead to academic development (Borup & Stevens, 2017; Coy, 2014; Dipietro et al., 2010). This is in accordance to Vygotsky's theory indicating for a child to learn or be in a position to conceptualize an idea, the concept must first be brought up in the social setting and then on an individual level (Bøttcher & Dammeyer, 2016, Murphy et al., 2015; Vygotsky, 1978).

Vygotsky's theory also focuses on the zone of proximal development (ZPD). For a student to experience cognitive development what they are being taught should be within their capability (Karpov, 2014; Vygotsky, 1978). ZPD ensures the student is adequately challenged. This means the information being shown at a certain period is not within a student's comfort zone, but by scaffolding the information the teacher will be able to help the student reach their goal (Fani & Ghaemi, 2011; Murphy et al., 2015). In addition to that, Vygotsky's theory is applied in a virtual classroom based on the notion the virtual learning platform ensures the

student and not the teacher is the focus of learning process (Bøttcher & Dammeyer, 2016 Karpov, 2014, Vygotsky, 1978).

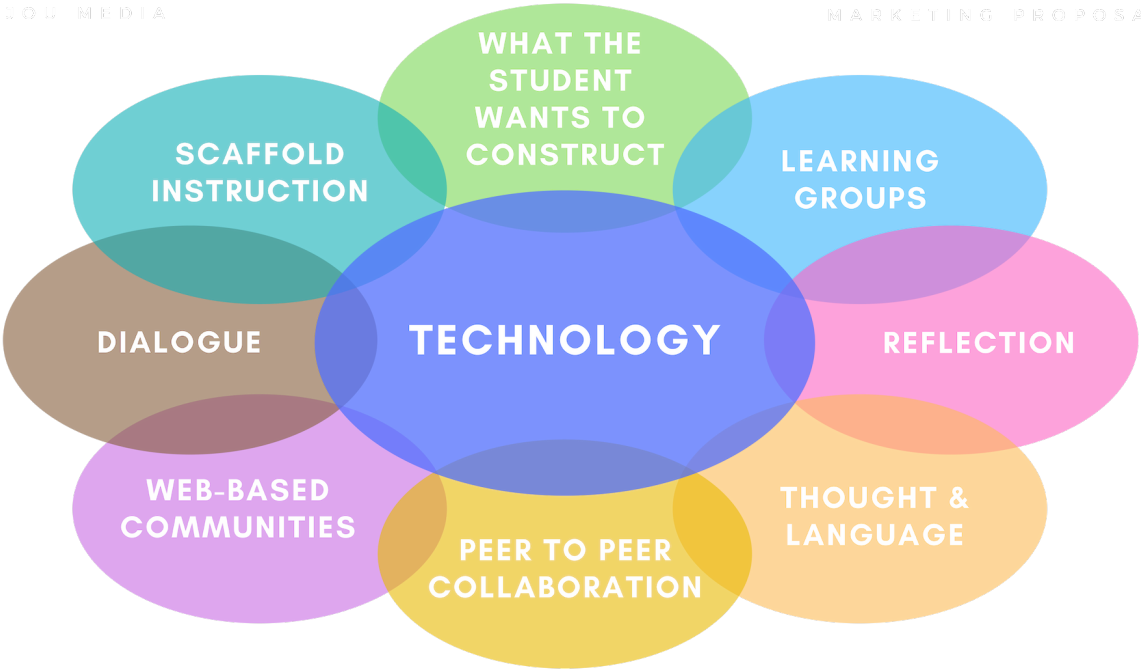

Figure 2: Relationship between Vygotsky's theory and virtual education.

Challenges Facing Virtual Education in the United States. Researchers and educational organizations have published numerous reports focusing on both the benefits and drawbacks of virtual education (Marteney & Bernadowski, 2016; Rose, 2014; Molnar et al., 2017; National Forum on Education Statistics, 2015; Toppin & Toppin, 2016). One of the challenges faced by virtual schools is fluctuating enrollment and mobility. A study conducted by the Center for Research on Educational Outcomes (CREDO) indicated 22% of online charter school students return to traditional brick-and-mortar school classrooms (Wood et al., 2015). In a study of 18 states, the average number of students remaining in an online charter school for five years was only 6% (Waters et al., 2014). Another challenge tied to student enrollment is the need for states to create funding formulas that address the characteristics of virtual schools. In states

where the funding follows the student, educators are concerned attendance tied to funding is only taken a few times a year creating a difficult situation for schools with changing enrollment (Battaglingo et al., 2012; Saultz & Fusarelli, 2017). With low graduation and high drop-out rates compared to traditional schools, another challenge facing virtual schools is quality assurance (Miron & Urshel, 2012; Molnar et al., 2017; Saultz & Fusarelli, 2017). A recent study by Russel (2016) indicated virtual schools in Idaho had only a 20% graduation rate while traditional schools had a 91% graduation rate. The current statistics show a need for a reasonable virtual school accountability system developed by states and local educational agencies based on appropriate data governance guidelines (Beck & LaFrance, 2017; Stahl & Karger, 2016; Richardson, 2015).

Few educational agencies are equipped to effectively monitor and regulate the rapid number of virtual school programs that have started across the United States (Molnar et al., 2017; Richardson et al., 2015; Whitinger, 2013). There is a need to ensure state regulations governing the operation of virtual schools are the same for all schools including those using educational management organizations. Aligned curriculum, data-driven instruction, balanced assessment, and strong intervention programs should be the focus of virtual schools and not profit-driven institutions (Beck & LaFrance, 2017; Halqachmi, 2013). Stringent measures should be developed in order to ensure as the new virtual school programs are starting up they are designed in such a way they provide quality education and use pedagogical approaches that are beneficial to the students they serve, especially students with disabilities (Miron & Gulosino, 2016; Whitinger, 2013; Wills et al., 2014).

The rapid growth of virtual schools is also a disadvantage, especially from a researcher's point of view, because it is incredibly challenging to conduct studies, collect and interpret

relevant data, and develop best practices (Abrego & Pankake, 2010; Beck & LaFrance, 2017). Due to the lack of sound studies, trained educators, and state governance, most of the pedagogical approaches in virtual learning are based on a trial-and-error process instead of valid research (Lantolf & Poehner, 2014; Waters et al., 2014). In cases where research has been conducted, it is relatively one-sided, focusing mainly on the teachers and lacking input from other stakeholders such as parents, students, and administrators (Barker & Gossman, 2013; Beck, Egalite, et al., 2014). Therefore, there is a significant need to conduct more research about teaching and learning processes in virtual schools (Bøttcher & Dammeyer, 2016; DiPietro et al., 2010; Molnar et al., 2017).

Virtual Education and Students with Disabilities

This study will assess how students with disabilities can be best served in a virtual school environment while meeting the requirements of the IDEA (Basham et al., 2015; Smith, 2016). Therefore, it is essential to understand the role of the parent, methods used by schools to carry out a valid IEP process, and the current strategies used to provide adequate special education services for students with disabilities in a virtual school setting (Collins et al., 2015; Smith et al., 2017; Stahl et al., 2017). Ortiz et al., 2017 found parents often feel tentative and confused about their role in working with students in online learning since they often receive conflicting expectations from schools and vendors. Virtual schools are a new, unique setting, and guidelines set forth by the IDEA do not fit perfectly in this new environment. IDEA requirements of least restrictive environment (LRE), previous access to scientific-based curriculum, response-to-intervention (RTI) processes, and specially designed instruction provided by a special education teacher are established differently in a virtual environment (Stahl et al., 2017). Teachers and administrators have no specific guidelines on how to address IDEA requirements for students

with disabilities in an online setting (Collins et al., 2015). The educational rights provided to students with disabilities and their parents under the IDEA must not be neglected when a student enrolls in a virtual school. The requirements of a free appropriate public education (FAPE) including proper special education and related services must be delivered even in an online setting (United States Department of Education, 2016). By conducting this study, the researcher will be able to determine the best practices educators in a virtual school environment use to provide appropriate learning environments for students with disabilities.

Virtual Schools and Special Education Requirements. Virtual schools provide an adequate learning environment catering to the individual students' needs and establishing avenues of communication with teachers, staff, and other students (Alamri & Tyler-Wood, 2017; Barker & Gossman, 2013). Virtual schools offer new educational opportunities to students with disabilities and can provide individualized programs allowing students to determine the pace of the instructional process (Basham et al., 2015; Beasley & Beck, 2017). In this learning environment, parents of students with disabilities can feel they are more involved in educating their children and better able to determine their overall progress because of their increased involvement in the classroom (Beck, Maranto, et al., 2014; Waters & Leong, 2014; Whitinger, 2013). Virtual schooling also allows for the use of technology as an extension of assistive technology for the students with disabilities. It allows for the enhancement of the pedagogy process because the teacher can use various presentation formats and personalized instruction aligned to the learning needs of the student. In addition, students usually have control of their learning environment based on its flexibility of both time and space (Alamri & Tyler-Woods, 2017; Burdette et al., 2013; Coy, 2014).

Given virtual education appears to have some advantages for students with disabilities, parents, advocates, and educators of these students are now challenging online schools in terms of their provision of Free and Appropriate Education (FAPE) and Least Restrictive Environment (LRE) to students with disabilities (Burdette et al., 2013; United States Department of Education, 2016). Parents of students with disabilities have pointed out there is a lack of preparation regarding enrollment of students in an online environment. Educators and administrators who support the use of an online environment to provide special education for students with disabilities advocate for guidelines on the implementation of Individuals with Disabilities Education Act (IDEA) in this learning environment (Collin et al., 2015; Voulgarides, 2018; Waters et al., 2014). For instance, the learner's least restrictive environment can be a self-contained classroom for students with disabilities in their core classes. This provides students with the ability to interact with their peers because of blended learning being implemented within the public schools. To ensure students with disabilities do not feel segregated from their peers, they are provided with the option of taking elective classes with their non-disabled peers in subjects that will require little or no assistance, (Crouse et al., 2016; Fernandez et al., 2016; Miron & Urschel, 2012).

Some virtual schools provide their students with disabilities specialized equipment to aid in academic achievement, such as computers, Internet access, and printers to help accommodate their disability (Basham et al., 2015; Molnar et al., 2017). The dominance of technology in virtual education necessitates the need for the use of assistive technology. Some of the assistive technologies virtual schools may need include on-screen keyboards, word prediction, access to online learning tools, voice recognition systems, and animated signing characters (Miron & Urschel, 2012). Regarding web-based and computer-based instruction, children with disabilities

have shown improved performance as a result of these methods as compared to students in traditional special education environments (Burdette & Greer, 2014; Fernandez et al., 2016; Marteny & Bernadowski, 2016). In online learning, the factors that significantly contribute to the improved performance of the students include immediate and frequent feedback, individualized pacing, as well as personalized instructions provided in the virtual environment (Alamri & Tyler-Wood, 2017; Beck, Egalite, et al., 2014; Miron & Gulosino, 2016).

Conclusion

Overall**,** special education is designed to satisfy the needs of students living with disabilities (Smith, 2016). IDEA is a federal law that regulates special education and requires all public schools to offer special education services to children who qualify in one or more of the 14 eligibility categories (IDEA, 2004; 39th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2017 (2018). Schools use various strategies to help students in special education programs succeed in the least restrictive environment (LRE). These strategies include modifications, accommodations, assistive technology, and the assistance of paraprofessionals (Hallahan et al., 2014; Kurz et al., 2015; Radford et al., 2015). For any student to qualify for special education, they must have a documented disability acknowledged by the IDEA. Additionally, the student must need specially designed instruction to be able to access academic and functional instruction. An IEP is developed for the student to allow him/her to benefit from the learning process. This process was designed with traditional brick-and-mortar school settings in mind (Idaho State Department of Education, 2016; Smith, 2016; Voulgarides, 2018).

Over the past two decades, virtual schools have become a popular alternative to the traditional brick-and-mortar schools. It is evident virtual schools are rapidly gaining popularity in

K-12 education in the United States (Chingos & Schwerdt, 2014, Molnar et al., 2017; Saultz & Fusarelli, 2017). Some parents have approved of virtual schools due to the numerous benefits such as flexibility, one-to-one attention, and self-paced learning (Beck, Egalite, et al., 2014). However, the enrollment of students with disabilities in virtual schools has left many unanswered questions. More information is needed to provide all educational stakeholders the facts they need to establish regulations and accountability measures to ensure students with disabilities receive quality services (Basham et al., 2015; Carnahan & Fulton, 2013; Ferdig & Kennedy, 2014; Voulgarides, 2018).

Chapter III - Design and Methodology

Introduction

As the number of full-time virtual schools continues to increase, so does the need for local educational agencies to ensure students with disabilities are allowed to participate and benefit from the online educational experience (Collins et al., 2015; Tindle, East et al., 2016). The requirements of the Individuals with Disabilities Education Act (IDEA) apply whether a student with disabilities is enrolled in a public brick-and-mortar school or a public virtual school (United States Department of Education, 2016). A common theme in research literature about educating students with disabilities in virtual environments is the need for more reliable research to identify school and parent roles, valid special education services, and acceptable student outcomes (Basham et al., 2015; Ferdig & Kennedy, 2014; Ortiz, 2017).

A Report on the Stakeholder Forum on Elementary and Secondary Online Learning and Students with Disabilities noted the need for continued research in numerous areas including: a) what adequate special education services look like in an online environment; b) impact of parent engagement; c) what makes an effective online special education teacher; d) fundamental research on the measurement of processes and outcomes; and e) identifying strategies, tools, supports and who is responsible for their implementation (Stahl, Rank, East, Rice, & Mellard, 2017). Basham et al. (2015) indicated the virtual environment leads to a setting where parents and teachers of students with disabilities share roles, and more research is needed to determine how parents, students, and teachers can engage in interactions differently from what occurs in a traditional brick-and-mortar classroom. This chapter will focus on the various aspects of qualitative research design and methodology used to support the research questions in this study.

Research Design

According to Marshall and Rossman (2016), qualitative researchers are "intrigued by the complexity of social interactions expressed in daily life and by the meanings the participants themselves attribute to these interactions" (p. 2). The intention of this study was to investigate the ways four full-time virtual schools in Idaho were meeting the needs of their students with disabilities based on input from special education teachers and parents thus lending itself to the nature of qualitative research. Since qualitative research happens in a natural setting, is based on the real experiences of participants, and draws on multiple methods the researcher examined specifics about virtual special education programs through interviews with participants, observations in natural settings, and analysis of documentation (Maxell, 2013; Taylor, Bogdan, & DeVault, 2016).

This study investigated various factors contributing to the valid delivery of special education services in Idaho virtual schools and employed qualitative data collection and analysis methods. Qualitative research tends to support questions that investigate the relation between two occurrences or events where the other incident is the outcome of the first occurrence (Marshall & Rossman, 2016). The research questions used in this study include:

1. What do parents of students with disabilities in a full-time virtual school perceive to be their role in developing a valid IEP aligned to state and IDEA regulations?
2. What do parents of students with disabilities in a full-time virtual school perceive to be their role in providing special education services aligned to state and IDEA regulations?

3. What methods are Idaho virtual school special education teachers using to carry out a valid IEP process aligned to state and IDEA regulations for full-time students with disabilities?
4. What strategies are Idaho virtual school special education teachers using to provide appropriate special education services aligned to state and IDEA regulations for full-time students with disabilities?

These questions assisted in creating connectivity between goals, conceptual framework, methods, and validity (Maxwell, 2013). Qualitative data collection was conducted through individual interviews with eight parents and nine special education teachers who work with students with special needs in a virtual school. The interviews were conducted and recorded using Zoom, an online conferencing software. Observations were another essential method of data collection utilized in the study (Taylor et al., 2016). Eight IEP meetings were observed and data was collected through an established observation protocol. IEP documents were collected from participating parents and analyzed using a document review protocol. The accumulated data was then analyzed and coded. The model used was relevant in this research since it ensured comprehensive analysis and the description of numerous situations (Marshall & Rossman, 2016; Saldana, 2016).

Participants

After completing the National Institutes of Health (NIH) training (see Appendix A), the researcher contacted the relevant authority at four full-time Idaho virtual schools to provide a blueprint on the purpose of the study and ask permission to conduct the research for the study in their school district. The researcher assured school administrators about the confidentiality of the information and explained information related to their institution was only for research

purposes, and the school district would not be identified in the findings of the study (Creswell, 2014). Numerous questions were posed by the school districts about employee time requirements, special education permissions, and scheduling. After answering questions and meeting with all required school district representatives, signed site permission letters were obtained (see Appendix B). An application for approval from the Northwest Nazarene University (NNU) Institutional Review Board (IRB) was submitted and permission was received to begin the study (see Appendix D).

The study focused on input from parents and special education teachers from the four virtual schools. Each school sent out emails to parents explaining the research and to solicit participation from parents that have had a student with disabilities in the school for a minimum of one year (see Appendix E). Emails explaining the study and soliciting participation were also sent to special education teachers who had worked with students with disabilities in a virtual environment for a minimum of two years (see Appendix E). Parents and special education teachers meeting the required criteria were randomly selected from interested parties at each site and communication was made with participants using a predetermined script to discuss their participation and informed consent forms (see Appendix F). All participants were required to sign an Informed Consent Form before participating in the research study (see Appendix G). Therefore, the sample population in this study included eight parents and nine special education teachers who were interviewed through online conferencing depending on the time and their availability (Jacob & Furgerson, 2012; Peters & Halcomb, 2015).

The purpose of the selected group or the population sample was to provide a comprehensive understanding of the issue at hand as the chosen group members have extensive experience on the topic of study (Maxell, 2013; Taylor et al., 2016). Participants had a precise

understanding and represented views and information pertinent to their field of expertise (Peters & Halcomb, 2015). The parents selected for interviews had students with disabilities participating in the virtual school for a minimum of one year and were members of the IEP team that developed the IEP document pertaining to their student's educational needs. The special education teachers also had a copy of their students' IEP's to assist them in developing a customized curriculum for the students based on their disabilities. Input from special education teachers was relevant because they supervised the implementation of the IEP for students with disabilities. Special education teachers had been working with students with disabilities in a virtual environment for a minimum of two years.

Data Collection

Qualitative research usually centers around four fundamental methods for data collection: a) participating, b) observing, c) interviewing, and d) analyzing materials (Marshall & Rossman, 2016). The use of multiple qualitative data collection methods can triangulate data to add validity, broaden the range of trends addressed, and provide diverse perspectives. The researcher selected qualitative data collection methods that supported the research questions and extended the knowledge on the research topic (Maxell, 2013; Taylor et al., 2016).

The nature of qualitative research can also lead to researcher bias and preconceptions affecting collection and interpretation of the data. Reflexivity, the ability of the researcher to evaluate one's self, is critical to the reliability and validity of the research findings (Fischer, 2009). Bracketing was used to assist the researcher in setting aside personal experiences, previous knowledge, biases, and preconceived notions about the research topic. Reflexivity and bracketing were vital in making sure the views of the participants were understood and valued. The bracketing process included writing down personal biases, experiences, and past knowledge

about the research top in the first section of a bracketing journal (Chan, Fung, & Chien, 2013; Eddles-Hirsch, 2015). During data collection, analysis, and writing the final research report, the researcher wrote in the bracketing journal when a bias or preconceived notion arose. The journal was reviewed when writing the final research report, and researcher biases were shared with the audience as they read the interpretations and results of the data. This section outlines the various methods used to collect data in this study.

Individual Interviews. Interviews are the exchange of ideas between two people and have a structured purpose (Creswell, 2014; Peters & Halcomb, 2015). Interviews were conducted with parents of students receiving special education services in the virtual school for a minimum of one year and special education teachers providing services to students with disabilities in Idaho virtual schools for a minimum of two years. Interviews were focused on obtaining information and knowledge on the effectiveness of special education service delivery in an online learning environment (Jacob & Furgerson, 2012; Taylor et al., 2016). The interview method involved interaction between the researchers and the respondent via Zoom video conferencing. The interview questions were useful in discovering the person's values, feelings, beliefs, perspectives, understandings, and experiences pertaining to working with students with disabilities in a virtual setting (Marshall & Rossman, 2016; Taylor et al., 2016).

Appropriate interview protocols were developed by the researcher to obtain information connected to the studies four research questions (see Appendix H). Using semi-structured interview questions provided a clear guide for the interviewer and developed comparable qualitative data. The strength of the semi-structured interviews was they contained a fixed set of questions used to quantify and provide reliability. The conversations generated qualitative data through the use of open-ended questions where respondents were allowed to think through

answers, select their own words, and express their views in their terms (Jacob & Furgerson, 2012). The interview protocols were developed to gather valuable information promptly as not to burden interviewees. The semi-structured interviews were more flexible depending on the respondent answers; they gave the investigator the chance to inquire for more in-depth understanding by seeking clarification when necessary (Creswell, 2014; Taylor et al., 2016). The interview protocols were piloted with two separate people to highlight any ambiguities, record time, and to allow researcher practice. Everyone interviewed was emailed a Participant Debrief after their interview session (see Appendix I).

Observations. The researcher received permission to observe eight virtual IEP meetings at participating virtual schools conducted with established meeting regulations and guidelines. These observations allowed the researcher to investigate how the IEP team dealt with specific issues, observe the range of ideas and opinions, and learn about the participant's experiences and practices. The researcher was able to identify strategies, protocols, and methods used to develop and implement student IEPs in a virtual setting. The challenge with the IEP meeting observations was the researcher's commitment to keep all the sessions confidential and respect individual privacy, however, under such circumstances, the researcher could not guarantee the other individuals in the meeting group would keep the information about themselves or others private (Creswell, 2014; Taylor et al., 2016).

In the eight observed IEP meetings, the IEP team included the parent or parents of the student who required special education, an administrator, a special education teacher, a general education teacher, and other members of the IEP team relevant to the student's needs and meeting purpose. The IEP team discussed the student's strengths and weaknesses, reviewed current levels of educational performance, set new student goals, established needed

accommodations, and considered other required IEP components. The IEP meeting observations involved recording statements and actions of interest in the natural setting as outlined in the observation protocol created by the researcher (see Appendix H) (Marshall & Rossman, 2016; Taylor et al., 2016).

Document Analysis. IEP documents were collected from the eight selected parents of students with disabilities attending the virtual schools and analyzed according to an established protocol created by the researcher (see Appendix H). These documents included invitations to meetings, consent for assessments, eligibility determinations, IEPs, and written notices. Thirteen specific areas in the IEP documents relating to IDEA regulations were transcribed, coded, and sorted for themes (Marshall & Rossman, 2016; Saldana, 2016). Information gathered through the analysis of these documents allowed the researcher to determine compliance scenarios, specific accommodations, parent/teacher roles, and student goals pertaining to students with disabilities in a virtual educational environment.

Analytical Methods

Qualitative data analysis methods were used to code, sort, and create themes from the vast amount of data collected from the three different data sources to illuminate patterns pertaining to the studies research questions (Creswell, 2014; Saldana, 2016). The data in this study was collected based on established protocols (see Appendix H) and consisted of interview transcripts from parents and special education teachers, observation notes of virtual IEP meetings, and analysis of IEP documents gathered throughout the qualitative data collection process. One research assistant was used to transcribe interviews (see Appendix C). Throughout the entire process, the researcher wrote analytic memos to capture researcher reflection, provide

context, and support understanding of the data. These memos were used to note answered questions and make insightful connections. (Marshall & Rossman, 2016; Saldana, 2016)

The three main steps of qualitative data analysis include: (a) discovery; (b) coding, and (c) refining (Creswell, 2014; Marshall & Rossman, 2016; Taylor et al., 2016). The first step taken by the researcher was to organize the data and become familiar with all three types of data collected during the study. Discovery, or familiarizing, happened when the researcher immersed herself in the data by reading and rereading to become intimate with the collected data and making sure the data was adequately organized, labeled, and prepared for the formal coding process. Coding was an encompassing process that started as the researcher collected and formatted data. Preliminary words and phrases were recorded in analytic memos throughout the entire process (Chowdhury, 2015; Saldana, 2016; Taylor et al., 2016).

First cycle coding was performed using a sub-coding method guided by "parent" codes aligned to research questions and "children" codes drawn from interviews, observations, and document analysis. Sub-coding is meant to specify and organize data into preliminary categories and subcategories. Pattern coding was implemented for the second cycle of coding to identify emerging themes and explanations (Chowdhury, 2015; Saldana, 2016). The process moved from codes, categories, and reflection to significant themes (Creswell, 2014). From these themes, the researcher developed theories in an attempt to infer what, how, and why certain phenomenon occurred (Saldana, 2016).

For consistency and accuracy in presenting the information, the researcher examined the data with a pre-defined framework to gather responses associated with research objectives and coding to develop themes. After the data were checked for completeness, it was analyzed and recorded according to the research theme (Saldana, 2016; Taylor et al., 2016). The process of

validating data was focused on reducing errors in the process and applying content validity. In content validity, the researcher referred to the degree to which the different aspects of investigation were fully assessed or measured (Marshall & Rossman, 2016; Maxell, 2013). The interviews provided an adequate measure covering the content area established by the research questions. In qualitative research, trustworthiness refers to establishing credibility, transferability, confirmability, and dependability. In this study, prolonged engagement, member checking, data triangulation, and peer debriefing were methods used to ensure the researcher's interpretation of the data were trustworthy (Marshall & Rossman, 2016; Taylor et al., 2016). Everyone interviewed was emailed a Member Checking form with an outline of themes established from the research data (see Appendix J).

Confidentiality. Participants in research studies may incur a loss of privacy; however, all research records in this study were handled as confidentially as possible (Taylor et al., 2016). No individual identities were used in any reports or publications resulting from this study. All electronic data from observation notes, document analysis, recording, and transcribing were kept in a secure location in the cloud with only the primary researcher having the password. All handwritten or printed data were held in a locked file cabinet in the researcher's office, and the key to the cabinet was kept in a separate location. In compliance with the Federal-wide Assurance Code, data from this study will be kept for three years, after which all data from the study will be destroyed (Department of Health and Human Resources, 2009).

Limitations

Although many virtual schools exist in Idaho and across the United States, this study was limited to the special education programs of four Idaho virtual schools. Because of the uniqueness of each virtual school and the students with disabilities they work with, it would be

challenging to translate the findings of this study to all virtual schools. The nine teachers and eight parents participating in this study make up a tiny group when looking at the broader population of virtual school teachers and parents. When making inferences and creating recommendations, it is imperative to recognize the limitation of the information. In the process of qualitative research, the level to which one can generalize the findings to broader populations depends upon the quality of the data collection and analysis process (Maxwell, 2013; Taylor et al., 2016). Care should be taken because over-generalization can readily occur, for instance suggesting the result is applicable for the whole country when only four virtual schools in Idaho were sampled. Qualitative research findings cannot always be used to make deductions about a broader population but instead propose to offer examples of how or why in specific situations (Creswell, 2013; Taylor et al., 2016).

Another limitation of the study is the lack of student participants. Although there is clearly a lack of valid research on students with disabilities in virtual environments, student perspectives on this issue are also noticeably missing (Barker & Gossman, 2013; Beck, Egalite, et al., 2014; Collins et al., 2015; Rice & Carter, 2015; Voulgarides, 2018). However, for this study the researcher felt the complex research questions could be answered more insightfully by parents and school personnel with a solid understanding of IDEA requirements working directly with students with disabilities in virtual schools.

Another limitation of the qualitative research is that data collection and analysis is more easily influenced by the researcher's personal biases and preconceived ideas (Marshall & Rossman, 2016; Saldana, 2016). Bracketing was used in this study to minimize the effects of researcher bias throughout the data collection, analysis, and final research reporting. Research rigor is more challenging to maintain, evaluate, and validate given the researcher's ability to be

open to the data and adhere to the research framework. Matters of anonymity and confidentiality can pose difficulties when exhibiting data and results are often more difficult to describe visually (Taylor et al., 2016; Marshall & Rossman, 2016).

Chapter IV - Results

Introduction

The purpose of this qualitative study was to identify the methods and best practices used by four Idaho virtual schools to implement a valid special education process in their virtual setting. As the rapid growth of online education continues, policymakers, educators, and parents agree additional research is needed to provide answers to all educational stakeholders and assure quality educational opportunities for students (Burdette et al., 2013; Miron et al., 2018; Molnar et al., 2017; Richardson et al., 2015). The research in this study examined the roles of parents and the strategies used by special education teachers in developing Individualized Education Plans (IEPs) and providing compliant special education services for students attending virtual schools (Individuals with Disabilities Education Act, 2004). Chapter 4 will present a comprehensive summary of the research results by introducing the themes that summarize the findings and providing a detailed analysis of those findings in relation to the study's research questions. The following research questions guided this study:

1. What do parents of students with disabilities in a full-time virtual school perceive to be their role in developing a valid IEP aligned to state and IDEA regulations?
2. What do parents of students with disabilities in a full-time virtual school perceive to be their role in providing special education services aligned to state and IDEA regulations?
3. What methods are Idaho virtual school special education teachers using to carry out a valid IEP process aligned to state and IDEA regulations for full-time students with disabilities?

4. What strategies are Idaho virtual school special education teachers using to provide appropriate special education services aligned to state and IDEA regulations for full-time students with disabilities?

Results

Themes. Qualitative research methods were used in this study to gain a deeper understanding of how research participants perceive four virtual schools are providing special education services to students with disabilities. The themes presented in this research are an outcome of the semi-structured interviews with eight parents and nine special education teachers, eight observations of virtual IEP meetings, and analysis of eight IEP documents. After transcribing the data, the researcher started by reading all of the data transcripts and protocols to become familiar with the data. Hand-coding methods using highlighters, colored pens, and post-it flags were applied because the researcher felt this technique would provide a deeper connection to the data. First cycle descriptive coding, sometimes referred to as topic coding, was utilized to classify and connect similar content (Saldana, 2016; Taylor et al., 2016). The researcher noted the basic topic of each passage in a word or short phrase. Second cycle pattern coding was used to group initial topics into a reduced number of categories. This process transformed narrative notations into summative categories. During the second cycle coding, each set of data was analyzed individually and then compared with categories from each of the other data subsets to obtain overreaching categorical groupings. Second cycle pattern coding led to a more meaningful categorized account of the research data's substance. The coding process started with authentic qualitative data and allowed the researcher to identify patterns and connections while moving towards conceptual themes that answer the study's research questions (Chowdhury, 2015, Saldana, 2016).

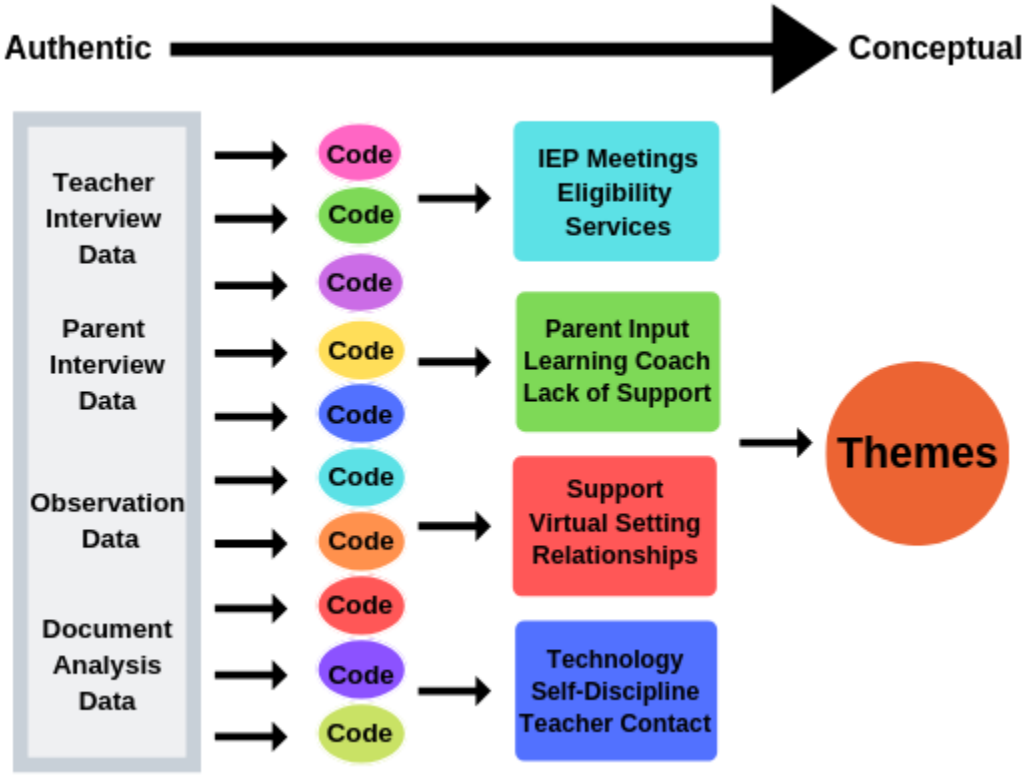

Figure 3: Qualitative research model used to analyze research data. Information on the left represents research data collected during the study. The arrows follow the data analysis process through the first and second level coding levels and end with the development of themes.

At the center of qualitative research is the task of discerning themes (Chowdury, 2015, Saldana, 2016). After coding, categorization, and reflection, the researcher identified twelve categories and developed them into themes. These themes embody patterns from all data sets that are important in describing how research participants identified with the phenomenon addressed in the study's research questions. The following four themes presented from the data in this research study: a) compliance, b) parental involvement, c) strengths, and d) challenges. The themes represent an overview of special education teacher and parent perceptions of the special education process in four Idaho virtual schools. This chapter will elaborate on these themes and subcategories in relation to the study's research questions.

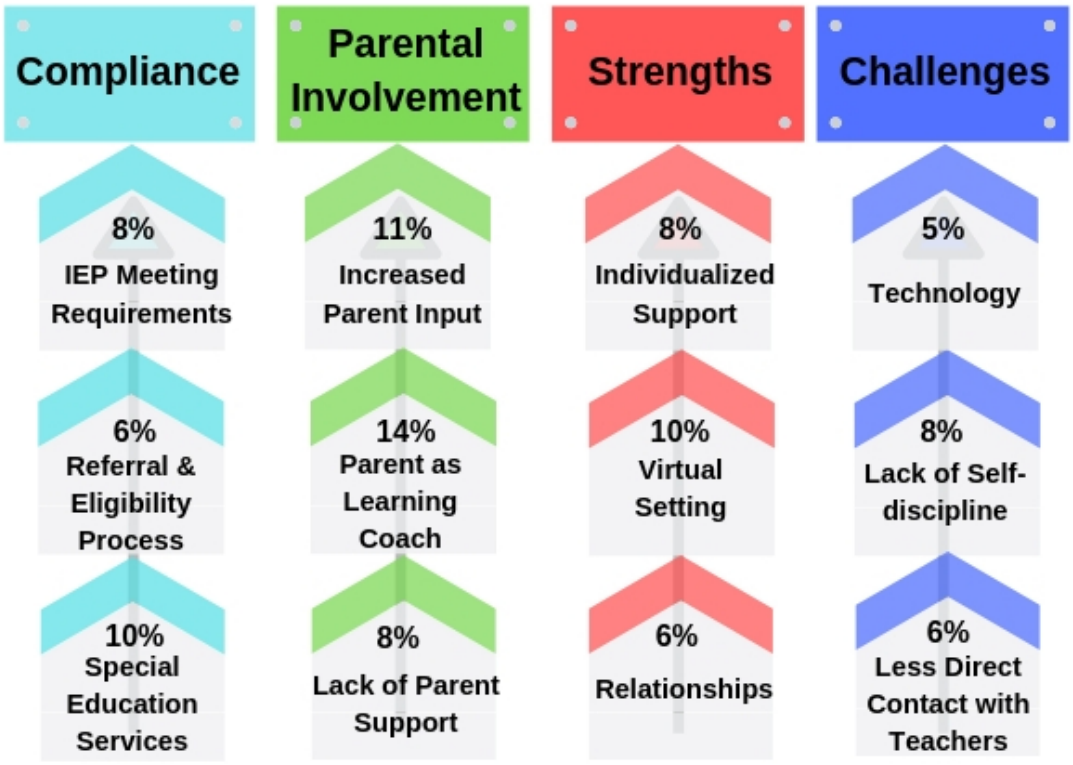

Figure 4: Second cycle coding categories used to develop four themes. Percentages represent the number of first cycle descriptive codes present in each category.

Compliance. Entwined throughout participant interviews, observations of IEP meetings, and analysis of IEP documents was a focus on compliance to the Individuals with Disabilities Education Act (IDEA) regulations. The IDEA was known as the Education for all Handicapped Children Act (EHA) from 1975 to 1990, at which time Congress reauthorized the act and changed the name to IDEA. This act includes six main components illuminating the focus of IDEA: a) Individualized Education Plan (IEP; b) Free and Appropriate Public Education (FAPE); c) Least Restrictive Environment (LRE); d) appropriate evaluation; e) parent and teacher participation, and f) procedural safeguards (Individuals with Disabilities Education Act,

2004; Smith, 2016). IDEA was last amended in 2004 and guides the education of all students with disabilities in public schools.

The regulations and guidelines set forth by IDEA were created for brick and mortar schools and did not distinguish between traditional or virtual education environments although they govern both. Some applications of IDEA guidelines in a virtual setting are very apparent while others are left open to some interpretation (Basham et al., 2016; Carnahan & Fulton, 2013; Collins et al., 2015). All parent and teacher participants felt very confident their school was compliant in meeting IDEA regulations. Research data did not point to any IDEA non-compliance issues, but did provide data on different strategies and methods used to meet state and federal regulations.

One category noted within the compliance theme was IEP meetings. Fulfilling IEP meeting requirements was an area of strength reported throughout interviews, observations, and documents. Required members of the student's IEP team including a parent, regular education teachers, special education teacher, related service personnel, and a district representative attended every meeting. Some IEP meetings included the student or an outside learning coach, and when required the school psychologist or transition agencies were in attendance. All members were frequently asked to provide input, but parent input was very prevalent throughout the meetings. All required components of the eligibility and IEP were covered including but not limited to procedural safeguards, student strengths and weaknesses, goals, least restrictive environment, accommodations, services, transitions, and testing. The format of meetings, phone conferencing versus web-based conferencing, was a topic that stood out in interviews and observations.

A second component of the compliance theme arising from the data was the referral and eligibility process. Although the data analysis did not find any areas of non-compliance, participants noted room for improvement in two areas of the referral and eligibility process, the school response-to-intervention (RTI) practices and required classroom observations. Participants felt a robust schoolwide RTI process could provide the necessary intervention data needed for special education referrals. Creating an effective RTI process in a virtual environment was something all schools were still perfecting. Part of the referral process included special education teachers performing classroom observations for referred students. With students schooling at home, having limited face-to-face interactions with general education teachers, and using flexible schedules, participants indicated doing applicable classroom observations was challenging. Two strengths of the referral and eligibility process reported in the data were appropriate evaluations and team input. Although schools had different philosophies on online versus face-to-face assessments, the data indicated qualified personnel performed valid assessments, and according to team members presented enough information to determine student eligibility. The appropriate team members were present at the meetings and given an opportunity to provide input into the eligibility decision.

The third category within the compliance theme was special education services, including specialized instruction delivered by the special education or general education teacher and other related services such as speech and language, occupational therapy, and executive functioning support. A variety of strategies were addressed by parents and teachers in interviews and observations while IEP documents detailed the service minutes. Specialized instruction was provided using different methods and venues depending on the age of the student with disabilities and individual school practices. Related services were provided face-to-face by

contracted providers in both therapy offices and the student's home, or services were provided virtually using web-conferencing programs specific to online providers.

Parental involvement. Parent and teacher interviews, IEP meeting observations, and IEP documents frequently addressed parent involvement. Students are schooling at home with limited face-to-face experiences with general education and special education teachers. Some students come to virtual schools from traditional brick and mortar public school settings while others come from charter, private, or conventional home school environments. Overall, virtual school enrollment has increased from under 10,000 students in 2000 to over 295,000 students in 2017 with approximately 14% of those students coming from a home school setting and a growing number of virtual schools serving grades K through 12 (Miron et al., 2018). Research study participants noted virtual schools create a setting where the type and amount of parent involvement becomes a more significant factor in student success than in traditional brick and mortar schools, especially for younger students.

The research data revealed parents and teachers frequently see parents as learning coaches in many situations. Parents coordinate closely with general and special education teachers, serve as a facilitator to support instruction, and coordinate the student work schedule. Parents frequently sit in on direct online lessons from special education teachers or related service sessions with the therapist to help focus students and to internalize educational concepts for reinforcement throughout the student's weekly educational activities. Participants indicated the role of parents also differs by the age of the student with disabilities. While parents may need to assist with focus, technology, and serve as a medium between the student and special education teacher for younger students, older students may grow in independence but still need parents for motivation and program coordination.

Another category evident in the parental involvement theme was increased parent input in educational decisions. Parent and special education teacher interviews, IEP meeting observations, and IEP documents all confirmed the virtual setting facilitates an opportunity and a need for parental input. Parents and teachers indicated an increase in parent satisfaction because they felt their input was heard and valued. Because of the increased involvement of parents in their student's daily education, they can give valuable information on appropriate goals, accommodations, and other needs. Special education teachers rely heavily on parent contributions to develop the IEP and implement appropriate special education services. Again, participants stated parent participation differs with the age of the student and decreases as the student is more able to advocate for themselves. The increase in parental input leads to parents feeling valued and creates a sense of satisfaction with the special education services in the virtual school environment.

However, data pointed out parent engagement is a double-edged sword for a student with a disability in a virtual school. The third category appearing in the parental involvement theme was the lack of parent support leading to challenges for students in a virtual school environment. While all data collected emphasized increased parental involvement for parents of students with disabilities in a virtual school, teacher interviews and IEP meeting observations pointed to adverse effects for students whose parents had limited participation in their student's educational experience. Considering the learning takes place in the student's home, teachers have restricted ability to encourage students to log on to their classes, stay focused on the instruction, and complete assignments by the deadline. Teachers felt most parents understand the increased responsibility of enrolling their student in a virtual school and having a child school at home, but some parents do not. In many instances, the special education teacher or school felt the

responsibility to educate parents on their obligations when students are struggling with necessary self-discipline, motivation, and focus. Teachers indicated parental support was even more necessary when dealing with specific behavioral, social, or emotional needs. Special education teachers faced frustrating situations when students did not attend scheduled assessments, direct instruction appointments, or related service sessions. Teachers noted students struggle when they do not have the skills to school on their own.

Strengths. All data collection methods point to some strengths of a virtual educational environment for students with disabilities. Researchers and advocates of online learning have indicated numerous advantages for students attending a virtual school (Crouse et al., 2018; Toppin & Toppin, 2016; Wearne 2016). With expanded school choice opportunities, parents and students are looking for the setting that best meets their needs (Beck, Egalite, et al., 2014; Rice et al., 2017; Thomas B. Fordham Institute, 2013). Parents and teachers shared numerous successes and benefits from their experiences with students with disabilities in a virtual school. These successes brought a sense of accomplishment to parents, students, and teachers as well as created a feeling of satisfaction for parents choosing a virtual school environment for their students.

Parent and teacher interviews, observation of IEP meetings, and IEP documents indicated an increase in individual support for students with disabilities in these four Idaho virtual schools. When compared to a traditional public brick and mortar school setting, parents and teachers felt students in a virtual school received more one-to-one time from parent learning coaches, special education teacher's online direct instruction, general education teacher availability, and increased related service times. Parents suggested their student with a disability had very little one-to-one time with a special education teacher before enrolling in a virtual school. Teachers indicated students in the elementary grades received all specialized instruction

in an individual online session while middle and high school students receive lessons in small groups. Executive functioning skills were provided either individually or in small groups depending on the need for social interaction. Related services such as speech, occupational therapy, and physical therapy were all done one on one. Depending on the level of parental involvement, teachers indicate the parent acting as a learning coach can provide beneficial individualized support for student learning.

The most emphasized category within the strength theme was the benefits of the virtual school setting. Research data pointed to the advantage for some students to school at home in a more safe, secure, and comfortable environment. According to parents and teachers, many students in their virtual school have intense medical needs and need frequent monitoring. Parents felt more comfortable being able to address the student's medical needs by themselves in their home. Parents and teachers noted a large number of students in their virtual schools have experienced a bullying or harassment issue in a traditional brick and mortar public school or because of increased school violence do not feel safe at school. Research participants also noted many of their students have disabilities such as autism, anxiety, or depression making the traditional school setting very difficult for them and not conducive to learning. Schooling at home in a familiar environment, with fewer distractions, and less social drama was a better setting for these students. Scheduling flexibility was another advantage noted by parents and teachers for students that need more breaks, learn better at certain times of the day, work at a slower pace, or travel extensively.

The other category within the strength theme was relationships between IEP team members, including student relationships. Research participants felt very strongly about the increased opportunities to form stronger relationships with parents, students, and other IEP team

members. Teachers indicated the increased one-to-one instructional time with students with disabilities allowed them to develop stronger bonds with students in a virtual environment. Teachers felt many of the older students depended on them extensively and they were able to help them reach their goals thereby creating lasting connections. All participants noted the increased parental involvement formed a triangle of communication between the parent, special education teacher, and student facilitating stronger relations. Teachers and parents noted they might only communicate once a year at the annual IEP meeting with a special education teacher in a traditional brick and mortar school, but in the virtual setting, there is constant communication which builds stronger relationships. The evidence of strong connections was not only brought out in participant interviews, but also observed in the virtual IEP meetings. Parents felt they were an equal member of the team, everyone valued their input, and they were more in control of their child's education. Parents noted increased contribution and caring from all members of the IEP team including general education teachers, school psychologists, and related service therapists.

Challenges. Educating students with disabilities in a virtual environment certainly has challenges. Numerous opponents of virtual education, teachers working in virtual schools, and virtual school administrators admit online learning has a lot of room for improvement and more research is required to assure valid educational opportunities for students in a virtual environment (Beck & LaFrance, 2017; Richardson et al., 2015; Saultz & Fusarelli, 2017). As virtual education continues to grow, parents, teachers, policymakers, and educational administrators will be working to overcome the challenges presented (Beck & LaFrance, 2017; Crouse et al., 2018). Parent and teacher interviews, IEP meeting observations, and IEP document

data pointed out some of the challenges faced by students with disabilities educated in four Idaho virtual schools.

One component of the challenges theme is technology, including access, understanding, and applications. Data provided from special education teacher interviews and IEP meeting observations indicated a frequent need for the special education teacher to train students and parents on required technology applications. When families enroll students in a virtual school and have minimal understanding of technology, it creates a need for teachers to provide additional training for both parents and students. Another concern brought forth in the data was students not having access to adequate technology. Although the virtual schools may provide computers to students, if the parents do not provide sufficient internet access, students will struggle to be successful in the virtual environment. Parents and teachers also noted technology is not infallible. There are times students lose internet access or have a technical malfunction with equipment. A challenge reported in the data was younger students spending so much time learning to work a mouse, access required software applications, and navigate learning management systems, technology becomes a distraction to the learning process. Some parents also noted struggling with the technology necessary to distribute documents, provide electronic signatures, and communicate effectively with the virtual school.

A second part of the challenges theme is working with students lacking in self-discipline and motivation. Teachers expressed difficulties with getting some students to log on and work in their classes. Interviews and observations provided data on how student attendance is tracked using hours of participation in virtual courses. Some students struggle to put the time in classes to meet attendance requirements and be successful in their classes. Teachers frequently had to contact parents and work on setting up appropriate schedules to improve time-management

skills. Teachers also reported an issue with setting up scheduled times for special education services and then having the student not log onto the virtual meeting. Research data also indicated students with disabilities might struggle with behavior and attention issues adversely affecting their ability to stay on task. Without constant parental involvement, this type of student will find it difficult to focus on educational functions in a virtual environment. Participants felt it was easy for a student to disappear or hide in a virtual environment and cut off communication with teachers. If the teachers could not get the support of a parent in all of these situations, it frequently led to truancy and manifest determination meetings.

Interviews, observations, and document analysis overwhelmingly pointed out students with disabilities have less direct contact with teachers in a virtual school. General education teachers may only communicate with students in their classes via email, discussion boards, texts, or phone calls, where within a traditional brick and mortar classroom they see the student face-to-face on a daily basis. Although teachers and parents interviewed believed some students with disabilities received more one-to-one time with their special education teacher in a virtual school, overall they felt the student had less direct contact with teachers on a daily basis. Because the teacher has less direct contact with the student, establishing suitable accommodations, writing appropriate behavior or academic goals, and understanding the student's strengths or weaknesses can be challenging. Parents indicated teachers did not know their student well and may not understand the day-to-day struggles the child faces. Having less direct contact with the teacher can make it more intimating for students to reach out to the teacher and ask for help. Since students are not always in the presence of a teacher, participants felt teachers had less control over student learning. Given the teacher's loss of control, research data indicated more of the burden for student learning transferred to the students and parents.

Research questions. Qualitative research focuses on the collection of descriptive data such as people's spoken words, written words, or observable behaviors surrounding a particular experience. Qualitative researchers seek to understand people from their frames of reference and are concerned about how people act in their everyday lives. Researchers strive to obtain first-hand knowledge of occurrences through observing people's actions, listening to people's words, and looking at the documents people produce (Marshall & Rossman, 2016; Maxwell, 2013; Taylor et al., 2016). The researcher conducted semi-structured interviews with nine special education teachers and eight parents, observed eight IEP meetings, and analyzed eight IEP documents to increase understanding of how four Idaho virtual schools are serving students with disabilities. Throughout the narrative, the researcher identified participants, observations, and documents as P#, T#, O#, and D#. The data collected provides rich insight into the researcher's four research questions.

Research question one: What do parents of students with disabilities in a full-time virtual school perceive to be their role in developing a valid IEP aligned to state and IDEA regulations?

Interviews. Interviews with parents and special education teachers provided valuable insight into the role parents play in developing effective IEPs to support student learning in a virtual environment. As required by IDEA, a parent attended all IEP meetings and when asked every parent and teacher reported all required team members were present at the student's eligibility and annual IEP meeting. However, the 17 interviews indicated the role of parents in the IEP development differed in a virtual school when compared to a traditional school setting.

The most significant difference noted by research participants was increased parental input in the development of the student's IEP, especially in determining present level of

performance, appropriate goals, needed accommodations, and service times or types. Phrases, such as “I felt like I had more input,” “the team listened to me,” and “I felt my input was valued,” were reported throughout the parent interviews. P7 stated:

> So when we have an IEP meeting, usually whoever heads the meeting will ask how I feel my child is doing personally. They'll ask me what I feel her strengths and weaknesses are for that year. They'll ask me what I would like to see happen for the year. It has to do with my input and what I see in her and what I would like to happen for her in the coming year.

Teacher interviews supported the concept of parents having more input in the virtual IEP development process as well. Given the virtual setting where students are schooling at home, teachers indicated parents had valuable information on strengths and weaknesses, present levels of performance, and student behaviors. T2 said, “we always get the parent involved and ask them, what do you think? What kind of accommodations do you think your child needs? What kind of goals do you think your child needs”? Other teachers corroborated with statements such as, “we really rely heavily on parent input to develop our plans,” “parents feel their opinion is valued and that is important,” and “we talk to parents to find out what is happening on the other side of the screen.” T2 summarized the role of the parent in the IEP process by stating:

> Parents are giving input on how they think their child's education should look. Instead of us saying, this is the way it's going to look which is quite often how it works in a brick and mortar. The big success in the virtual school IEP process is that the parent feels more in control. They feel like their opinion is valued and important.

Parents and teachers felt the increased parental contribution created a more cohesive IEP team where all members were valued and had input into the process. P3 expressed, “I felt like we

were more of a cohesive team with the virtual school. I felt like I had more input." One parent described how the IEP team worked together to serve her student's needs:

> One of the things I really liked was that the school took input from everyone on the IEP team. It's not like they just chose, okay, you're going to see this person, they're going to test you, and then based upon what they see and what I see, we're going to let you know what your eligibility is and what your education needs are. They took input from me, my child, her advisor, and previous teachers. I thought it was really important to not just have the input of one or two people but to have multiple people give their input on what she needs, what works for her, and her strengths and weaknesses, so that they can teach her and she can learn to the best of her ability. I feel we work as one interconnected team with every member providing valuable input (P7).

Teacher interviews noted increased parental input led to better working IEP teams and improved communication between team members. Positive comments such as "we are a tight-knit team here, and we are on top of things" demonstrated T4's enthusiasm for developing cohesive IEP teams. T4 described her virtual IEP team experience:

> The whole team is so good at communicating with the parents, being parent-friendly. I get so many comments from parents, and they're like, oh, my gosh, this process was so much better than I've been through before. This is because we involve the parent. We don't tell the parents what to do. We get their input. And we don't' say, well, this is what we're going to do with your kid. And this is what we think is going on. You know, making them fit into our bubble of the way we want them to educate their child. We work with them.

Data from interviews suggested a high level of parent satisfaction because of their increased input and control in developing their child's IEP. Parents referred to expanded caring relationships and a sense of concern for individual student needs. P7 stated:

> And I just felt like when I got her there that they really cared about my daughter and they cared about her learning needs. And, I mean, yes, she does have special education needs. But they have adapted her learning so that she could actually learn. I mean, they made it to where she could learn and succeed. And it worked, she is finally getting good grades, and she's learning.

Teachers also noted a high level of parent satisfaction with statements such as "I'd say that our parents are really happy. Because they feel more involved in developing IEPs or 504s" or "the things we've heard from parents is that we're very responsive to their needs. We definitely view ourselves as customer service people, for better or worse" (T2 and T6).

Observations. The observations from eight virtual IEP meetings supported the data collected from parent and teacher interviews. The researcher frequently observed parents providing detailed input into present levels of performance, goals, accommodations, and service types or times. Special education teachers repeatedly asked the parent about the student's present level of performance on reading, math, writing, and behavior goals. Parents often gave updates on where the student was in the achievement of IEP goals. In O1 the researcher noted, "Mother does all the reporting on performance in classes, needed resources, and curriculum focus first. After parental input, the special education teacher talks about her part in the curriculum and providing assignments, accommodations, and specific lessons."

Throughout the observations, parents provided detailed information on current progress towards IEP goals and offered input on new or revised goals. The observer wrote statements

such as, “mother reports progress towards all goals,” “the mother asks for the addition of a problem-solving goal,” and “mom felt like he has not met this goal and she would like to change the goal to something more aligned with his current math curriculum” (O1, O3, & O5). As one IEP meeting approached the goal setting phase, the observer noted:

> Mother gives input into how she wants the goals rewritten. Mother’s main concerns are problem-solving and attention. She would like goals to reflect more goals towards independence. The mother struggles with some of the requirements of how the IEP goals have to be written and tracked. The mother does not want to take on a lot of data tracking. It is difficult to create goals and figure out how to track progress. When the parent is providing support, it is difficult to track data unless the mother wants to time, document, etc. The mother wants to write goals in ways the behavioral interventionist or special education can track with a focus on task-based and outcome goals (O1).

Parents had strong opinions regarding which accommodations were appropriate for their child in the virtual school setting. When developing appropriate accommodations for a student with a disability, the observer noted the communication on accommodations was very much a two-way conversation between the special education teacher and the parent with little input from other team members including the general education teacher (O6). During O7, the special education teacher asked for guidance on appropriate accommodations for the student, and no one gave input. At that point the special education teacher directly asked the parent, “given your role in the student’s learning process, can you please provide input on what accommodations best support your student.” The special education teacher was purposely trying to involve the parent to get parent input on student accommodations. In another situation the observer noted:

> The special education teacher asked what type of things the student needs help with. The mother indicated writing, paraphrasing, putting thoughts on the paper, etc. The special education teacher asked the mother if she thought a writing accommodation would be appropriate. The mother indicated yes and provided a writing goal she wanted to add. The special education teacher suggested we could allow her to demonstrate knowledge in different ways such as powerpoints, posters, etc., and the mother agreed (O6).

Observations provided data on parental input into special education service times and appropriate services. Several parents indicated there was no longer a need for their student to have a behavior plan in the virtual setting since they were schooling from home with parental support, but if the student returned to a traditional classroom setting a behavior plan would be needed. The observer noted:

> Mother wants her student left eligible for a 1:1 Behavioral Interventionist on the IEP, but she wants to deny this service now in lieu of providing the behavior interventions herself. The special education director addresses how the team can make this happen and indicates how the team can word this in the written notice section of the IEP (O1).

Parents frequently had strong opinions on service time as indicated by the observer's notes:

> Time for services was discussed. The speech therapists asked about 20 minutes per week for the student. The mother said she would prefer 30 minutes per week. Other members of the team asked about his ability to focus for 30 minutes. The mother felt strongly the student could focus for 30 minutes. The special education director indicated we could start at 30 minutes per week or 120 minutes per month and then if the student is not able to focus we will amend the IEP and adjust the time (O7).

Document analysis. Parents provided specific concerns in most skills areas on the IEP indicating their understanding of the student's present level of performance. Parent concerns in D3 stated the student "still continues to struggle with fictional text that has implied meanings within the text" and the student "needs to be able to add evidence from the text to support his written responses." Other parent concerns used phrases such as "complex writing," "understand the concept of," and "compose and decompose numbers" (D1, D5, and D7).

The goals written into the IEP documents were specific, measurable, and as determined by the IEP team, achievable and relevant to student needs. Special education teachers and therapists wrote most goals so progress toward completion could be monitored virtually. "Given a set of 10, multi-digit addition problems, (student) will solve the math problems with 80% accuracy over three consecutive attempts by (date)" (D4). "Given a grade level reading passage and writing prompt, (student) will support her writing with evidence from the text 6 out of 10 opportunities 3 times consecutively by (date)" (D1). However, some goals may become more challenging, although not impossible, to monitor progress online such as "Given a person (student) does not typically interact with, (student) will hold a 3-minute conversation with at least 10 exchanges 4 out of 5 opportunities by (date)," or "Given a social situation, (student) will participate in collaborative conversations with diverse partners about grade 1 topics with 80% accuracy in 3/5 trails by (date)" (D2 & D5).

The IEP accommodations recommended by the team were written in the documents under the presentation, timing/schedule, setting, response, and other categories. The accommodations all appeared to be relevant to the student's goals and needs. Some accommodations such as speech-to-text, multimodal presentation, shortened assignments, audio, and redo test/quizzes that receive a grade less than 70%, and modified grading are very

conducive to occurring in an online class. However, many of the accommodations on the IEP documents would be more challenging to implement without parental support given the student is schooling at home. Such accommodations include prompts to stay on task, frequent breaks, minimize distractions, scribe, and model directions.

Service times on the IEP documents ranged from as low as 10 minutes per week to as high as thirty minutes per week. Service areas included: a) reading, b) math, c) written language, d) speech or language, e) occupational therapy, and f) social skills. Services were all provided by a special education teacher, therapist, or counselor. Optional statements of service delivery on all IEPs indicated services would be delivered virtually.

Research question two: What do parents of students with disabilities in a full-time virtual school perceive to be their role in providing special education services aligned to state and IDEA regulations?

Interviews. The study's second research question centered on the parental role as it pertains to special education services provided to their student by the virtual school. Throughout the parent interviews, parents refer to themselves as an "aide" or "helper," and teacher interview narratives from all four schools frequently referred to parents as "learning coaches" as they defined the parent role. P5 described her role by stating:

> I see myself as her special education aide. And I assist her most in keeping her on task and then also as she's taking any quizzes or assessments or tests I need to sit next to her because she has a tendency to just click through the answers to get it over with. I need to keep her slowed down and focused. And during geometry she loses where she's supposed to be at, I sit next to her and do her geometry together. I make her work out some of the

problems on the whiteboard. I work out a problem on the whiteboard. We take turns. And it's like when I was a special education aide at the public school when she was younger.

P5 explained her role was to be aware of her child's goals and then help her child stay focused and on task. P5 felt she knows her child better than anyone and she has worked with her long enough to know when she needs a break or when she needs to focus on an activity. She stated, "I can tell when all the electronics need to be put away. I understand her accommodations, I see what she needs, and I choose to make her buckle down or take a break or start over." Teacher interview data supported the concept of parents acting as "aides" or "learning coaches" and emphasized the critical role parents play in their student's virtual education. T3 stated:

> The role of the parent is really going to be different depending on the age group. So starting at the elementary level, the special education teacher will be the one who pulls out into the virtual resource room and works specifically on the student's IEP goals. Then it is also the responsibility of the special education teacher to educate and inform the parents on how to apply the classroom accommodations that were agreed upon by the IEP team, because the parent is the one that is working with that student similar to, I guess, what an aide might do, but in the home general education setting. In middle and high school the need for educating the parent is there, but the role of the parent starts to decrease and gets put more onto the teacher.

Parents frequently referred to how they help with the implementation of accommodations written on the student's IEP. They made statements like "My role is to see what their individual needs are and provide accommodations they need to thrive in school" or "I try to work closely and notice when the boys might need a little extra help in a certain class. And then I can either provide that help or let the special education teacher know" (P2 and P6). Since the parent has

direct contact with the student schooling at home, parents may assist with accommodations requiring adult intervention, as P5 said she contacts her student's special education teacher when she sees a need for additional accommodations. She stated, "I've just been giving her accommodations that are listed on her IEP as far as like reading her the test questions and giving her extra time on the quizzes, tests, and long assignments."

Teacher statements supported the need for parents to assist with student accommodations in the virtual school setting because teachers do not have direct contact with the student. T5 defined the parent role by saying she considers the parent a learning coach facilitating the education of their student. As T5 provided direct instruction tied to the special education goals, the parent helps fill in the gaps. She lets parents know if they are working with their student on something and they cannot figure out how to assist the student or to modify the work, they can contact her at any time for help. T5 said, "We work with parents to help make appropriate accommodations in the general education setting as needed."

T6 viewed the parent role in a similar manner when she stated:

> The parent is a learning coach. They're there as well to coach them through their education. And to reach out to us if something's not working. We have awesome parents who are saying, you know what, this student needs a few more accommodations in this class or can we do this? And we definitely can amend the IEP at any time to reflect that. We do use a lot of parental and learning coach input because we're not able to see those students face-to-face. So we primarily rely on them to tell us the kind of day-to-day activities and frustrations and successes of those students.

Several parents indicated their role included attending direct instruction provided by special education teachers and related service therapists. By watching and listening to sessions,

parents can reinforce skills with students throughout the week. P1 stated, “I sit with him, make sure he's listening, and help keep him focused. I can see how she's explaining things and what they're working on so we can continue to work on the same concepts through the week.” P8 expressed, “I make sure that my son is sitting and ready to work with the therapist at the time that we have scheduled. And when she gives homework, I try to work with him through his assignments.”

Teacher interview data emphasized the important role parents play in assisting and reinforcing special education direct instruction and related services. T2 stated:

> Our Idaho certified special education teachers provide direct, specialized instruction as outlined in the IEP virtually using Zoom. Frequently, especially with our younger students, the parent is sitting right there with the student, and they are learning exactly what is being taught so they can reinforce those skills during the week. Whereas in a brick and mortar school, that does not happen. The child gets pulled out of the regular classroom and goes to the special education room. Generally, the parent has little understanding of what is being covered on a daily basis. But in a virtual school, the parent has the option to be sitting right with the student and know exactly what concept or skill the child is working on.

T1 spoke about the benefit of parents participating in related service therapies:

> With virtual related services, the parents are able to meet with those therapists, if they desire, weekly. Where in the traditional school setting, the parents may never have any contact with that therapist except for their once a year annual meeting. It is nice because they are able to really keep in contact with that therapist and know what is going on. The parents know how the therapist is working with their child and the skill set that they are

working on so parent can reinforce those skills during the week. We encourage parents to be involved with their child's related services.

Parents working closely with students to provide accommodations and support special education services appeared to require increased communication between the parent and the special education teacher. Parents frequently noted, "I stay in touch with her special education teacher on a pretty frequent basis" or "I communicate frequently with our special education teacher to make sure necessary accommodations are used" (P7 and P2). P4 summarized her role by stating:

> I think there's a much heavier role for a parent in a virtual setting when you're implementing an IEP plan because you're the eyes and ears there making sure that the plan is being implemented and that that plan is being followed. And so it's up to me to make sure that services are being provided appropriately and that the goals are being worked on appropriately. I have had a really great IEP team to support me. And so we have been able to communicate and work extremely closely together to do what's best for the kids and to grow them and to meet those goals and to help make progress on those things. And so that's been a double-edged sword. It takes a lot of involvement. And on the flip side, it's really awesome to be able to be that hand's on in your child's special education.

Teacher participants supported the importance of the parent role in providing special education services to students in a virtual school environment and maintaining constructive communication between special education teachers and parents. T4 summarized this thought by stating:

> The parent is instrumental to our setting and we rely very heavily on their input. So in our setting, the General Education teachers have live classes that they teach four times a

> week. And students are expected to go to those. And then at home, the parent is responsible for making sure they're getting their assignments, their quizzes, and their work done and turned in. And then the General Education teacher here monitors their progress and really makes sure they're working. Constant communication between students, parents, and teacher is essential to success.

Other parent roles expressed through participant interviews were manager, organizer, and advocate. Parents scheduled students virtual service sessions, structured the school day schedule, and advocated for student needs. P8 summarized by saying:

> My role is a lot of coordination between all the moving parts. And then most of the hands-on academic support I'm comfortable with so I'm providing much of that to my kids because it works better for us to do it that way than to rely on a teacher. So a lot of coordination and advocacy.

P4 felt strongly about their role:

> My role is and always has been both in the virtual setting and in a brick and mortar setting, I'm the driver. I'm generally the one that's formulating the ideas, crafting the plans, pushing through what my kids need and an extremely strong advocate for my children. And knowing what is going to work best for them in a program. And really making sure that that kind of program is developed and implemented and seen through.

Teachers repeatedly expressed they believe the virtual school setting creates an enhanced role for parents of students with disabilities when compared to a more traditional classroom setting. They felt many parents of virtual school students chose the school setting because they desired more control of their child's education. None of the teachers stated concerns with increased parental roles and input except in the cases where parents chose the virtual setting but

did not understand their role may look different than in a traditional brick and mortar school. One teacher stated:

> I think that the parent has a bigger role in the virtual school. And I say that because typically parents that finally get to a virtual school, and typically with virtual schools they're the parents that have kind of skipped around a lot, they're a little more hands on. Parents have a much bigger role, they're more involved. They've gone to all these other schools and they're frustrated and so they're more hands on. They're not like the parent you see once a year in a brick and mortar school once a year because I taught there too (T8).

Another teacher viewed increased parent input on the IEP team in the virtual setting to be a valuable asset while lack of parent involvement can be a huge challenge:

> So one of the challenges is a lot of parents, like I mentioned, do enroll their students here because of behavior concerns in the brick and mortar. And if parents are working full-time or if they are not engaged in the schooling process, then that creates a huge challenge where the student's failing here. We comply with the attendance laws and we hold our students to the same standards of a brick and mortar. And so when a parent enrolls them here, sometimes they feel like, well, this is home school. It's easy. They don't need help. They're going to do it themselves. And we see that that student fails. And then we have to go to truancy and manifest determinations. And it just gets taxing and difficult. So that's a challenge for me when we don't get that parent support (T4).

Observations. Observation data supported the interview findings pertaining to research question two. Throughout the interviews, parents were frequently referred to as a learning coach

by teachers and even students as recorded in the observer's reflective notes. At an IEP meeting where the student was in attendance, the observer reported:

> When asked about accommodations, the student indicated it is helpful when teachers and/or learning coaches help her refocus. She likes when her learning coach (mother) allows her to eat during class. It helps her stay focused. She likes taking breaks and feels it is helpful to have extra time to submit assignments (O4).

While the special education teacher was discussing student goals during O4, the observer noted:

> The student will set four to five educational goals per week and follow through with these goals. The mother indicated the student's goals are repetitive and the student falls back to the same goals and she is not sure this is a productive activity. The mother feels she may need to celebrate more successes. The special education teacher suggested a check-in and check-out system with the learning coach (mother). The mother suggested the team keep this goal but lower the number of goals to one or two educational goals per week. The mother (learning coach) would be the one helping the student set weekly goals, monitoring goals, and creating positive rewards.

Observation data documented the role parents played in providing student accommodations on a daily basis. During IEP meeting observations, the observer wrote, "When testing, a familiar person is present, which is the mother," "The student can dictate his assignments to a parent," and "The mother indicates it is still difficult to get the student motivated to start each day but he has done better in staying on task throughout the day since the mother has been implementing the reward system" (O2, O8, & O2). At times, parents asked for direction in how to accommodate students as the observer noted:

> Accommodation: Assignments and tests may be shortened or modified. The special education teacher feels like in history and language, this accommodation may be needed. The mother feels the assignments are too long and hard and should be modified. The mother said she has to help the student a lot with history, writing, and outlines, etc. The mother indicates she is not sure how much she should be doing and helping because the student cannot do the large assignments alone. The student is working on a Mayan project in history. The mother is not sure if the student should do it alone and just do the best she can, or should a parent be helping more so the student can be more successful (O6).

In another meeting, the special education teacher had a difficult conversation to address the need for a parent to be involved in behavior interventions:

> The special education teacher has observed that during the past few classes the student has been making some unkind comments about other students. The teacher gives an example and the mom indicates the student is just being too blunt. The mother does not feel a behavior plan is necessary, she feels the teacher and herself can work with the student on making sure comments are kind and not too blunt during class. (Reflective note: This is a difficult conversation and the teacher is uncomfortable talking with mom about student's unkind comments in her class. Mother is supportive and willing to work at home on this issue. Mom understands the needs for behavior intervention but does not feel a formal behavior plan is necessary) (O4).

During IEP meetings, participants mentioned the importance of parents attending direct instruction and the need for increased communication between parents and teachers. The ability

of parents to attend direct instruction sessions and reinforce those skills during the week was part of the parent role. The observer reported:

> Speech and Language service time has been 30 minutes per week. With additional goals on writing, the therapist would like to increase to 45 minutes. The team agreed. The therapist felt the English teacher could integrate these goals in his English class and the mother could attend sessions and reinforce goals throughout other activities (O8).

The observer reported on the need for increased communication between teachers and parents in several areas including reporting on progress, accommodations, activities, and behaviors. Statements, such as "The mother is in charge of contacting Vocational Rehabilitation and will report back to the team," "The mother reports to the team on the theatre and art community based activates the student will do during the day," and "The mother reports on the student's personal care skills she has been working on" demonstrate the need for close communication between the parent and special education teacher (O1, O8, & O2) . Observer notes from O4 stated:

> Goal: Given an assignment or project, the student will stay focused for 45 minutes at a time. The special education teacher indicates this goal is hard for her to monitor because she is not in the class with her and is not able to see if this is happening. It is difficult to gather information from the student. The teacher would like to continue to encourage this goal but remove from the IEP. New goal: Given an academic task, the student will independently submit 8 out of 10 academic tasks each week. It will be easier to document this goal. The student can also provide reflections on this goal. It will be hard to determine independence but teacher and parent will need to communicate closely. (Reflective notes: Mom is alright with removing the first goal. Mom is willing to take on the role of communicating on the new goal, as far as the focus aspect.)

Document analysis. The document analysis provided minimal insight into this research question. Although other data indicated parents viewed themselves as an aide or learning coach, the IEP documents do not list the parent as an aide or learning coach at any time. The researcher found the accommodation section of the IEPs supported parental involvement. Many of the accommodations listed in the IEP documents would be very difficult, if not impossible, to provide for young children without parental involvement. Some of those accommodations include prompts to stay on task, frequent breaks, minimize distractions, scribe, and model directions. One D7 accommodation listed under the response category stated, "Modified Answers – parent will interpret his answers due to his verbal skills."

Although interview and observation data noted parental involvement in attending and reinforcing direction instruction sessions, the IEP documents do not make that distinction. Information found in the IEP documents does not directly illustrate increased communication between parents and special education teachers. However, to provide students with many of the accommodations listed, such as extra time on tests/quizzes/assignments, simplify test/quiz wording, or frequent checks for understanding, would point to a need for increased communication between the special education teacher and parent, especially for students in elementary.

Research question three: What methods are Idaho virtual school special education teachers using to carry out a valid IEP process aligned to state and IDEA regulations for full-time students with disabilities?

Interviews. The parent and teacher interviews highlighted three main methods used by special education teachers in carrying out valid IEP processes in their virtual schools: a) meeting formats, b) response-to-intervention (RTI) methods, and c) assessment techniques. Each of the

four virtual schools in this study chose to conduct their meetings either by phone conferencing or via a web-based conferencing platform where participants can see each other on the screen. Several special education teachers addressed a preference for meeting formats. T2 described how her school utilizes the Zoom web-based conferencing platform in her meetings:

> Our meetings are all held virtually. We always do our meeting through Zoom. And we can see everybody on the screen. The administrator or the special education teacher will host the meeting and introduce everyone. And then each person who did their testing will give their results and the special education teacher reviews the IPE. Each person presenting data can share their screen on Zoom so the rest of the people at the meeting can see the information.

T6 came from a school using phone conferencing for IEP meetings and she explained:

> I think the biggest hardship in a virtual school IEP meeting is because it's on the Conference Line. As a special education teacher, I'm typically the one that gets to drive to the meeting. Most people don't feel very comfortable sitting in silence, where as if you're sitting face-to-face, you're able to see other people's body language and how other people feel. It's a lot easier for people to jump in and share.

Parents echoed the same concerns as teachers pertaining to phone conferencing for IEP meetings. P5 expressed concern with not being able to distinguish who was talking on the phone conference meetings. P6 felt a drawback to of not using video conferencing was the inability to read people's body language or see their expressions.

P4 summed up her feels by stating:

> It can be somewhat challenging having a meeting, and we've done all of our meetings on the telephone and no video conference, nothing like that. And so you lose the element of

> facial expressions and reading people and seeing them while you're talking to them that I think that does take away from the conversation and the collaboration compared to a brick and mortar setting.

Another concern arising from parent and teacher interviews was general education teacher participation in their meetings. T6 indicated input from general education teachers could increase using a web-conference meeting format. She felt the special education teacher and parent dominated the conversation while general education teachers usually sat on mute unless asked a question. She noted the team collaboration could be improved using a better meeting format. P4 also expressed a concern about general education teacher involvement at her student's IEP meetings:

> I think one thing that I have seen that is different in terms of a virtual environment is that even though there is a general education teacher at the meeting, it may not be the same general education teacher at any given point in time. It is kind of like the school puts a general education teacher in there just to fill the role that somebody's there as a general education teacher that really has no pertinence to our situation.

Another area highlighted during parent and teacher interviews was the response-to-intervention (RTI) process. Each school described their continual focus on developing a sound, efficient RTI process within their school. The RTI process becomes essential for special education referrals and eligibilities. T5 indicated when a teacher or parent made a special education referral, the referral team held a meeting with the parents. At the meeting, they discuss all of the current data and then make a recommendation to start the RTI process, refer to special education, or pursue a 504 plan depending on each situation. T5 also noted the RTI process in

their school varied depending on the grade level of the student. T4 spoke pertaining to her school's RTI process:

> Our RTI is very similar to a regular school. We do have Tier 1 and Tier 2 interventions. Our teachers all monitor very closely what students are doing and they use that data to track progress in intervention classes. We are required to have regular communication with parents and students and so we call each family at least once a month to check in. If they are still struggling, then they're referred to the Special Education program and they go through the eligibility process.

One area of consistent concern communicated through interviews was the difficulty of qualify students with a specific learning disability (SLD). T5 described the challenge of collecting the required data for SLD eligibility, especially the observation component. She indicated they gathered the data in all required areas for six to eight weeks through the RTI Tier 2 process and then input the information into graphs. T9 explained the difficulty with classroom observations required for qualifying SLD students:

> It's really tough to do the actual observations. If I'm a special education teacher doing an observation of a student in an English classroom, how do you do those observations? Because they're not in a classroom with other students. When you're doing the observation, you're supposed to be comparing them to their peers, that's the difficult part. How do you compare them to their peers other than looking at what other students are doing, how they're performing, work completion? That's a lot more difficult to do in this type of setting.

Even observations with a general education teacher present in the virtual classroom appear to be difficult according to T5:

> One challenge for referrals in a virtual environment is clearly observations in the general education classroom. We log into the general education classroom and frequently wait for the child. We ask the general education teacher to ask the student a question so that we can get some data but it is hard. It is not a good indicator, virtually, for that classroom observation, because we can't always see what the student is doing.

T1 and T8 summed up the feeling of most teacher participants by saying, "RTI is the one area in a virtual school that I feel is difficult and we have not figured out how to do it well yet" and "Our RTI and referral process is evolving. We've come a long way over the years."

With new technologies constantly becoming available, virtual schools have options to choose from when determining which methods will best serve their students. The technique used for testing students to determine special education eligibility is one area allowing for choice. In three of the four schools the researcher worked with, all testing for eligibility was done in a face-to-face setting and one school performed all assessments for eligibility using contracted telehealth services. T5 indicated all assessments for special education eligibility in her school were performed face-to-face. Her school employees a special education secretary to contract with agencies in the student's area to administer the tests. Sometimes this requires providers to travel long distances. T6 stated:

> Our eligibility assessments are all done face-to-face. We contract with school psychologists to do the cognitive, adaptive, and emotional/social assessments who meet face-to-face with the family. Academic testing is assigned out to the special education teacher across the state that is closest to the student. We also contract with speech/language and occupational therapists in the area of the student.

One school contracted with a telehealth provider to perform all eligibility evaluations and administered tests online. T1 reported the school has a school psychologist available to give assessments virtually. The school psychologist administers cognitive, academic, and behavioral tests and gathers medical and educational histories from parents to factor into the overall evaluations. The school also has access to speech and language therapists as well as occupational therapists to perform online assessments in these areas. T1 indicated physical therapy, vision, and hearing tests were contracted out with face-to-face agencies in the student's location. P3, a parent of a high need student, described her experience with the virtual evaluation:

> So my son's eligibility testing was done over the computer and he was great. It was difficult, but we knew it was going to be hard with him just because he's mostly non-verbal. I think it's hard to actually get an accurate idea of what he actually knows because of all his disabilities. But he was great and we did just as much as we could. It was a good process and I was impressed with the school psychologist's ability to work in the virtual environment and her professionalism.

Observations. The observer reported required team members attended every meeting, offered procedural safeguards to parents, and asked for parental input of student strengths and weaknesses. Students frequently attended their IEP meetings and were warmly welcomed by team members. At every meeting, all required IEP components were addressed including but not limited to present level of performance, goals, services, least restrictive environment, and transition plans. The most significant difference in the meetings was the meeting method and presentation.

Observer comments on IEP meetings held via phone conferencing included references to difficulties knowing which team member was speaking, tendencies for some team members to

remain muted and not offer input, and inability to judge people's facial expressions. One record from the observer notes stated, "The special education teacher asked if everyone on the team agreed with the eligibility report, but it was difficult to determine if every member stated their agreement O3)." Although the special education teacher in the phone conference reviewed all required elements of the IEP, the observer reported it was hard to follow along and take in the vast amount of information provided by the teacher without a visual of the document. During O5, the observer noticed one team member was present at the beginning of the meeting but when asked a direct question did not respond. It did not appear the special education teacher realized the person was no longer in the meeting or had left the phone muted and was attending to other duties. One advantage of phone conference meetings perceived by the observer was the simplicity of the technology and the lack of technology issues.

The observer noticed some strengths and challenges of meetings held using web-conferencing platforms. The observer reported the following statement about a meeting conducted with web-conferencing software:

> The speech therapist communicated the results of the student evaluation by sharing her screen on Zoom and showing graphs for team members to view. The visual made it very easy for all team members to follow the speech therapist's evaluation report (O3).

Other positive reports included, "Parent expressed she likes holding meetings via Zoom because she can see the members of the team," "Zoom allowed for virtual face-to-face meeting and sharing of screen for assessment results," and "Everyone in the zoom meeting was asked to verbally say they agree the student does not currently qualify for speech services. Everyone took a turn indicating they agreed" (O5, O3, & O2). The observer frequently reported being able to share evaluation and IEP documents online make it easier for team members to follow the

meeting. When team members spoke, everyone in the meeting could see who was speaking and if each person needed to agree or disagree with an IEP decision, everyone took turns stating their answers. One observation report affirmed:

> The special education teacher shared her screen and reviewed the listed accommodations and the other considerations on the IEP, such as ESY, Limited English Proficiency, deaf or hard of hearing, communication needs, blind or visually impaired, health care needs, and behavior needs. (Reflection notes: Sharing the screen gives a great visual. Everyone on the team can see the document as they address all the components of the IEP) (O5).

One disadvantage noted by the observer about meetings held through web-conferencing platforms was the technological issues. Time was often taken to help parents troubleshoot video or audio problems, participants were sometimes late if they had to download required software before joining the meeting, and if participants do not use their mute function correctly background sounds interrupted the meeting. One example described by the observer stated, "Reflection note: Parent could not get sound to work in the Zoom meeting. Special educator teacher was very good at troubleshooting to find a solution. Knowing how to troubleshoot technology issues is important in this setting" (O3).

Observation data provided only small references to school RTI processes. At one initial eligibility meeting, RTI data gathered to determine student eligibility was shared but the observer noted the data was hard to follow with no visual representation. The special education teacher noted data from two intervention programs had been gathered over eight weeks and the teacher provided graphs to the parent via email (O8). At another meeting, the observer reported a speech screener was administered online at the mother's request, but the screener did not indicate a need for a full-scale evaluation. This meeting was held using a web-conferencing platform, the

therapist displayed the screener results on the screen for all IEP team members to see (O5). All other eligibility meetings were re-evaluations and the team did not discuss any interventions or initial testing.

The researcher observed only minor references to online testing versus face-to-face testing. The observer did not note any complaints from parents or teachers about assessment results no matter the method used to administer the evaluations. In one instance the following communication was documented, "The speech therapist presented information on the student's speech evaluation. Some tests were given for auditory processing as well at mother's request to see if a visit with an audiologist is warranted. The evaluator gave the assessments online (O7)." At a phone conference meeting, the observer noted, "The school psychologist indicated he had previously sent the report to the special education teacher and the parent. He read his recommendations and asked if anyone had any questions" (O8).

Document analysis. The IEP documents listed all required team members as present. The documents do not indicate if IEP meetings were held using phone conferencing or web-conferencing methods. The eligibility reports contained the data required to determine eligibility for all students but the reports did not mention the RTI process used to collect the data. Qualified individuals performed the evaluations used to determine eligibility for special education but did not cite the methods used to administer assessments.

Research question four: What strategies are Idaho virtual school special education teachers using to provide appropriate special education services aligned to state and IDEA regulations for full-time students with disabilities?

Interviews. Interview participants, both parents and teachers, suggested the virtual school setting is a large change of placement for students with disabilities. P7 reported her daughter

was on an IEP before transferring to the virtual school she currently attends. She described how the school IEP team had to interpret and adapt her daughter's IEP to fit the virtual school setting. P7 felt the team did a great job of revising the IEP to best suit the virtual school environment. For students qualifying for their initial IEP, the team must develop accommodations, specialized instruction, and related services to meet the needs of the student with a disability in the online setting.

Research participants discussed the accommodations and supports provided to students with disabilities from their virtual school. Types of supports included technology devices, a variety of assistive technology, and general classroom aids, such as wiggle seats, sensory devices, and ball chairs. T5 summarized:

> We often do an assistive technology evaluation through the Idaho Citizens Technology Project. They go into the home and conduct their evaluation. Based on that evaluation we decide as an IEP team what we need to provide to the student. We send iPads to students, wiggle boards, and slant-boards. We provide touch screen overlays for their computer monitors, different web applications, or programs that would help be an addition to the education the students, just as it would be in any brick and mortar setting. Things are just mailed as opposed to being hand delivered.

Consistent with the virtual school connection to technology, many of the supports reported by teachers were tied to assistive technology. T8 worked in a high school setting and talked about the different types of assistive technology used by her students. They included screen readers for reading curriculum out load to students, pens to write on computer screens, and speech-to-text applications. T3 mentioned providing touchscreen computers for students unable to use a mouse and larger keyboards.

Some classroom accommodations mentioned by research participants were standard for any classroom while others were more specific to the virtual school environment. T5 spoke to more traditional classroom accommodations, such as reducing the number of spelling words or the length of writing assignments. P4 referenced modified schedules, adapted curriculum, and extra time. T4 summarized the concept of making accommodations for students with disabilities in a virtual school by stating:

> You do have to think outside the box. A lot of students who might have a writing accommodation in a general setting because they use pencil and paper may not necessarily need to happen in this virtual world if they're efficient in typing. So you really have to look at the student's skills and ability. And really I guess the biggest challenge would be deciphering how the virtual world can help but also potentially hinder a student from learning and making sure the accommodations are correct for those students.

Teachers and parents described methods used to provide specialized or direct instruction to students with disabilities as required by IDEA regulations. T2 stated:

> The certified special education teacher provides direct, specialized instruction. They get online with child and do learning activities based on IEP goals. The length of the specialized instruction is determined by the IEP team and listed under service time in the IEP.

What the specialized instruction looked like significantly varied by grade level, student need, and school practices. T7 suggested virtual special education teachers perform the same activities as a special education teacher in a traditional classroom, such as provide lessons and assignments based on IEP service times, progress monitor, and collect data. T7 reported the only difference is

she uses a webcam to see the student instead of being in the same room. T3 described the variety of techniques available to provide direct instruction to students:

> Resource classes, pull in and push out services, online breakout rooms used for support in a regular classroom, co-teaching models, one-on-one online sessions for academic and functional skills, small groups instruction for study and social skills, and behavioral interventions. We provide all the services determined by the IEP team in either a virtual setting or face-to-face depending on the need of the student.

Some of the strategies used to provide specialized instruction to student with disabilities at the middle or high school level were less individualized and more geared to a small group or whole classroom settings. T5 acknowledged her virtual school's efforts to place students with disabilities in the least restrictive environment. She noted students in her high school take resource classes, attend classes using co-teaching between special and regular education teachers, and have access to special education teachers during online office hours. P7 expressed her appreciation for the access her student has to teachers during online office hours. Students can use web conferencing, phone calls, emails, or text to contact teachers. P5 felt her high school student benefited greatly from the online high school special education classes focused on life skills. T4 described the scheduling of middle school students in her virtual school. After the team reviews the eligibility and IEP, students are placed in leveled English, math, science, and history classes. The school also enrolls students in a special education classroom called "focused instruction classes" to provide support for general education classes. T8 summarized by stating:

> We have open office hours, which is when a student can come in for tutoring or additional support. During those hours the student or parents can just email or call the teacher. We offer study skills and social skills classes taught by a special education

> teacher. And within the regular classroom at the middle and high school levels, we do a lot of co-teaching. We go into the virtual general education classrooms and co-teach using breakout rooms.

Some related services are provided face-to-face by therapists in an office or the student's home while other related services are delivered online by telehealth providers. Each of the four virtual schools had their systems and methods for providing related services to students with disabilities. "Related services are provided depending on what is best for the student. Some use virtual therapy, and some have in-person therapy. It depends on the student's needs. Everyone we work with is a state of Idaho certified therapist" (T3). Participants noted related service methods were determined by IEP teams based on the needs of the child. T5 stated, "We have face-to-face related services and virtual related services. It just kind of depends on where the student is located, parent preferences, and IEP team recommendations." T1 noted students with autism or attention issues sometimes struggle with online therapy sessions and perform better in face-to-face sessions. "We tried online speech and OT when we first started with the virtual school. My son has ADHD and did not do well. The school has since transitioned him to face-to-face services" (P2).

Speech and language services, occupational therapy, social skills, and some counseling sessions were reported to be more conducive to an online setting while physical therapy, behavioral interventions, personal care plans, and community-based rehabilitation services (CBRS) were provided face-to-face in a therapist's office or in the student's home. T6 reported her school provided behavior interventionists and CBRS personnel to work with qualifying students in their home. P3 expressed her appreciation for the opportunity her student has to attend an online social skills group lead by the school's counselor. Several parents and teachers

pointed out speech/language and occupational therapy services were successful online. “He's improving so obviously the therapy in the virtual environment is working because that's the only therapy we've been having for the last year is the virtual with the school” (P8). P1 expressed success with telehealth speech services and appreciated the amount of time it saved her not having to drive to get the therapy. She described the experience:

> Our virtual school used a telehealth provider to connect the therapist in her home to us in our home via the internet. And she uses a variety of things in that platform. She has matching games and other little game boards and sounds and things that they go through. And it's an interactive kind of whiteboard they work on and she can put videos up. She can change the view so that he can see her big and she can show him how to make sounds with his mouth and things like that.

Observations. The eight IEP meeting observations noted information on accommodations, specialized instruction, and related services. Some of the accommodations reviewed during a meeting for an elementary student included extended time to complete assignments, prompts to stay on task, frequent breaks, repeat instructions, scribe, and reword questions to simplify for the student. The observer’s reflection notes from the meeting questioned, “How do these accommodations work in a virtual setting? How involved is the mother in having to provide these accommodations to young children” (O5)? During a meeting for a high school student, the observer recorded the following accommodations:

> Presentation: Use of study guides, extra examples, answer questions about content, reading material and test items reworded or rephrased for understanding, and frequent checks for understanding. Timing/Schedule: Extended time to master concepts within the quarter. Setting: Quiet distraction-free setting, use of checklists and calendar

> reminders to help stay on task. Response: Alternate projects and assessments, test items reworded or simplified, shortened assignments and assessments. Other: Curriculum at instructional level and accommodated or adapted to meet the instructional needs, excluded or shortened assignments and lessons to focus on main concepts and ideas. The special education teacher asked for input on any additional accommodations. None given. (Reflection notes: How do some of these accommodations happen when a student is working at home without any adult supervision and classes are online) (O8)?

Observations supported interview data pertaining to specialized instruction for different age students. Elementary teachers provided academic services predominately in one-to-one settings with increased parent support, where high school teachers delivered services in more group and classroom settings with less parental guidance. O8 reported, "Math service time is 20 minutes per week. Mother is providing additional services but her time does not count towards special education service time." In the high school setting, "The student will receive 30 minutes of reading and 30 minutes of math services a week. The classes she attends are 45 minutes long but listing 30 minutes gives some cushion. (Reflection: High school students, class setting not individual)" (O6). In addition to individual and classroom settings for specialized instruction, other locations mentioned in the IEP meeting observation notes included: teacher office hours, small group, and co-teaching. Each IEP meeting observed defined the setting and time for specialized instruction, such as:

> The special education teacher addressed the need for specially designed instruction and how it will be provided in the virtual environment. The special education teacher will provide 15 minutes per week of direct math instruction online, 15 minutes of direct

reading instruction online, and 30 minutes of social skills online in a small group setting (O3).

Special education teachers addressed a variety of related services and delivery options in the IEP meeting observations, including speech, occupational therapy, behavior intervention, counseling, vocational rehabilitation, and personal care services. In O5, the mother indicated her son was currently receiving private speech services in a face-to-face setting. She feels her son does better in this environment. The occupational therapist agreed the student does struggle with online services especially since his illness has escalated. The observer reported:

> The special education teacher asked the administrator if the school can check into contracting for face-to-face services. The administrator indicated if the student is not doing well with telehealth services, we can contract for face-to-face services. The administrator asked if mom has any preferences. Mom will get back with the team. (Reflection note: Does the school need to provide face-to-face or is virtual enough to fulfill requirements) (O5).

Several observations mentioned a need for behavior interventions. In O2, the special education teacher suggested using the school behavioral specialist to work in the home with the parent to help with student behavior issues. The parent agreed this service would be beneficial. "Mom indicated he did not need a behavioral plan in this setting. (Reflection note: Behavior plan not needed when schooling at home but would be needed in a traditional classroom)" (O2).

Document analysis. Many of the accommodations listed on the IEP documents were very appropriate and easy to implement in a virtual school using an online curriculum. Speech-to-text, audio, dictation, redo tests/quizzes below 70%, and graphic organizers are readily integrated using online learning tools. The virtual setting is very conducive to accommodations

linked closely to assistive technology, schedule flexibility, and learning management system applications.

IEP documents listed specialized instruction provided by special education teachers under the services section. Times for reading, mathematics, and written language services were recorded, and the optional statements of delivery all noted direct services would be provided virtually. Related services such as speech or language, occupational therapy, and social skills were also noted in on the service page. The location for services varied from home, to special education classroom, to therapy room.

Conclusion

Chapter 4 presented a summary of the qualitative data collected from eight parent and nine teacher interviews, eight IEP meeting observations, and analysis of eight IEP documents. Four distinct themes resulted from the research data: a) compliance, b) parental involvement, c) strengths, and d) challenges. The researcher presented information on three main categories within each theme. Specific evidence from the data collection process was shared to support the study's four research questions. Participants were passionate about the new frontier of serving students with disabilities in virtual schools but also acknowledged the need for continual improvement as noted by T8:

> Thank you for doing this. I think it's about time somebody, you know, researched us. I think there's a lot of things that we're doing well and a lot of things I think could be improved upon. And, you know, this is the new way. When I started this in 2003, we had so much resistance from the state. I mean, lawsuits and audits. I mean, it was unbelievable the resistance we got from lots. And now, it's completely embraced. From

> kindergarten all the way up through college. And it's interesting for me to see the continuum and how things have changed over the last 15 years.

The researcher sought to listen and gain knowledge from participant's insightful remarks, rich experiences, and work products. Chapter 5 will expand the discussion surrounding each theme as well as add recommendations for further research and implications for professional practice.

Chapter V – Discussion

Introduction

"Human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (Vygotsky, 1978, p. 88). Public educators are critical constituents in the learning process of most children. The knowledge provided by researchers can increase understanding and aid educators in creating quality educational settings (Ballantine & Hammack, 2017; DuFour, 2015; Stahl et al., 2017). The exponential growth of students enrolled in virtual schools across the United States has created an urgent need for all educational stakeholders to discuss best practices for serving students with disabilities in an online environment (Molnar et al., 2017). In 2017, 429 full-time virtual schools in the United States enrolled 295,518 students, an increase of 17,000 students from the previous year. Research estimates at least one in 10 of those online students has a disability (Crouse et al., 2018; Miron et al., 2018; Molnar et al., 2015). Crouse et al. (2018) state students with disabilities enrolled in virtual schools are primarily untracked, and the lack of information pertaining to these students leaves unanswered questions about how to best meet their needs in an online environment.

This qualitative research study's purpose was to provide additional information to education stakeholders about students with disabilities receiving services in virtual schools. The researcher used naturalistic inquiry to seek in-depth understanding through the direct experiences of educators working in four Idaho virtual schools. The following research questions directed the study.

1. What do parents of students with disabilities in a full-time virtual school perceive to be their role in developing a valid IEP aligned to state and IDEA regulations?

2. What do parents of students with disabilities in a full-time virtual school perceive to be their role in providing special education services aligned to state and IDEA regulations?
3. What methods are Idaho virtual school special education teachers using to carry out a valid IEP process aligned to state and IDEA regulations for full-time students with disabilities?
4. What strategies are Idaho virtual school special education teachers using to provide appropriate special education services aligned to state and IDEA regulations for full-time students with disabilities?

Summary of the Results

Themes. Research data was gathered through interviews, observations, and document analysis. The qualitative data analysis process in this study established four themes: a) compliance, b) parental involvement, c) strengths, and d) challenges. The data represented by each of these themes, along with supporting literature, will guide the discussion in this chapter.

Figure 5: Themes communicated through analysis of research data.

Compliance. Since the Education for All Handicapped Children Act (EAHCA) was enacted in 1975, all children with disabilities have a right to a public education, and public schools are mandated to offer special education services to students with disabilities (Katsiyannis, Yell, & Bradley, 2001; Voulgarides, 2018). The EAHCA was renamed the Individuals with Disabilities Education Act (IDEA) in 1990, and continues to govern special education services in public schools (Smith, 2016; Spaulding & Pratt, 2015). The 39th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2017 (2018) reported 6,683,283 students with disabilities ages 3 through 21 are receiving special education services in the United States.

According to the United States Department of Education (2016), requirements set forth by IDEA apply to all public schools, including virtual schools. These compliance requirements include but are not limited to: a) child find responsibilities; b) provision of a free and appropriate public education; c) evaluation and eligibility obligations; d) IEP requirements; and e) implementing education in the least restrictive environment. The technological advances in the United States currently afford a wide range of educational opportunities for students with disabilities. Students with disabilities can significantly benefit in traditional brick-and-mortar classrooms from face-to-face specialized instruction, differentiated lesson plans, and adaptive technologies (Armstrong, 2012; Chingos & Schwerdt, 2014; NCSE, 2014). Similar special education services can also be provided to students attending virtual schools using innovative technology platforms, qualified teachers and therapists, and scientific-based learning strategies (Mellard et al., 2018; Noel et al., 2013; Ortiz, 2017).

Three distinct categories surfaced under the compliance theme in this study: a) IEP meeting requirements; b) referral and eligibility process; and c) special education services. The

Individuals with Disabilities Education Act (IDEA) lists the IEP team members required to attend meetings (Idaho State Department of Education, 2016; Individuals with Disabilities Education Act, 2004). Parent and teacher interview data indicated all required team members attended the virtual school IEP meetings, while observations and document analysis data backed up this assumption. When asked about IEP team attendance at meetings, interview participants frequently made statements similar to, "all members of the team were in attendance" or "everyone on the team was in attendance including the school psychologist" (P3 & T1). Observation notes indicated "all required members were present and introduced themselves, including the student" and "the Vocational Rehabilitation representative is present at the meeting to discuss transition options as well as all other required IEP team members" (O1 & O8). The IEP document analysis reported documents listed all required team members. IEP meeting attendance was a strength for the four virtual schools in this study.

The Individuals with Disabilities Education Act (IDEA) also addresses specific IEP components required to be reviewed at the meetings such as, student strengths and weaknesses, goals, service time, services, least restrictive environment (LRE), and transportation (Idaho State Department of Education, 2016; Individuals with Disabilities Education Act, 2004). Parents interviewed unanimously felt their child's IEP was complaint with IDEA regulations, they had ample opportunity to provide input, and all components in the IEP were covered during the meeting. When asked about required IEP team members, all teachers interviewed noted team member requirements pursuit to IDEA guidelines. Observations of IEP meetings noted, "mother is asked to provide strengths and weaknesses," "services and service times were discussed," and "student goals were reviewed and revised according to team input" (O1, O5, & O7). The IEP document analysis showed all documents covered necessary IDEA components.

Two other significant points came from the data in relation to compliance of IEP meetings. First, although all members of the IEP teams provided input during the meeting, parent participation was very prevalent. Some parents expressed specific dissatisfaction with previous brick-and-mortar IEP meetings, indicating appreciation for the opportunity to provide more input at virtual school meetings. One parent stated:

> I feel like I have even more of an input in the virtual school. I kind of know what goals they need to work on. And I believe my input is valued as far as behaviors and what they need as far as accommodations as opposed to the public brick and mortar setting. We had a harder time with accommodations there. I didn't feel like a team member as much. Like we didn't seem to create our goals together. Or like the goals were already done, and they just read them to us, and then we signed the IEP. I feel like once we switched to virtual, the team was making goals together (P3).

Observation data indicated teachers frequently asked for specific input from parents. During O7, "The special education teacher asked for input from the team on the accommodations discussed. When mom did not give input, the special education director directly asked for input from mom given her role in his learning."

The data in this study indicated all IEP members were present at meetings, and IDEA meeting requirements were met. Parents had a prominent role in meetings and provided valuable input in the IEP process. Parents of students with disabilities in four Idaho virtual schools perceived their role in developing a valid IEP as being an advocate, driver, or coordinator. Parents felt their role included providing valuable input into student's strengths and needs, present levels of performance, goals, services, and accommodations. Kendall and Taylor (2014) cited brick-and-mortar schools' failure to establish partnerships with parents led to parents

withdrawing their students from this traditional setting. Parents searching for more control of their child's education have additional avenues to pursue in today's educational frontier. The data from this study indicated IDEA meeting requirements were met while allowing for robust parent input. More guidance and research on parental roles and IDEA requirements in online learning are needed to assure the needs of students of disabilities are appropriately met in every public education setting (Kendall & Taylor, 2014; Neuman & Guterman, 2016; Ortiz et al., 2017; Rice et al., 2017).

The second point established through the data analysis was the variation of IEP meeting formats. Some virtual school IEP meetings were held via phone conferencing methods while other schools used video conferencing applications to facilitate meetings. Parent and teacher interviews indicated a preference by parents for the improved communication provided through video conferencing applications. T6 noted, "The majority of our meetings are held using a telephone conference line. So it makes it a little bit more difficult in a way because you're not able to see body language." P5 agreed when she stated:

> The IEP meeting is done on the phone. So I think it would be helpful to be done like this interview, on Zoom or on Class Connect, which is how they connect their students. But they just do it on the phone. The drawback to doing it on the phone is you're not reading people's body language or seeing their expressions or things like that. So it's harder to tell or even distinguish who's talking because you can't see who's talking.

During O3, everyone in the meeting was asked to verbally say they agreed the student did not currently qualify for speech services. Everyone took a turn indicating they agreed and the entire team could hear and see the people responding. The observer reflection notes stated, "video

conferencing allows for online, face-to-face meetings, screen sharing to display assessment results and IEP documents, and the ability to easily see who is speaking" (O3).

Effective communication between IEP team members is paramount to the success of an IEP meeting and the development of an effective IEP for students with disabilities (Rice et al., 2017; Smith et al., 2017; Tindle et al., 2015). One valuable method Idaho virtual school special education teachers are using to carry out a valid IEP process is the use of secure and efficient video conferencing applications for IEP meetings. This data supports other research studies indicating video conferencing is one preferred form of communication for online learning (Alamri & Tyler-Wood, 2107; Borup & Stevens, 2017; Velasquez, Graham, & West, 2013). This finding could encourage states to provide additional training and support to assist virtual schools in implementing video conferencing strategies.

The next category noted in the compliance theme was the eligibility process. IDEA regulations explicitly define eligibility requirements which are a large part of special education compliance (Idaho State Department of Education, 2016; Voulgarides, 2018). Within this topic, research participants noted strengths and areas for improvement. Two strengths of the eligibility process reported in the data were appropriate evaluations and team input. The research data indicated qualified personnel performed valid assessments and enough information was presented to determine student eligibility, although schools had different philosophies on virtual versus face-to-face assessments. When asked how evaluations to determine eligibility for special education services were administered, several teachers indicated all assessments were given in a face-to-face setting. Their schools contracted with school psychologists in different parts of the state to conduct evaluations, and special education teachers also traveled to perform assessments in the student's community. One of the teachers reported:

> All our testing for eligibility purposes has to be done face-to-face. They cannot be administered virtually. So our school psychologist will travel all over the state to test students. And also we have teachers all over Idaho that will travel to assess their kiddos. And then we have agencies we contract with all over Idaho as well. (T4).

Other teachers indicated evaluations were performed online with appropriate assessments being given virtually using video conferencing platforms designed for this purpose. T1 explained:

> We have a school psychologist that is available to do virtual testing, both cognitive and academic testing. They send out the behavior measures to the parents to have those filled out. They get the medical history, their educational history, and everything else from the parents. And then, of course, we have virtual speech and occupational therapists able to do virtual evaluations in those areas.

After completing virtual assessments, the evaluator used video conferencing tools to explain the evaluation results to the IEP team. The observer wrote: "The school psychologist shared her screen and displayed evaluation results using graphs, charts, and narrative" (O5). In another observation of an eligibility meeting held using a video conferencing application, the observer noted, "The special education director asked if the team all agreed that the student is eligible for special education services. Every member took a turn to verbally indicate whether they felt the student was eligible for special education services" (O7). Overall parents expressed satisfaction with the eligibility process no matter the method used to complete and report evaluation. P3 explained:

> My boys were in the public setting prior to virtual schooling. And just comparing those two settings, I feel like the IEP process and the eligibility process had been a lot smoother

> through the virtual school. I feel like there's been a lot more of a cohesive team and not to say that they didn't do a good job when we were in a public school, but it just feels like our virtual meetings using video conferencing are more organized and easier to understand and easier to follow.

The data in this study noted certified evaluators administered appropriate evaluations in all IEPs reviewed by the researcher. Research participants expressed satisfaction with both face-to-face and virtual assessments performed for eligibility purposes. Online evaluation practices are becoming more prominent as the telehealth industry expands (Fernandez et al., 2016; Mellard et al., 2018). The research in this study reports virtual assessments are one method Idaho virtual schools are using to carry out a valid IEP process aligned to state and IDEA regulations for students with disabilities. As states closely regulate the expansion of telehealth services, opportunities for virtual schools to provide valid online evaluations will increase (Basham et al., 2016; Mellard et al., 2018).

The appropriate team members were present at the eligibility meetings and given an opportunity to provide input into the eligibility decision. Teachers interviewed noted, “And then our service providers also are on our virtual meetings and they provide input that way,” “The parent is instrumental to our setting, and we rely very heavily on their input during our meetings,” and “As a special education teacher, we encourage input from the whole team and don’t try to say this is how it is going to be or this is what we are going to do” (T4, T9, & T2). P7 expressed her feelings:

> One of the things I really liked was that they took input from everyone. It's not like they just chose, okay, you're going to see this person. They're going to test you. And then

> based upon what they see and what I see, we're going to let you know what your eligibility is and what your education needs are.

Providing all IEP team members input throughout the eligibility process is critical in establishing strong partnerships as the team moves forward with developing an IEP to meet the student's needs (Smith et al., 2017; Tindle et al., 2016; Wills et al., 2014). Once again the data from this study focused on the importance of parental input. The parents of students with disabilities perceived their role in developing a valid IEP aligned to state and IDEA regulations to be an equal and valuable member of the eligibility team where all members provided input.

Two challenges noted in the referral and eligibility category were establishing effective response-to-intervention (RTI) programs and performing valid classroom observations. An RTI system must address the different learning needs of individual students through scientific-based interventions and track student progress to determine the impact of interventions. This process is complicated, requires numerous resources, and involves high levels of training for personnel in any setting, but is especially challenging to coordinate in a virtual environment (Cavanaugh et al., 2011; National Council for Special Education, 2014; Smith, 2016). Teachers described their school's RTI process in their interviews. Many commonalities appeared such as "data collection," "curriculum-based measurements," "tracking progress," and "Tier 2 interventions." One teacher described the RTI process in her school:

> If there is a parent that has a concern or a teacher has a concern about student learning, we refer them to our RTI team. The team meets with the parent and works together to determine concerns and gather data. And then the team discusses the appropriate interventions. We generally use a computer-based program that begins with a diagnostic the students are able to take that places them, sees where their holes are, sees what they

> need to work on. It is computer adaptive. And then once they've completed that diagnostic, then it adapts and gives them instruction and practice on the concepts that that child needs. And then it also automatically progress monitors that child. And it's nice because then parents and the teachers are able to see that progress and we're able to set goals according to the diagnostics and what it shows that child needs. We can individualize those goals and then monitor their progress in that area (T1).

Although all teachers were able to articulate their school's RTI process, they noted the need for continual improvement in this area. T8 stated, "We've come a long way in our school. But I think as far as setting up a really good response-to-intervention program, we are still working on that."

Another compliance piece referred to by research participants was useful classroom observations. When determining if a student has a specific learning disability, observations of the student in the general education classroom are a required component of the process (Idaho State Department of Education, 2016; Individuals with Disabilities Education Act, 2004). In 2014, the U.S. Department of Education started collecting information from states on the status of virtual schools. For this data collection process, they defined a virtual school as:

> A public school that offers only virtual courses; instruction in which children and teachers are separated by time and/or location. In addition, interaction occurs via computers and/or telecommunications technologies, and the school generally does not have a physical facility that allows children to attend classes on-site (U.S. Department of Education, 2016).

Interviews with teachers noted the difficulty, given the general education teacher is separated from the student by time and/or location, of conducting good classroom observations. "As far as

an observation goes, that is the one area in a virtual school that I feel is difficult and we have not figured out how to do it well yet" (T2). T8 expressed frustrations with obtaining valid classroom observations:

> Classroom observations are difficult in a virtual school and an area we are working to improve. Most of the observations that I make are when they're meeting with me because they don't meet regularly with their teachers. The teachers are required to do one hour of online office hours per week and typically the kids don't come.

Although noted as challenges in this study, two methods Idaho virtual school special education teachers are using to carry out a valid IEP process aligned to state and IDEA regulations for students with disabilities include efficient RTI practices and sound classroom observations used for eligibility purposes. This research adds to the call for additional clarification from state agencies on how to appropriately implement practices in a virtual environment to adequately meet IDEA guidelines (Basham et al., 2016; Burdette et al., 2015; Collins et al., 2015; United States Department of Education, 2016).

The last category noted in the compliance theme was special education services. Three general areas were addressed: a) support, b) specialized instruction, and c) related services. A variety of assistive technology and classroom supports are provided for students with disabilities in public schools (Fernandez et al., 2016; Higgins et al., 2012; Kurz et al., 2014). Research data indicated virtual schools provided required supports to meets the needs of the students with disabilities in their school. Parents stated, "We have received sensory devices and ball chairs," "my child uses a tablet and dynabox provided by our school," and "our school provided a laptop, webcam, and microphone to access services" (P4, P3, and P7). T5 noted the school provided the

same type of programs, devices, and equipment as any brick-and-mortar school would have, they were just mailed to the student's home.

A wide variety of teaching strategies and settings are available to provide specialized instructions to students with disabilities within a virtual school (Alamri & Tyler-Wood, 2017; Basham et al., 2015; Ferdig & Kennedy, 2014). Research data from this study noted numerous methods for providing specialized instruction to students in a virtual environment including one-to-one instruction, small group, co-teaching, and special education classroom settings. Teachers indicated the same processes are utilized in online learning as in a traditional setting, just using technology to link students, teachers, and classrooms. T3 explained:

> We meet with our students based on whatever the service time is. We meet through Blackboard Collaborate. We run lessons and assignments and everything, just as a special education teacher would in a brick and mortar school. And as those students complete those assignments, I progress monitor. I collect data. I do all the same things as a special education teacher would in a brick and mortar school. It's just done via the computer. They can use a webcam. I can use a webcam. So we see each other and can talk to each other. We can also type in the chat.

Strategies used to administer specialized instruction to students with disabilities varied depending on the age of the student and individual school practices. Interviews, observations, and document analysis indicated younger students usually received specialized instruction in a one-to-one setting while middle and high school students were taught in small group or classroom settings. The observation notes recorded reflection notes such as, "elementary student receiving 1:1 services from special education teacher online," "middle school student enrolled in small group social skills," and "high school student attends online basic English class" (O5, O2,

& O8). T6 reported using “co-teaching methods” while T7 indicated all her services were provided “in a 1:1 setting.” The IEP document analysis also noted differences in how services were provided depending on the age of the student.

The study noted a variety of methods used by Idaho virtual school special education teachers to provide appropriate special education services aligned to state and IDEA regulations for students with disabilities including direct one-to-one online sessions, small group online meetings, co-teaching, and special education online classes. The service delivery methods were frequently directly related to the age of the student with younger students receiving more one-to-one services. Research on best practices for teaching in an online environment is plentiful (Alamri & Tyler-Wood, 2017; Borup & Stevens, 2017; Greer et al., 2014; Pace et al., 2017). Developing effective online teaching practices aligned to education theories such as Vygotsky’s Sociocultural Theory of Learning will take time, collaboration, and research (Dipietro et al., 2010; Murphy et al., 2015; Pace et al., 2017; Radford et al., 2015). This study recognized special education teachers from all four virtual schools were all instructing students with disabilities using their own methods. Sharing strategies for the delivery of special education services in an online environment through state conferences, professional development opportunities, and teacher preparation programs would better meet the needs of students with disabilities.

The last item addressed in the special education compliance area was the delivery of related services. IDEA regulations require schools to provide related services to students with disabilities found eligible through a comprehensive evaluation. IDEA regulates the types of related services available to support the educational experience of special education students in public schools (IDEA, 2004; Idaho State Department of Education, 2016). Special education teachers from the four virtual schools in this study addressed a variety of related services and

delivery options, including speech, occupational therapy, behavior intervention, counseling, vocational rehabilitation, and personal care services. While related services were available to all qualified students with disabilities in the four schools, the method of service delivery varied. Some related services were delivered using telehealth services while others were provided in a face-to-face setting either in a therapist's office or in the student's home. Teacher's indicated the IEP team decided on service delivery based on the best setting for the student. T3 reported all related services in her school are provided by Idaho certified therapists, and the IEP team determined delivery methods depending on what was best for the individual student. A teacher from one of the virtual schools explained:

> OT and Speech are provided virtually for the majority of students. There are a couple of students that have been working with therapists for years, or we have autistic students that don't adapt well to change that we contract with other providers for in-person services (T1).

Occupational therapy and speech/language services were most often delivered virtually with some individual counseling sessions and social skills groups held online as well. Behavior interventions were provided exclusively in a face-to-face setting.

Teletherapy was one method used by Idaho virtual school special education teachers to provide appropriate special education services to students with disabilities. The researcher noted the IEP team frequently made the decision to provide face-to-face or telehealth related services based on the needs of the student. Assuring the needs of students with disabilities are the determining factor in choosing related service delivery methods should be addressed as states develop guidance and provide professional development for virtual school special education staff (Basham et al., 2016; Collins et al., 2015; Rose, 2014). According to Mellard et al. (2018), as

telehealth continues to grow as an option for students with disabilities in virtual school settings, questions about parent involvement, consistency of therapists, and technology training need to be studied further.

Parental Involvement. The nature of virtual education necessitates increased parental involvement while many parents choosing to educate their student in a virtual school are looking for more control of their child's education (Rice et al., 2017; Richardson et al., 2015; Smith et al., 2017). Miron et al. (2018) noted a growing number of virtual schools serving students grades K – 12 with approximately 14% of those students coming from a home school setting. Students in the four Idaho virtual schools participating in this study are schooling at home with limited face-to-face experiences with general education and special education teachers. The data from this study indicates virtual schools create a setting where parent involvement increases and becomes a more significant factor in the success of students with disabilities, especially for students in lower grades.

Three apparent categories surfaced under the parent involvement theme in this study: a) increased parent input; b) parent as a learning coach; and c) lack of parent support. Research supports the importance of parent involvement in education. In an online setting, the parent role includes supporting instruction, administrative tasks, and motivating students (Burdette & Greer, 2014; Smith et al., 2017; Tindle et al., 2015). Research data from this study noted the virtual setting facilitates an opportunity for increased parent input in the development and implementation of the student's IEP. Teachers frequently expressed the importance of parental input in determining the present level of performance, appropriate goals, needed accommodations, and service times or type, given their proximity to students. T4 noted:

> I definitely think the parents' role is different in a virtual school because they're acting as both teacher and parent at the same time. So when they're coming, they are giving us input on how their students are interacting with our school. So we rely really heavily on their information to develop our plans.

P5 felt her role was to help develop the goals on the IEP, giving input on last year's goals and suggesting new goals. "They ask what I feel her strengths and weaknesses are. It has to do with my input and what I see in her and what I would like to happen for her in the coming year" (P7). Parents echoed the sentiment of teachers as they described their responsibilities:

> My role is making sure that he has the right accommodations, the right things are written on the IEP, and the right goals are added to best meet his needs. Because I'm working with him more than anybody else, especially being in a virtual school, I understand some of that better than other people or I can see where his strengths and weaknesses are faster (P1).

Observations and document analysis support the interview findings with phrases such as, "Reflection: The school asks for a lot of input from the parent," "special education teacher adds goals given by parent,", and "after accommodations are read, mom is specifically asked what she wants changed or added for accommodations" (O3, O7, & O2). During another observation, the observer reported:

> Mother reports progress towards all goals. Mother addresses the need for a behavioral and functional problem-solving goal. IEP goals are centered around behavior interventions – Mother is asked to review her concerning behaviors – Mother feels like the behavior plan from last year was very accurate and would like to stay with the plan (O1).

Observations noted parents were frequently giving input on the present level of performance, appropriate goals, needed accommodations, and service times or types.

When parents feel valued, parent satisfaction increases and IEP teams become more cohesive (Beck, Egalite, et al., 2014; Burdette et al., 2014; Rice et al., 2017). Research participants in this study indicated that increased parent input produced greater parent satisfaction and stronger IEP teams. Teachers used phrases such as, “I think the biggest success is parents are happy, happy, happy,” “We definitely view ourselves as customer service people,” and “I’d say our parents are really happy” (T2, T6, & T8). T1 gave her opinion on why she feels virtual IEP teams are stronger and more cohesive because of increased parental input:

> I feel really good when we have a parent that we're talking to on the phone, or we've just had an IEP meeting, and all they do is say how grateful they are they've made this choice for their child, because they feel like they have a voice and are part of a very effective IEP team. Where in the typical school setting they haven't necessarily felt that way. And they feel like all the choices are being made by everybody else. And we try really, really hard to make those parents feel like they have a voice here and that they're being heard. And that we're trying to do what's best for their child. And I know that there are school districts that try this. But I think it's just really intimidating for parents when they go into a meeting with all these people that are professionals, and it's scary for them, and they feel like everybody else has control of the situation, when their child goes to therapy and things like that. And they don't really know what's going on behind closed doors when their child is out of their hands. And here they feel like they have a lot more control. I've had multiple parents just tell me thank you, and they're so appreciative.

Parents expressed satisfaction with increased input and indicated teams were stronger in the virtual setting. P2 expressed, “The team has listened to me and met the needs of my children. Unlike other experiences I have had in a brick and mortar school.” Another parent concurred:

> Honestly, if anything I think the IEP has worked better and IEP team has built stronger relationships, at least for us personally in the virtual setting than it did for us in a brick and mortar school. And that's part of the reason that we transitioned from a brick and mortar school and an online school (P7).

Parents in this study frequently indicated they had left brick-and-mortar schools because they were dissatisfied with their student’s special education services and their role on the IEP team. Parents of students with disabilities in Idaho virtual schools perceived their role in developing an IEP and providing special education services aligned to state and IDEA regulations should be more significant and have a greater impact on their student than their previous role in the brick-and-mortar setting. Special education teachers in the four Idaho virtual schools in this study encouraged and supported increased parent input as a strategy for developing an IEP and providing special education services aligned to state and IDEA regulations. Although this study is limited to a relatively small number of participants, the parent satisfaction fostered through the special education teacher customer service approach may provide insight for brick-and-mortar special education programs and opponents of virtual education (Beck & LaFrance, 2017; Cook et al., 2013; Kendall & Taylor, 2014; Rice et al., 2017; Saultz & Fusarelli, 2017; Tindle et al., 2016).

Another category topic found in the research data was the parent being viewed as a learning coach. The virtual school setting changes the parent’s role in their student’s education (Burdette & Greer, 2014; Ortiz et al., 2017; Tindle et al., 2015). A study by Burdette and Greer

(2014) indicated 27% of parents of students with disabilities in virtual schools reported spending more than three hours per day helping their student with school work. Parents said their most significant roles were: a) scheduling their student's work time; b) family-school communication; and c) making decisions about assessments and accommodations. Other parental involvement areas noted by parents in this study were dealing with student behaviors, ensuring equal access to the curriculum, and time management.

Research participants in this study frequently referred to the parent as a "learning coach" or "aide." T5 summarized by stating:

> The parent is considered a learning coach and then I always say that I'm going to help facilitate the education of their student. Because I am teaching the special education goals, I am going to help fill in the gaps. I tell parents if you are working with your student on something and they can't figure out how to help the student or to modify the work, call me and I will help. I'm not going to just side-step the parent and say I'm only doing this or I am only focusing on this. We work with parents to help make appropriate accommodations in the general education setting as needed.

Parents support the concept with their statements:

> So my role is to see what their needs are, their individual needs, some accommodations that they might need to thrive in the school because I am the one who is with them all day. I'm the one who's giving them the instruction and working with them (P2).

Observations of IEP meetings and IEP document analysis supported the parent acting as a learning coach. In one session, the observer recorded, "Mother does all the reporting on classes, needed resources, and curriculum focus first. Special education teacher then talks about her part in the curriculum and providing assignments, accommodations, and specific lessons" (O1).

During O8, the special education teacher asked the mother about the student's personal care skills. Mother reported on gaps in this area and suggested goals they should pursue. Observations and document analysis noted specific accommodations reliant on parent participation in the virtual school setting. Some of these accommodations included, "minimize distractions," "frequent prompts to stay on task," "scribe," and "modified answers – parent will interpret his answers due to his verbal skills" (O5, O8, D3, & D5).

When specialized instruction or related services are being delivered online, parent participation as a "learning coach" supports student success (Burdette & Greer, 2014; Mellard et al., 2018; Ortiz et al., 2017; Smith et al., 2017; Waters et al., 2014). Research participants noted the value of parent support when using online special education services. One teacher stated:

> Our related services are provided virtually the majority of the time. They work directly with the parent and the student online. The parent is right there with the child when the services are being provided online. We encourage parental involvement because then the parent can work with the child during the week on those same related service goals (T2).

Parent input supported the concept of providing additional support during service times. P1 noted, "I try to sit by him and make sure he's listening and paying attention. I can also see how she's explaining things to him and what sounds they're working on so we can work on that through the week." Observations noted special education teachers and therapists expressing appreciation for the parent's presence during service times and the ability for the parent to reinforce concepts at home.

The amount of parent support is dependent on the age of the student, younger students needing more assistance and older students gaining more independence (Beck, Egalite, et al., 2014; Tindle, Mellard, et al., 2016; Waters et al., 2014). P4 described her situation:

> My daughter's pretty self-sufficient. Like I said, she's a senior this year. When she first started her IEP, I'd have to stay on track and make sure that she did her work, that she had her meetings, and she met with the people she was supposed to meet with. But now she's very independent. In the beginning, I had to do that a lot. Because going from a brick and mortar school to a virtual school it was quite different. But like I've said, we've been doing it so long and now we're at the end of her schooling. She's really self-sufficient and adaptive. And she's pretty much taken it on as her own so that I don't have to be involved quite as much as I had to before. But I still really stay in contact with her special education teacher and if she's getting behind or if she's struggling, we can make sure we can get back on track, whether on her end or my end.

This category answers two of the questions in this research study. Data indicates using the parent as a learning coach is one strategy Idaho virtual schools are using to provide appropriate special education services for students with disabilities. As well, data point out parents of students with disabilities perceive their role to be a learning coach when it comes to providing special education services in a virtual school environment. Numerous research studies acknowledge the critical role parents play in the learning process of students with disabilities using online learning (Ortiz et al., 2017; Smith et al., 2017; Tindle et al., 2015; Waters & Leong, 2014). Other research studies call for more guidance on how virtual schools can meet IDEA regulations for delivery of special education services, including the definition of teacher and parental roles (Basham et al., 2016; Burdette, Franklin, East, & Mellard, 2015; Molnar et al., 2017). This study has added to the literature on the roles of parents and special education teachers working with students with disabilities in virtual schools. Parents and teachers must use all available resources to efficiently work together and communicate closely to support student

success. As more virtual schools are available to students with disabilities in grades K-12, parents participating as a “learning coach” will be a continued topic of conversation (Burdette et al., 2013; Mellard et al., 2018; Waters et al., 2014). With parents taking on more of a teaching role, how teachers can guide and help parents apply scientific-based learning methods such as Vygotsky’s Sociocultural Learning Theory will need to be addressed.

The third category noted in the parental involvement theme was what happens when there is a lack of parental involvement with a student with disabilities in a virtual environment. Parental involvement can be a double-edged sword given the setting of a virtual school. When students are left alone to fend for themselves, factors such as self-discipline, time management, and motivation come into play (Ferdig & Kennedy, 2014; Greer et al., 2014; Ortiz et al., 2017). Teachers in this study expressed a concern with the adverse effects caused by a lack of parental support. T6 noted frustrations when a parent communicates with a student differently than she would. She stated, “When you call home to talk with the learning coach and they turn around and scream at their children, it is quite difficult. We're here to help and support them. And that's why those behaviors start happening” (T6).

Because students work from home in a virtual school, teachers have limited control over the student. If students lack self-discipline or time management skills or if a student struggles with the ability to stay focused on tasks, minimal parental supervision can be detrimental (Crouse et al., 2018; Ortiz et al., 2017; Waters et al., 2014). T4 indicated the lack of support from parents hinders her ability to provide additional assistance to the student. She stated, “We cannot force the student to log into a computer every day and to be there and to do things” (T4). One teacher expressed her concern:

> I think sometimes when the parents choose to leave the student to school on their own, it can be very difficult. And sometimes they have several other siblings at home and the students are left to their own demise. Sometimes you are trying to give direct instruction and the student just disappears. And you are like where are they? Where is their mom? And there just may not be an adult at home to supervise. I have had situations where I can't reel the student in because maybe he is watching YouTube on the other monitor or hiding under the desk, or watching TV or just does not want to school with me. And sometimes there is no one there to help redirect the student. That can be really challenging (T5).

While teachers felt most parents understood the responsibility they assume when enrolling their student in a virtual school, some parents do not. Teachers reported an increased responsibility to teach parents about the skills needed to support their student in a virtual school environment. T2 stated:

> Sometimes the special education teacher has to spend a lot of time educating the parents because they do not have the skills needed to support virtual schooling at home. Part of my job in a virtual environment is to educate the parent and the child. It can be a bit of a challenge because the parents oftentimes will keep me on the phone for two hours explaining what is going on with their child and getting advice. I love the challenge but it can be very time consuming.

T3 indicated some parents felt frustration because their student had not been successful in a brick-and-mortar setting and not they were struggling in a virtual school. "A lot of parents don't realize how much responsibility falls on them as a parent when they bring a student into the virtual world. And I think at times that can be overwhelming" (T3).

Teachers stated it could be challenging when students are not receiving the education and services they need to be successful because parental involvement is lacking. One teacher noted:

> We have children that are scheduled for assessments and parents just never keep their appointments. And these are typically children that are really, really, really in need of the service. And it hurts really bad when you see a kid that needs something so badly, and a child needs a quality education and they're not getting it. We try to encourage a parent in that situation to put their child in a different school. But they have the control and the choice. But it is hard to see that when a child needs a different setting and the parents do not agree (T1).

Students with social or emotional needs require even more parental involvement (Rice et al., 2017; Sakiz, 2017) When parents were not fulfilling their responsibilities or did not have the skill set to deal with student needs teachers felt frustration. T6 explained:

> The biggest challenge is there are some students who come to us with those social/emotional needs or behavior needs. And we do not have control over their setting. And sometimes their setting will contribute to those needs. A student may not typically need behavior or intervention services or some different types of goals or whatever. But because their home environment is their general education setting, they're still needing behavior supports because of interactions with learning coaches or with other people. Whereas in a general education class or a typical brick and mortar school, you know, teachers may be able to handle some of those behaviors in a different way where the students' behaviors may not be seen as such a big need.

Research data from this study indicate if students do not have the skills needed to school on their own, without parental involvement they will fail. Parents and teachers noted the

importance of parental participation in a virtual school setting which is supported by the literature on this topic (Burdette & Greer, 2014; Curtis, 2013; Noel et al., 2013; Tindle et al., 2015). This research noted when parents decide to enroll their student in a virtual school, they are making a substantial commitment to provide the time, training, and structure needed for student success in an online environment. Learning theories such as the zone of proximal development (ZPD) are difficult to achieve without a considerable time commitment from a parent and an understanding of how students learn (Aubrey & Riley, 2016; Fani & Ghaemi, 2011; Karpov, 2014). The significant findings in this study on the importance parental involvement plays in student success concurs with recent research on the need for virtual schools to educate parents on their role, train on supporting practices, and provide needed tools for student success (Cook et al., 2013; Ferdig & Kennedy, 2014; Ortiz et al., 2017, Richardson et al., 2015). Another strategy used by special education teachers in four virtual schools in Idaho to provide appropriate special education services to students with disabilities is to encourage more parental involvement.

Strengths. Existing research on virtual education points to some strengths of this setting for students with disabilities (Crouse et al., 2018; Toppin & Toppin, 2016; Wearne 2016). Delivery of special education services, student contact with teachers, and family participation look different in a virtual school environment (Coy, Marino, & Serianni, 2014; Mellard et al., 2018; Hashey & Stahl, 2014). A study conducted by Alamri and Tyler-Wood (2017) reported the importance of teaching presence (being visible or present) and social presence (feeling a connection) to the success of online learning. The study also pointed out the need for increased human interaction for students with disabilities in an online learning environment (Alamri & Tyler-Wood (2017).

Three additional categories surfaced under the strengths theme in this study: a) individualized support; b) virtual setting; and c) relationships. Research participants noted students with disabilities in a virtual school received more one-to-one time from parent learning coaches, special education teacher's online direct instruction, general education teacher availability, and increased related service times. T8 noted:

> One of the greatest advantages for a student with disabilities in a virtual school is the extra support. I've never calculated out the numbers. And I'm sure we could calculate out the numbers, how much more one-on-one support a student gets in a virtual world than what they would get in a brick and mortar school.

Because of the virtual school environment, the access to learning coaches and teachers happens in a different format but when done correctly can increase student success (Coy et al., 2016; Hashley & Stahl, 2016). T3 expressed her thoughts on the advantage of one-to-one time with a parent:

> So students are exited off IEPs all the time. I just had two other situations where I was co-teaching the math course for special education students. And two students had their three-year evaluation done, and both of them were able to exit out of math. They no longer needed the support. And I think the one-on-one intensity and the way that our curriculum is run—our curriculum is definitely a very intense curriculum in our school setting. And I think just the support you get from the parents, the student truly I believe gets additional and more supports that what they would in a brick and mortar setting because they have the parents with them all day long helping coach and teach. They have the teachers pretty much readily available anytime they need help. Plus the special education teacher anytime they need help.

Parents in the study felt students received more one-to-one time with special education teachers and related service providers. P7 stated when her student works with a teacher, it is always one-to-one. She said, “It’s not her and two or three other kids and a teacher working together. It’s really one-on-one. Now she works with a teacher 45 minutes twice a week and it’s just her and the teacher.” P8 related her feelings:

> The other thing that is a really, really good strong point of virtual schools is that she gets that one-on-one time for her services every week. And I know for her that that's really helpful instead of sticking her in a classroom with however many kids there were. And if she got, you know, if she just didn't get that little bit of extra help she needed because the person was too busy with another student.

Research participants also noted increased one-to-one time with related service providers. T5 reported:

> You get more therapy time each week. When I worked in the brick and mortar setting, your IEP would say 20 minutes of speech a week. But you wouldn't always get that. There were weeks when my SLP was out of town and she never came to get that kiddo. And there were no make-up compensatory services for that missed session. It just--they didn't get it that week. Well, in our model, you're getting about an hour once a week of OT or speech. In behavior, you're getting up to 20 hours sometimes of behavior. And if you miss a session of OT or speech or whatever, we do compensatory services. We'll make that up to make sure you're getting what you're entitled to and what's listed on that IEP. So that's a definite strength and positivity.

Observation and document analysis data noted teachers delivered the majority of special education services for elementary age students in a one-to-one setting except small group social

skills sessions. In middle and high school, special education services for high needs students with disabilities were provided in one-to-one settings while other students attended special education classes.

One method special education teachers in Idaho virtual schools are using to provide appropriate special education services to students with disabilities is one-to-one online instruction. The research did indicate teachers and parents felt students with disabilities received more one-to-one direct instruction online than in a brick and mortar school setting. Research participants reported special education services in a traditional setting were frequently given in small groups, however in the online setting, especially with younger children, services were often provided one-to-one with a teacher or therapist using video conferencing. Greer et al. (2014) found the use of video conferencing in online learning can mimic the one-to-one, face-to-face, direct instruction needed for students with disabilities. This would allow teachers to use scientific-based learning methods, such as the zone of proximal development. Data in this study concurred with additional research indicating effective special education services for students in virtual schools are frequently provided in one-to-one settings using video conferencing technologies (Alamri & Tyler-Wood, 2017; Greer & Deshler, 2014; Velasquez et al., 2013).

The most highlighted category in the strengths theme was the virtual setting. Being schooled in an online environment provides numerous advantages for some students with disabilities (Crouse et al., 2018; Marteney & Bernadowski, 2016; Thompson et al., 2012). Many students with disabilities have medical needs that make attending a traditional school very difficult. Those needs could include illness, anxiety, or an inability to focus (Fernandez et al., 2016; Thompson et al., 2012; Toppin & Toppin, 2016). Some parents choose to school from home because of safety issues such as bullying, harassment, or school violence (Cook et al.,

2013; Kendall & Taylor, 2014; Rice et al., 2017). Other parents are searching for more flexibility and migrate to alternative school settings providing more options in curriculum, time, and location (Beck, Egalite, et al., 2014; Thomas B. Fordham, 2013; Wearne, 2016).

Thompson et al. (2012) verified online schooling provides a unique means for a student with medical needs to maintain educational progress. Research participants noted how students with medical needs benefit from the virtual school setting. T1 explained:

> We have kids in the virtual school that have really intense medical needs. Their health needs to be monitored constantly. And because they're in a virtual school, they're able to be there in their mother's presence or the presence of a nurse, that she is able to do that constantly and take care of their needs. And she's a great mom, very intelligent woman. And she does a great job instructing her children. And that's a setting that that's really, really helpful when that mother would be concerned for her child's life every minute of the day if her children were in the school setting.

T9 spoke about how the virtual setting can help students with attention deficient disorders:

> We have a lot of kids that have ADHD, it's extremely hard for them to focus in a classroom when there's a lot of other students around. So this at least provides them the opportunity to have all those distractions eliminated. We do see a lot of success with kids coming in and finishing school where they're not going to finish it in the brick and mortar. So that's one huge positive for kids that have such a hard time focusing when there are 28 other kids in the classroom with them, they can't focus at all. In our school they can focus, they can complete assignments. Because they don't have those distractions, they do a lot better. So that's a huge success.

Parents expressed their feelings in interviews and IEP meetings about the benefits of the virtual school for their child experiencing medical trials. “My child is having frequent hospital stays. I don't worry about him falling behind or missing out on assignments or anything because he can do some things when he starts perking up and feeling better in the hospital” (P2). P3 explained her family’s situation:

> My son’s anxiety is extremely high. Transitions are difficult. He's really excelled this year because of finding a program that works for him. Being able to do it at home and on our own time and not having to worry about the stress of school and the over sensory stimulation and just from the anxiety that he has around people. My husband and I both agree that if he was in a public setting, we don't even know where he would be right now.

P6 expressed her positive experience with her student in a virtual setting, “I like the virtual school because my boys like it. It has helped their anxiety, so it's just more conducive to learning if they don't have that social anxiety. I have loved watching their confidence grow.” T6 noted, “ I had one student who has been identified with autism. And the lights and the little sounds of the lights would drive him crazy. So they're able to get away from those events that just really affected him.” Another parent stated:

> There's like no distractions because they're in their home, a safe environment. They're not distracted by other kids. They don't have the social anxiety. So that's taken away. And then they can focus and concentrate on their own learning. They have to learn how to organize their time wisely. And they've been really good at knowing when they need a break. They get up and walk around because sometimes it's hard to sit in front of the computer all the time. It depends on the kid if they get their energy from others, which mine don't. They like to isolate. But it's been really good for us, for the boys. Because I

> don't really think there's a way they can handle the public school. They would have dropped out by know (P7).

During O3, the observer noted, “Mom feels the virtual school has been a great setting for her student because of his increased illness. Mom feels like the school is working with her to help his education continue with the difficult situation.” In another meeting, the observer reported:

> The special education teacher asks if we want to keep using the OT through telehealth. Mom feels telehealth meets the needs of not having to take the student out of the home. In the winter he has prolonged illnesses and she would not be able to take him out in the winter many times (O4).

With increased school violence and students with disabilities experiencing bullying in traditional public schools, many parents want to school their students in the safe, comfortable environment (Beck, Egalite, et al., 2014; Cavanaugh et al., 2013; Cook et al., 2013; Kendall & Taylor, 2014). Participants in this study reported the safety advantages of choosing a virtual school setting. T6 stated, “We've had a lot of students come because they have been bullied at school. They're able to get away from peers that really affected them and come to a comfortable setting where they can feel more successful.” T4 reported:

> Our school provides a safe place for students. A lot of the kiddos that come to our school have had issues at school with bullying or with poor peer interaction, and so the successes that I've had have really come from students who feel safe schooling for the first time. And one in particular, he was an initial referral for me. And he had just shut down. He did not want to work. He was feeling horrible. He had done really well until middle school. And then when he hit middle school, he just decided he was done with school. And mom came to us and she said, “You know, I'm just done. I don't know what to do. I

> don't know how to help him. I think I'm just going to have to, you know, be okay with him doing what he can." And we went through the referral process, got behavior intervention services in place and occupational therapy. And this year he's finding so much success and he's just grown. We have a lot of those students in our school.

T9 noted, “We get a lot of kids with emotional disturbances, bipolar, a lot of autism, a lot of anxiety, a lot of depression. Because those are typically the kids that aren't doing well in a brick and mortar setting.” T8 also noted working with students needing a setting outside the traditional public school:

> I think particularly for kids with emotional issues, mental health issues, anxiety, depression, and autism, that are not comfortable in social settings, kids that have been bullied, we have a lot of those, this is an opportunity for them to get an education without all the drama we all know is in brick-and-mortar high schools.

The nature of virtual education, students and teachers separated by time and place, offers flexibility in individualizing curriculum, pacing, and scheduling (Cavanaugh et al., 2013; Posey et al., 2010; Thomas B. Fordham Institute, 2013; Wearne, 2016). The more flexible setting can be more conducive to student needs and parent desires as noted by the research participants in this study. T6 listed some of the reasons students with disabilities find the virtual setting fits their needs:

> We have other students who come just because they needed to be schooled maybe in the afternoon rather than the morning based on their disability and their needs. So they have more of that flexible scheduling. Or they can get it done in four hours and go and work. And we have a lot of returning students as well, or students who are married, or had children, who have been able to come back and get their diploma. So it's pretty awesome.

Parents interviewed in the study had a wide variety of reasons why they felt the flexibility of the virtual school setting met their student's needs. Some of those reasons centered around pacing and scheduling. P2 stated, "I feel my kids have been able to move at their own pace and work at their own pace. I have watched my 2nd grader flourish in his reading." P1 noted, "When you're in a virtual school, parents can help kind of adjust the schedule. Maybe you do more school work in the morning or in the evening or even some of your classroom work on the weekends." P7 added:

> One advantage I can see with a child with special needs for me personally is that my daughter can work at her own pace. And she can work in her own time frame. So if she's not feeling it in the morning, she can work on it in the evening. And she can work on it at her pace. And I think that's one of the reasons that we've been so successful. Obviously there's deadlines and times when things need to be turned in. But it's not so pressured versus when she was in a traditional school because they're only in school for a certain amount of time versus she has the whole day now.

P5 agreed when stating:

> I think the best thing about the virtual school is the ability for her to be able to take breaks, where she wasn't able to do that in the brick and mortar school. Being able to take a 15 to 20-minute break and do some of her sensory seeking activity. She likes to swing. We have a swing set where we live. Or pace if it's not snowing or something. She has to do her sensory seeking, wiggle out the wiggles type of thing.

Other parent comments focused on the virtual setting providing flexibility to individualize curriculum or allow students and parents to attend activities and travel. One parent explained:

> I think it's been really great to be able to customize her education because she's bright but she works at a much slower pace than a typical child. And the school's been really workable with making accommodations of what counts as a credit for her for high school. And so that's been really awesome for her because we've been able to find things that are really engaging for her and that are at an appropriate level for her content wise and skill level wise to meet her academic credits without being too overwhelming for her or being irrelevant for her. So she's really grown within that. She's grown a lot of independence and she's grown a lot of confidence and a lot of skill, because we've been able to move at her pace and at her level (P4).

Another parent expressed her appreciation of the flexibility provided by a virtual school setting:

> I do appreciate the flexibility. So she does therapeutic horseback riding every Wednesday afternoon. It's two hours from where we live. So being able to move her classes around and go to horseback riding and come back and then finish classes in the evening is just really convenient. Or for her to go out with her community support worker when we have time scheduled. Or to schedule appointments or things like that. We travel some too. And we went to Germany for two weeks and just took school with us. And that was really convenient. It was really nice (P5).

Parents of students with disabilities in four Idaho virtual schools perceive their role in providing special education services aligned to state and IDEA regulations to be a personal caregiver, protector, behavior interventionist, and time manager. The data in this study noted the virtual school setting provides parents of students with disabilities an option to school from home to better accommodate medical needs, safety concerns, and desires for more flexibility. In a survey completed by 3,547 parents of students with disabilities in virtual schools, 24.3% reported

their child had a health care need. Asthma and/or allergies was the top health concern reported at 47% followed by attention deficit disorder at 38%, other (included 130 different medical diagnoses) at 24.8%, and depression, anxiety, eating disorders, or other emotional problems at 24.6% (Fernandez et al., 2016). In research conducted by Wearne (2016), 38.9% of parents chose to school at home because of safety concerns. Research also indicates a large number of parents prefer to school at home because their child was being bullied or experiencing behavior issues at their previous school (Kendall & Taylor; 2014; Beck, Egalite, et al., 2014; Wearne, 2016). Many parents are also looking for more control and flexibility with curriculum, time, and schedules to better meet the needs of their families (Cavanaugh et al., 2011; Cook et al., 2013; Neuman & Guterman, 2016). The findings from this study agree with research on why parents chose to school students with disabilities from home using a virtual school setting, but the ease of having virtual related services gives students with specialized needs the ability to continue to thrive in all areas of their development. Additionally, the ability to have therapy virtually within the home setting helps students who are often ill to stay more active even through the winter.

The last area addressed in the strengths theme is strong relationships between IEP team members, including students. Virtual students appreciate teachers who work to get to know them and create caring relationships (Borup & Stevens, 2017; Cavanaugh et al., 2011; Crouse et al., 2016). Given the lack of face-to-face contact with the general education teacher, especially in middle and high school, many students with disabilities can depend extensively on the special education teacher to help them be successful. Time spent with one-to-one specialized instruction, electronic communications, and frequent progress monitoring work to facilitate strong connections between the teacher and student (Borup & Stevens, 2017; Coy, 2014; Crouse et al., 2018). Increased parental involvement in virtual school settings creates a need for consistent

communication between all IEP team members, therefore, developing deeper relationships (Burdette & Greer, 2014; Rice et al., 2017; Tindle et al., 2015).

Research participants indicated increased one-to-one instructional time, parental involvement, and communication helped form strong relationships. Teachers noted a willingness to spend the needed time with students to help them be successful. T9 stated:

> I have been pretty amazed by some of the meetings online and the conversation that goes on back and forth between the Special Ed teacher and the parents. So they seem to develop some pretty good relationships to help support getting those kids online and doing their work. I do know that some kids become very dependent and the kids will always be online with the teacher. And the teacher will provide more time if the student needs it, so it is much different in this world.

Teachers noted the virtual setting gave parents more input, therefore, forming strong team relationships. T5 reported:

> One strength of our virtual school is the close relationships that you get with your parents. When I worked in the brick and mortar, I don't really feel like I was asking the parent to be a big team member, part of the IEP team meeting. I feel like they were really getting talked at and talked to and told what we're going to work with you on. I feel like the parent is really a big part of the IEP meetings in this model and of their student's education and we really value that relationship with the parent. We have really close-knit relationships with the families. And that I think is just another huge positivity.

Increased parental involvement leads to a need for constant communication thereby building stronger relationships between parents and the school (Borup & Stevens, 2017; Noel et al., 2013; Rice et al., 2017). T4 shared:

> We're a really tight-knit team here and we are on top of things. Because we want to make sure deadlines are met and things. So we're in constant communication through email, IM. And I think it really makes it so that we have to be in contact with parents a little more, just to create that triangle of communication to ensure that we're meeting the needs of that student, both at home with the learning coach and also with us. So that's a strength. I think in brick and mortar schools a lot of the time it's really student/teacher relationships that are built and that parent relationship is just when the meetings come or when you need something. So our school really facilitates that triangle. So that's a strength.

T8 shared stories about some of the students she had formed strong relationships with:

> I had one student that graduated two years ago. And he failed for two solid years, maybe two and a half solid years of Fs. Just didn't do anything. And I kept bugging him and bugging him and bugging him. And I'd be just like meet with me. We'll meet two, three times a week if we have to. And he graduated in the last quarter. He turned 21 two weeks before his graduation date. And he passed. And he still says, “I never would have done it without you.” I have a lot of students that I get calls from all the time. I got a call just a couple of months ago about a student who said, "Hi, do you remember me? I graduated four years ago. And remember that program you talked about, that vocational rehabilitation?" I have kids that call me back all the time. And, you know, it's good. That's why I do it. Obviously, it's not for the money, for the glory. But I think in this setting, you get close to your kids because you have them for a long time. And these are kids that have a lot of needs. These are kids that have been to lots of other schools. These are kids with autism and depression. I had a student last spring that called me at 9:30 at

> night and said, "I don't think I can meet with you tomorrow because I tried to kill myself tonight, and they're going to put me in the Behavioral Health Center and can I call you later?" And just those kinds of things where you get on a level with some of these kids that stick around. And I would say probably two-thirds of them stick around. And you know, sometimes you're their only friend.

Strong relationships between IEP team members enhance the student's educational experience (Borup & Stevens, 2017; Burdette & Greer, 2014; Crouse et al., 2018). Parent interviews and observation notes reiterate the strong relationships present in the four virtual schools participating in this study. P3 expressed her feelings toward the teachers working with her student:

> Our general education teachers are a huge support. Our special education teacher has been just a great support especially from the beginning of this school year all the way into it, kind of designing curriculum. She really cares about my child and she's on top of it. She's really great. And I can text her any time with any issue and get a quick response. It's really great.

Another parent described her experience as a parent of a student with disabilities in a virtual school setting.

> I've noticed that the people that I work with, I just feel like they care. I just feel like they actually care about me and my child and her succeeding. And I never felt like that before. Her whole schooling from grade school through middle school I just never felt like someone cared like I feel like they care about her and her special education needs at my virtual school. Like I said I don't know if that's the schooling or the people I've worked

> with. It's just been an amazing experience to have a special education teacher in this environment that cares (P7).

Reflective comments within the observation notes frequently state, “Very positive environment among team members.” During O5, the student was sitting on the mother’s lap and waving to the team members as they spoke and appeared on the screen. The student immediately recognized the occupational therapist when she appeared on the screen and wanted to talk with her. Another observation report stated, “The special education teacher and behavioral specialist talk about their relationship with the student and thank mom for all her efforts. (Reflection Note: Comments indicate there is a close relationship between mother, child, special education teacher, and behavioral interventionist)” (O1).

Special education teachers in the four Idaho virtual schools in this study are working to build strong relationships with students and parents to strengthen the IEP process and provide appropriate special education services to students with disabilities. Parents and students value being an important part of an IEP team, frequent teacher communications, and belonging to a caring community (Beck, Egalite, et al., 2014; Borup & Stevens, 2017; Velasquez et al., 2013). Special education teachers in this study frequently noted the importance of building caring relationships with families and students. Parents in this study expressed an appreciation for the relationships between IEP team members, especially special education teachers, as well as a perception of increased voice on the IEP team due to their enhanced roles with students schooling at home.

Challenges. The fourth theme developed through the qualitative data analysis in this study was challenges faced by students with disabilities in a virtual school setting. Opponents of virtual education, state and local education agencies, teachers, and administrators point out that

online learning has areas needing improvement and additional research is required to establish guidelines governing students with disabilities in this environment (Hashey & Stahl, 2014; Richardson et al., 2015; Saultz & Fusarelli, 2017; Stahl & Karger, 2016;). As online learning continues to grow, all educational stakeholders will need to work together to overcome the challenges faced by students with disabilities in virtual schools (Abrego & Pankake, 2010; Coy et al., 2014; Toppin & Toppin, 2016; Torre, 2013). Three additional categories surfaced under the challenges theme in this study: a) technology; b) lack of self-discipline; and c) less direct contact with teachers.

Technology, including access, understanding, and applications, was addressed throughout interviews and observations. Technology is an enormous piece of online learning, and efficient integration, implementation, and training are imperative to successful student learning in a virtual school setting (Crouse et al., 2018; Higgins et al., 2012; Richardson et al., 2015). Current technology issues faced by virtual schools include training, integration, and security (Mayes, Natividad, & Spector, 2015; Stahl & Karger, 2016). Research participants noted virtual school settings created a need for the training of parents and students on technology. T2 reported, “It is part of my job as a virtual school teacher to train students and parents on how to use technology.” T6 concurred when she stated:

> One big challenge is the technology aspect of a virtual school. We have families who come and know nothing about computers. Don't even know how to email. For me at least, are the hardest parts is being able to support these families who don't understand technology.

One parent indicated she needed assistance with digital paperwork used at the virtual school:

> My hardest challenge technology challenge was probably getting the documents pushed around to sign. I just didn't understand the software the first time they sent it to me. And so I didn't sign it quickly because I didn't understand what I was supposed to be doing. But once I kind of asked some more questions and the teacher walked me through the process, there was nothing to not understand. I just had never used it before (P1).

In O3, the observer made the following reflection note, "(Parent could not get sound to work in the video conferencing meeting. Special educator teacher was very good at troubleshooting to find a solution. Knowing how to troubleshoot technology issues is important)." For younger students, a learning coach is essential to support the use of technology so it does not become a distraction to the learning process (Greer et al., 2014; Ortiz et al., 2017; Tindle et al., 2015). One parent shared her experience with her kindergarten student:

> The younger he was, especially in kindergarten, it was harder for him to use the mouse, so it was harder for him to interact with the teacher. It wasn't impossible because my kids have used online learning, different programs like Learning Eggs and things, so I wasn't one who banned all computer use like some people do. So that helped because he had some ability, but it was harder for him to navigate. And I think it was a little bit harder for him to interact and pay attention to a teacher on a computer, especially when he was back in kindergarten (P1).

Adequate access to technology devices and internet connectivity is imperative for the success of students with disabilities in a virtual school (Higgins et al., 2012; Mayes et al., 2015; Mellard et al., 2018). T1 noted, "One problem we face is technology. Some parents try to participate in a virtual school with limited technology resources. It's detrimental for student learning and difficult to provide appropriate special education services in a virtual environment

without adequate technology." Adequate internet connectivity is also essential for teachers providing services to students with disabilities in a virtual school. T2 stated, "Sometimes families don't have strong enough internet, their computer is not functioning properly, or we have to train students and parents on how to use technology."

Virtual learning environments require strong educational technologists to develop, maintain, and repair technology in the school (Crouse et al., 2018; Mayes et al., 2015; Richardson et al., 2015). Technology is not infallible and will always be a challenge in virtual schools as noted by teachers and parents in this study. "Sometimes the internet goes down or students have problems at home. They've lost internet, so they've lost time. The teachers are great about saying there's this library, take your stuff and kids can work from there" (T9). P7 noted:

> When there is an internet outage, we can't do anything about that. If she can't meet with her special service person, she can talk to them on the phone but they can't work on schooling if there's no internet. Has that happened? Maybe once or twice. But it's got to be something really fluky, you know, out of the ordinary. Technology issues happen, computers not turning on, computers deciding to do updates, you know, that's happened before when she's tried to do services. Just technology type stuff.

Special education teachers in the four Idaho virtual schools in this study are using technology access, training, and applications to carry out a valid IEP process and provide appropriate special education services to students with disabilities in their schools. Using technology to improve communication methods, implement scientific-based learning strategies aligned to Vygotsky's Sociocultural Learning Theory or similar models, and support special education services is a constant challenge faced by educational technologists (Higgins et al.,

2012; Mayes et al., 2015; Velasquez et al., 2013). Part of teacher preparation programs for virtual school teachers needs to focus on the understanding of technology integration as well as how to teach parents about the use of technology in a virtual school environment (Kennedy & Archambault, 2013; Pace et al., 2017; Smith et al., 2016). The participants in this study noted the challenges faced by special education teachers as they provided student access to technology, taught parents and students how to use the available technology, and learned how to use technology to strengthen student learning effectively. The data in this study concurs with other research indicating a need for more teacher preparation programs focused on preparing special education teachers to work in an online learning environment (Molnar et al., 2017; Pace et al., 2017; Smith et al., 2016).

The next category discussed in the challenges theme was lack of student self-discipline. Virtual education creates a need for increased student independence, motivation, and organization. Without a face-to-face teacher directing instruction, additional responsibility falls to students and parents (Ortiz et al., 2017; Rice & Carter, 2016; Smith, 2016). The need for effective communication between students, parents, and teachers increases when students struggle with self-discipline. If students do not have the skills to self-direct their educational experience, parents and teachers must take more responsibility until students can gain the needed skills. (Coy, 2014; Ortiz et al., 2017; Waters et al., 2014). Students with disabilities exhibiting behavior issues will need even more support to gain the skills required to be successful in a virtual school setting (Beck, Egalite, et al., 2014; Borup & Stevens, 2017; Burdette et al., 2013).

When students are parents are left to determine their schooling schedule, it takes organization, discipline, and time management (Rose, 2014; Stahl et al., 2017; Tindle et al., 2016). Research participants expressed frustrations when working with students lacking the self-

motivation to be successful in the virtual school setting, especially when parent involvement is minimal. T8 noted how she spends a lot of time helping families set up structured school schedules. She stated, “I think self-discipline is a challenge for students with disabilities in a virtual setting. We're dealing with a population and an age group that typically doesn't self-regulate very well anyway. When you add disabilities, then you have some challenges.” T3 experienced the same scenario:

> I will honestly say the biggest challenge I’ve seen is time management, and that’s not just time management with the student. I’ve also heard parents say that time management is one of their biggest challenges. We have school from 8:00 am to 4:00 pm, that’s our schooling day. And parents, they say, well, we can’t get all the schooling done. And when I sit down with them and I say, okay, I really want you to break your day out for me. What time do you start schooling? Well, we don’t start until about 9:30, 10:00. Well, okay. There’s two hours you lost in the morning. You know, teachers are at work at 8:00 am. I would say time management is definitely one of the biggest challenges.

P1 explained how parental involvement lessens as the student gets older and learns to direct their own school experience. When her student was in kindergarten, he needed her to sit with him 100% of the time. Now he is in second grade and much more independent in his learning. She can leave him to self-direct his learning for more extended periods of time. P7 noted students with disabilities that lack self-motivation and struggle to stay focused would not excel in a virtual school setting without a parent committed to spending large amounts of time with the student.

Because of the limited face-to-face contact with teachers in a virtual school setting, students lacking in self-discipline have an opportunity to ignore schooling responsibilities.

Without parental intervention, these issues can affect student learning (Cavanaugh et al., 2013; Crouse et al., 2018; Ferdig & Kennedy, 2014) Participants noted concerns with students not logging into classes, not attending scheduled services, and not being able to keep students focused during specialized instruction sessions. Since school attendance was tied to student participation in online classes, these behaviors led to truancy issues as well as failing grades. T8 noted, “I think just getting those kids to show up. That's the biggest challenge in a virtual school, I get a lot of kids that just disappear.” Similar concerns were shared by T9, “Sometimes it's difficult to get the kids to get online and do the work. The teachers often contact the parents. For some situations, parent contact works and for others, it does not work.”

When students with disabilities displayed behavior concerns, the situation was even more challenging according to T4:

> So one of the challenges is a lot of parents do enroll their students here because of behavior concerns in the brick and mortar. And if parents are working full-time or if they are not engaged in the schooling process, then that creates a huge challenge where the student's failing here. We comply with the attendance laws and we hold our students to the same standards of a brick and mortar. And so when a parent enrolls them here, sometimes they feel like, well, this is home school. It's easy. They don't need help. They're going to do it themselves. And we see that that student fails. And then we have to go to truancy and manifest determinations. And it just gets taxing and difficult. So that's a challenge for me when we don't get that parent support.

T7 experienced similar outcomes for students with disabilities exhibiting behavior concerns. She stated, “One challenge in a virtual school is the involvement level, especially for students that have behaviors. Being engaged in the curriculum and really applying themselves can be hard

when there's nobody there to push them." "I constantly struggle with setting up times for student services and then the student does not show up" (T9). T8 summed up the situation when she said, "In a virtual setting, it's easier for students to hide out."

The parents of students with disabilities in this study perceive their role in providing appropriate special education services aligned to state and IDEA regulations is to teach students self-discipline, motivate students, and promote organization skills. Research participants acknowledged the challenge presented when students lack the self-discipline to school in a virtual school setting. Although the general education and special education teacher can support student learning in a variety of ways, online learning creates a situation where developing student self-discipline skills falls in large part to the parent and student (Rice & Carter, 2015; Tindle et al., 2015; Waters & Leong, 2014). Curtis (2013) noted student self-motivation is critical to the success of students in an online learning environment. However, students with disabilities, especially younger students, may need assistance in growing self-discipline, motivation, and organization skills and much of this role falls to the parent (Barker & Gossman, 2013; Ortiz et al., 2017; Tindle et al., 2016). The data in this study concurs with other research noting the need for virtual schools to create an orientation process to appropriately educate parents and students on the responsibilities they assume when using online learning (Ortiz et al., 2017; Stahl et al., 2017; Tindle et al., 2015).

The last category detected in the challenges theme is less direct contact with teachers. Given the virtual school setting, teachers are not face-to-face with the students for hours at a time on a daily basis. This distance requires teachers to utilize technology to facilitate valuable communication methods when working with students with disabilities in a virtual school (Crouse et al., 2016; Dipietro et al., 2010; Greer et al., 2014; Pace et al., 2017). Traditional teacher

preparation programs do not specifically prepare instructors to work in a virtual school environment. New systems developed specifically to meet the needs of online teachers will improve instructional practices and help teachers utilize the best communication methods available (Crouse et al., 2018; Kennedy & Archambault, 2013; Smith, 2016). Currently, many online teachers are dependent on training provided by virtual schools, their own exploration, and limited scientific-based professional development courses on online teaching methods (Kennedy & Archambault, 2013; Pace et al., 2017; Smith, 2016). Even when teachers are using current best teaching practices, more responsibility for supporting students with disabilities in a virtual setting falls onto students and parents (Ferdig & Kennedy, 2014; Greer et al., 2014; Ortiz et al., 2017; Rice et al., 2017).

Research data from this study found less direct contact with online teachers to be a challenge at times. The online teacher's role can fall back to being a facilitator when teachers do not implement best online teaching practices (Crouse et al., 2018; Greer et al., 2014; Kennedy & Archambault, 2013). "A challenge in the virtual school environment is the teacher does not physically see the child every single school day and does not have as much contact with the child as they go through the learning process" (T2). T9 noted some teachers tend to provide more directions than instruction and do not use effective teaching or communication methods. She stated, "I think a lot of teachers that teach virtually forget that they're teachers." T8 shared her concerns about general education teacher roles:

> Special education students are with general education teachers for eight or nine weeks. They don't know them. The General Ed teacher may never have spoken to this kid. Whereas in a brick and mortar setting, the General Ed teacher, they're in their class and they see them face-to-face on a daily basis. In our setting, they don't. I think it's hard for

> them to reach out to these students because they don't teach them on a daily basis, they facilitate and grade papers. I think in our setting, the General Ed teacher can easily become absent. For most students, I would say 95 percent they're absent. They show up to the meeting because they have to but provide little input.

Strong communication skills and applications are essential to bridging the gap of less direct teacher contact. For teachers to provide suitable accommodations, build strong relationships, and provide appropriate instruction, they will need to move from the facilitation mode to high-level online teaching strategies to encourage student engagement (Crouse et al., 2016; Pace et al., 2017). T3 described the challenges she faces with student/teacher communication in her virtual school:

> Sometimes it is extremely challenging to communicate with students, as much as they know how to text and they know how to Snapchat and all of that stuff, they don't know how to send an email to their teacher to ask a question. And when they do ask a question, they write things like, I don't get this. Well, what is this? So understanding how to communicate with their teachers I think is another challenge. When they're in a live session, they can raise their hand and they understand that. But when they're at home and they're working on a math problem and they don't understand that math problem, they either don't know how or they're not willing, I'm not sure, to communicate that. And they've all been taught how to use the snippet tools. Snip the picture of the problem. Email your teacher and just say, you know, I'm working on math. And I'm working on question number 6. Here's the problem below. Here's how far I got but I'm not understanding. Somehow I'm not getting the right answer. Could you help me? In a brick and mortar school, that's easy. You walk into your teachers' room. You show them your

> paper and you point to it and there it is. But to really think outside the box and communicate with your teacher.

If the teacher does not have enough contract with the student to understand their specific needs, providing appropriate classroom accommodations can be very difficult. T8 described the system her school has in place to make sure general education teachers are aware of the classroom accommodations for each student. The special education teachers provide a spreadsheet each semester to general education teachers listing the accommodations for each of their students. T8 stated, “Even after providing a detailed spreadsheet, I find the application of accommodations in the classroom disjointed, not equitable, and not necessarily appropriate. Because general education teachers don’t see the student, they don't understand the disabilities.” Data from parent interviews echoed teacher statements. “Because of the virtual environment, teachers don't know my kids. They don't see what my kids deal with or struggle through on a daily basis. They don't have nearly the opportunities to see strengths and weaknesses” (P4). P6 expressed similar feelings, “Teachers don't know the kids. They're not here. They can't see it. Sometimes really hard to communicate the severity of the struggle or the impact of something or justifying why a particular approach or a particular plan is appropriate.” P5 summarized:

> I've never met my daughter’s teachers in person. And they’ve never met my daughter in person. I don't know even know what they look like and I don't know if they even know what my daughter looks like except for maybe like a picture. But just if she were to spend any time with her at a regular school, they could get to know her and find her pretty fun, or challenging.

In order to compensate for the lack of direct contact between teachers and special education students, virtual schools will need to utilize best online teaching practices, encourage

active parental involvement, and use current technologies to improve communication and best meet student needs (Rice et al., 2017; Richardson et al., 2015; Tindle et al., 2015). This adds additional responsibility on the virtual special education teacher to become a strong link between all members of the IEP team, especially with the student. Teachers noted the need for parent involvement and effective communication in the virtual school experience. One teacher noted:

> A challenge in the virtual setting is that the special education teacher in a virtual school does not have as much contact personally with the child as they would in a brick and mortar classroom setting. With virtual students schooling at home, the parent must take on a more direct role and students must develop strong self-motivation and communication skills. There is just not as much interaction with the special education or regular education teacher and without parental input and student communication, student needs can be overlooked (T1).

T9 indicated the parent's role is significant when it comes to scheduling the student to be online, helping students stay focused, and encouraging student/teacher communication when needed. She felt the special education teacher's role was to assist students with course work, provide special education services, and communicate with general education teachers to make sure accommodations are applied appropriately. One teacher addressed the need for parental involvement for students with behavior issues:

> I think it's hard to write behavioral goals and to monitor behaviors, because we don't see the student outside of our virtual setting. And so that's something that the parents really handle. And so when we're writing social skills goals or study skills goals, we're really relying heavily on the parent to help us monitor those. And so that's different than the brick and mortar (T4).

P2 felt some accommodations or interventions could be missed due to the lack of direct teacher contract. “A teacher in a brick-and-mortar school who is working with them every day might pick up on different things than I do. They may be able to adapt to his challenges a little more or find accommodations for things” (P2).

Because students with disabilities in online learning environments have less direct contact with general and special education teachers, parents in four Idaho virtual schools perceive their role is to frequently communicate with special education teachers, facilitate IEP accommodations, and advocate for student needs. Once again, the need for additional parent involvement for students with disabilities in a virtual school is acknowledged. To mitigate the challenges created by less direct teacher contact, virtual schools must utilize effective communication methods, best online teaching practices, and supplementary parent support (Almari & Tyler-Wood, 2017; Borup et al., 2013; Rice et al., 2017; Velasquez et al., 2013). To provide appropriate special education services in a virtual setting, communication between special education teachers and parents about student needs, suitable accommodations, and student progress is essential (Borup & Steven, 2017; Coy; 2014; Ortiz et al., 2017). The parents in this study expressed concerns the lack of direct communication hindered teachers in understanding specific student needs. The researcher noted a need for increased preparation for online teachers to assure they have the resources and understanding to minimize the effects of less direct teacher contact in a virtual school environment.

In summary, the four research questions guiding this study were answered in the following manner:

1. What do parents of students with disabilities in a full-time virtual school perceive to be their role in developing a valid IEP aligned to state and IDEA regulations?

- To be an equal and valuable member of the eligibility team where all members provided input;
- provide input on student strengths and needs, present levels of performance, goals, and services;
- be an advocate, driver, and coordinator in the IEP process; and
- serve in a capacity that will be more significant and have a greater impact on their student than their previous role in the brick-and-mortar setting.

2. What do parents of students with disabilities in a full-time virtual school perceive to be their role in providing special education services aligned to state and IDEA regulations?
    - To function as a learning coach;
    - serve in a capacity that will be more significant and have a greater impact on their student than their previous role in the brick-and-mortar setting;
    - to be a personal caregiver, protector, behavior interventionist, and scheduler;
    - to teach student self-discipline, motivate students, and promote organizational skills; and
    - to frequently communicate with special education teachers, facilitate IEP accommodations, and advocate for student needs.
3. What methods are Idaho virtual school special education teachers using to carry out a valid IEP process aligned to state and IDEA regulations for full-time students with disabilities?
    - Use of secure and efficient video conferencing applications for IEP meetings;
    - use of virtual evaluations to determine student eligibility;
    - development of efficient RTI practices;

- development of sound classroom observations methods;
- support and encourage increased parent input;
- build strong relationships with all IEP team members; and
- use of effective communication methods.

4. What strategies are Idaho virtual school special education teachers using to provide appropriate special education services aligned to state and IDEA regulations for full-time students with disabilities?
    - Use of direct one-to-one online sessions, small group online meetings, co-teaching, and special education online classes;
    - use teletherapy for some related services;
    - use of parents as learning coaches;
    - support and encourage increased parental involvement;
    - provide more one-to-one instruction and therapy, especially for younger students;
    - build strong relationships with parents and students; and
    - provide technology access, training, and applications.

Theoretical framework. Vygotsky's Sociocultural Theory of Learning can be applied when evaluating the effectiveness of virtual education for students with disabilities. Vygotsky believed social interactions play a fundamental role in a children's learning (Daniels et al., 2017; Vygotsky, 1978). "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological) and then inside the child (intrapsycholological)" (Vygotsky, 1978). The potential for learning is contingent on the zone of proximal development, a level of growth attained when students engage in social behavior. According to Vygotsky (1978), the depth of skills acquired through

peer collaboration and adult guidance exceeds what can be obtained alone. The zone of proximal development depends on full social interaction (Aubrey & Riley, 2016; Karpov, 2014; Murphy et al., 2015).

Adults such as parents and teachers are conduits for providing a child cultural history, social context, and language. Today culture tools include electronic forms of information access. About 99% of the world's technologically stored information was in digital format by 2014, and in 2016 over half of the world's population was connected to the internet (Mayes et al., 2015). Technology has infiltrated the cultural history, social context, and language surrounding our students thus affecting how Vygotsky's theories are applied in the classroom. Learning is a social activity directed by adults that are more knowledgeable on specific concepts. When done well, online learning can tie directly to Vygotsky's theories through teacher scaffolding, social interactions, and group work (Aubrey & Riley, 2016; Karpov, 2014; Murphy et al., 2015).

The results of this study found students with disabilities in virtual schools had access to adults, both teachers and parents, to provide scaffolding. However, online learning dictated more parental involvement, effective communication between IEP team members, and student self-discipline than a traditional brick-and-mortar classroom. As noted in the results of this study, students with disabilities have less direct contact with teachers in a virtual school setting, and the roles of the parent is enhanced. Online courses use technology to engage the social dynamics of learning through prominent social networking tools, peer to peer collaboration forums, and web-based communities and can help compensate for less direct teacher contact. Through the use of technology, virtual classrooms can contain the social ties necessary for learning in Vygotsky's theories. If technology is employed correctly, it can foster formal and informal learning groups, as opposed to students working in isolation (Crouse et al., 2018; Higgins et al., 2012; Mayes et

al., 2015). The participants in this study worked with special education students in a variety of settings including, one-to-one, co-teaching, small group, and resource classroom settings. As well, students, parents, and teachers used a mixture of communication methods.

Conclusion

Millions of immigrants worked diligently to build our country based on their dedication to freedom, opportunity, and choice. Education is foundational in the continual pursuit of achievement and happiness in our country (DuFour, 2015; McShane, 2015). The Digital Revolution has brought about a multitude of tools to transform and enhance educational opportunities for students. Living in the Information Age requires education to reevaluate practices, mindsets, and cultures to meet the needs of our society (Davis, 2013; DuFour, 2015; Saiger, 2016; Toppin & Toppin, 2016). As school choice options in the United States continue to grow, parents are the consumers searching for the best educational setting for their child. Virtual education is currently a forerunner in the school choice movement (Bernstein, 2014; Bhatt, 2014; Davis, 2013; Stern et al., 2015).

There are currently nine virtual charter schools in the State of Idaho, each school uniquely designed to meet the needs of students. Each school is mandated to serve students with disabilities and meet the regulations set forth by IDEA (Idaho State Department of Education, 2016; Idaho State Department of Education, 2017a). The participants in this qualitative study unanimously agreed virtual education is working for many their special education students. Members of this research study shared their real-life experiences through interviews, observations, and document analysis. The researcher drew the following conclusions from their responses.

All research indicated special education eligibility, IEP, and services were compliant with IDEA guidelines. Although all schools complied with IDEA regulations, the methods for implementation differed from a traditional brick-and-mortar school setting. All required members of the team attended IEP meetings. Participants expressed a preference for IEP meetings held using video conferencing software to improve communication and clarity. With the current availability of numerous quality video conferencing platforms, this technology can provide virtual schools the ability to greatly improve communications in virtual IEP meetings as well as other parent, student, teacher, or team interactions.

Participants in this study indicated the special education referral and eligibility process within these four schools met all compliance requirements. However, valid general education classroom observations and developing effective response-to-intervention (RTI) processes are challenging in a virtual school. Observations in a general education classroom can be difficult because of the lack of direct contact with general education teachers. Developing successful RTI programs was an area marked for continual improvement within the four virtual schools. Virtual schools should look for ways to share current best practices in these two challenging areas and continue to seek direction from state and national educational agencies.

Parents were very active participants in the student's special education process including support during required direct services. Parents were satisfied with their student's services and frequently attended special education services to gain the ability to reinforce concepts with their students throughout the week. Students with disabilities, especially younger students, regularly received specialized instruction in a virtual one-to-one setting. Virtual schools used a variety of methods, such as co-teaching, small group, or online classroom settings to provide services to older students. All related services were delivered to students in one-to-one sessions virtually,

either at home, or at a therapy office. Combined with parental involvement, online education supplies of a variety of innovation and effective methods for delivering special education services.

Frequently parents searching for an alternate way to educate their children are looking for more control over their student's education (Thomas B. Fordham Institute, 2013; Tindle et al., 2015; Water et al., 2014). Data analyzed in this study noted virtual education necessitated a high level of parent involvement for student success. Parents were able to offer valuable insight into their student's present levels of performance, appropriate goals, behavior issues, and other IEP components. Daily parent participation in their student's education was crucial to assist students with study schedules, content support, and focus. Younger students required more parental assistance and older students needed less help as they gained organizational skills and self-discipline. The parent's presence during special education services allowed for more consistency and strengthening of educational concepts. A lack of parental involvement in a student's virtual education can lead to frustration, truancy, and failure. When parents accept and act upon the additional responsibility placed on them when their student schools online, virtual education can be a rewarding, successful, individualized educational experience for students with disabilities.

The literature surrounding students with disabilities in virtual school consistently agrees there are strengths and challenges faced by all educational stakeholders in this situation (Collin et al., 2015; Coy et al., 2014; Molnar et al., 2017; Richardson et al., 2015; Saiger, 2016). This study noted several strengths for students with disabilities attending a virtual school. Participants felt students with disabilities receive more individualized support in an online setting from one-to-one time with special education teachers and additional personalized support from a parent learning coach. The ability to provide a great deal of individualized support to students with

disabilities facilitates the application of Vygotsky's Sociocultural Learning theories such as the zone of proximal development. Special education teachers and learning coaches can more easily determine current levels of performance and provide specially designed learning to exclusively meet the needs of the students.

The virtual setting provided a haven for students struggling with anxiety, bullying, depression, and other health concerns. The escalation of school violence in recent decades shakes parents, students, and educators. Parents have more control and feel students are learning in a comfortable, safe environment. Students struggling with attention issues excelled in an environment allowing for frequent breaks, freedom for movement, and allowances for pacing. The education anytime and anyplace philosophy of virtual schools offered parents and students more flexibility for educational experiences and more time together. The virtual setting of schooling from home is seen as an enormous advantage by many parents. The virtual setting allows parents more freedom to school anytime and anywhere, which aligns with Vygotsky's Sociocultural Theory of Learning in which student's environment plays a critical role in their learning process. The three essential themes of the learning process addressed by Vygotsky, culture, language, and zone of proximal development, can be applied in innovative ways in a virtual school environment.

Data analyzed in this study indicated IEP team members formed close relationships to support student learning through effective communication, one-to-one interactions, and positive school culture. Increased parent involvement in the educational process created a setting where parents felt more valued as a team member, increased satisfaction with special education services, and more control of their child's education. Because parents are more aware of their child's current level of performance, they can more easily apply the zone of proximal

development methods in their child's daily activities and interactions. As virtual schools continue to improve communication methods and special education services, strong IEP team relationships will positively affect the learning process for students with disabilities.

The research study brought to light several challenges for students with disabilities in a virtual school environment. Given technology's pivotal role in virtual education, technology development, maintenance, and training are a continual challenge for virtual schools. The teacher's role includes the responsibility to educate students and parents on a wide variety of technology integration issues. Technology is not infallible, and plans must be put in place to compensate for technology failures. Educational technologists must be recruited and put in place to support virtual education. Virtual schools must persistently strive to apply educational theories such as Vygotsky's Sociocultural Theory of Learning to the online learning environment as technology continues to advance.

Online learning requires students to utilize skills such as self-discipline, motivation, and independence to excel in this setting. When students lack these skills, it will have negative results for student learning. Parents and special education teachers take on an important role of teaching and developing these important life skills for students with disabilities in a virtual setting. More support is required for younger students. The goal is for students to develop more self-discipline, time management, and organizational skills as they grow older and become more independent in their learning process.

With limited direct contact from general education teachers, more responsibility falls to parents and students to direct the structure, pacing, and accommodations within the classroom for students with disabilities attending a virtual school. Because the student with disabilities is schooling at home, parents need to be available to deal with student behaviors, focus, and

questions. It is important for virtual schools to educate parents on the additional burden that falls to parents and students when students are schooling from home and have less direct contact with teachers. Lack of direct teacher contact can be slightly negated through improved communication between parents, students, and the special education teacher. Virtual schools need to focus on overcoming the challenge of less direct contact to the best of their ability through improved communication methods, updated technologies, and improvement of online teaching strategies. Teachers must focus on maintaining the role of a professional applying scientific-based learning theories such as Vygotsky's zone of proximal development and not fall into the role of a facilitator.

The researcher concludes virtual schools can provide a valid educational setting for students with disabilities. However, the researcher also notes a need for further research, more pro-active guidance from state educational agencies, and increased professional development opportunities for virtual administrators and teachers. Research participants frequently reported a need for continual improvement in such a new educational setting. "Thank you for doing this. I think it's about time somebody researched us. I think there's a lot of things that we're doing well and a lot of things I think could be improved upon. And, you know, this is the new way" (T8). The researcher felt honored to have had the opportunity to learn from such dedicated, optimistic, and talented educators.

Recommendations for Further Research

The literature is resonant with differing views of virtual education in the United States (Beck & LaFrance, 2017; Saultz & Fusarelli, 2017). According to Cavanaugh et al. (2013), barriers connected with traditional learning lead to a high drop-out rate for students with disabilities in brick-and-mortar settings. Students with disabilities are enrolling in virtual schools

across the country, and some data suggests they are joining at a higher rate than other student populations (Allday & Allday, 2011; Coy, Marino, & Serianni, 2014; Hashey & Stahl, 2014). As educational opportunities continue to expand, parents and students are looking for the setting that best meets their needs (Beck, Egalite, et al., 2014; Rice et al., 2017; Thomas B. Fordham Institute, 2013). Continued research on how to best meet the needs of students with disabilities educated in a virtual environment is essential. (Basham et al., 2016; National Council for Special Education, 2014; United States Department of Education, 2016).

This research study focused on special education programs in four Idaho virtual schools. As virtual education in Idaho and across the country continues to grow, the researcher recommends the continued review of special education processes in virtual schools to support and document the evolution of these programs. The performance of students with disabilities in virtual schools based on grades, attendance, longevity, and graduation rates should be an area of focus for future research. Although research on the performance of all students in virtual schools is prevalent, studies on students with disabilities in the same setting are less frequent (Marteney & Bernadowski, 2016; Miron & Gulosino, 2016; Molnar et al., 2017; Thompson et al., 2012). Although existing online data systems can provide specific and timely information about the performance of students with disabilities using online learning, confidentiality guidelines need to be revisited to establish boundaries that guard students while allowing access to data for future research (Stahl & Karger, 2016; Stahl et al., 2017).). Credible educational studies identifying the negative or positive influences related to student achievement would be beneficial if recreated for the unique virtual school setting (DuFour, 2015; Hattie, 2012; Schneider & Coleman, 2018).

In full-time virtual schools, parents and teachers share responsibilities related to instruction and ensuring the success of students with disabilities. Further research is needed to

establish the impact of these roles on student engagement, achievement, and relationships. The purpose of parents needs additional clarification along with the task of virtual schools in preparing parents for the other responsibilities they assume when enrolling their students with disabilities in an online learning environment (Basham et al., 2015; Ferdig & Kennedy, 2014; Ortiz et al., 2017). The development of teacher and administration preparation programs focused on virtual education will better prepare educators for the nuances of serving students with disabilities in this environment. Continued research on the use of technology to facilitate best practices in communication, instruction, and accountability will support parents and teachers in their roles (Coy, 2014; Tindle et al., 2015; Waters & Leong, 2014).

Although this study focused on several special education compliance components, other areas were beyond this studies scope. Some IDEA compliance issues easily translate to a virtual setting; others are more difficult to implement. The Idaho State Department of Education is responsible for ensuring virtual schools adhere to the education standards of the state and IDEA regulations. The researcher recommends more research on how virtual schools can meet Child Find, Least Restrictive Environment (LRE), teacher licensure regulations outlined in IDEA, and access for students with disabilities to virtual schools. Questions remain surrounding who is responsible for Child Find activities, local educational agencies or virtual schools. How can virtual schools meet the LRE requirement defined by IDEA as:

> To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of

> supplementary aids and services cannot be achieved satisfactorily (Individuals with Disabilities Education Act, 20 U.S.C. § 1400, 2004).

In 2000, the Department of Education (DOE) issued guidance stating:

> You may not categorically deny admission to students on the basis of disability. For example, you may not deny admission to a student with a disability solely because of that student's need for special education or related aids and services. Students with disabilities must have the opportunity to meet any appropriate minimum eligibility criterion for admission, consistent with the mission of the charter school and civil rights requirements. (DOE, 2000, p. 7)

Virtual schools are required to admit students with disabilities and meet all IDEA regulations. Additional research, review of state policies, and guidance from state agencies will be needed to make this happen and ensure the quality of education for students with disabilities in virtual school settings.

Implications for Professional Practice

This study provides educators involved in virtual education a deeper understanding of how four virtual schools in Idaho are providing valid IEP processes and special education services to students with disabilities in their schools. The researcher gleaned several strategies useful for improving professional practice when serving students with disabilities in a virtual school environment. The approaches were identified through qualitative research methods using real-life experiences shared by practiced participants.

The data from this study indicate effective communication methods are vital to the success of students with disabilities in a virtual school. Other research studies agree with the data from this study and point to the importance different types of communication methods play in

student learning (Alamri & Tyler-Woods, 2017; Borup et al., 2013; Tindle et al., 2015). Technology supports a wide variety of communication methods, some better than others. The teachers and parents in this study preferred the use of web-conferencing for meetings and the delivery of special education services over communication by a telephone. Participants indicated web-conferencing allowed for visualizing of body language, ability to see who was talking, and enhanced disclosure of information through shared documents. Teachers in another research study indicated the use of video conferencing allowed them to get to know students better and decipher student verbal and non-verbal cues (Velasquez et al., 2013). The researcher would encourage virtual schools to invest in web conferencing software to create optimal communication between students, teachers, and parents.

The interview data collected in this study indicated participants acknowledge a need for collaboration, training, and continual improvement plans. All Idaho virtual schools face the same challenges and work to develop best practices for providing special education services to their students. The researcher recommends virtual educators in Idaho highlight best practices in existing schools and develop effective methods for sharing those strengths through forums, workgroups, and conferences specific to virtual school educators. Parent input, through research studies and state surveys, should also be considered in identifying best practices for virtual schools.

Administrators and teachers within a virtual school confront different issues than traditional brick-and-mortar school personnel. Teachers coming from a traditional brick-and-mortar classroom or directly out of college to a virtual setting frequently have little preparation and learn by trial and error (Crouse et al., 2018; Smith, 2016). A state focus on developing administrator and teacher preparation programs to prepare educators for the virtual school

environment along with more investigation on how the Idaho State Department of Education is training special education personnel to meet IDEA regulations in a virtual setting is warranted. A pro-active approach of collaboration, education, and continual professional development will support administrators and teachers involved in online learning and assure students with disabilities are served within the IDEA guidelines.

Research data gathered in this study indicated online learning demanded increased parental involvement. The level of parent participation was dependent on the student's age and the student's level of self-discipline. Throughout the study, parents were frequently referred to as learning coaches by special education teachers, parents felt their involvement added consistency to their child's education, and participants felt parents were able to reinforce concepts, assist with the application of accommodations, and provide structure to the school schedule. The role of parents and teachers in virtual schools is widely debated (Ortiz et al., 2017; Tindle et al., 2016; Waters et al., 2016). Basham et al. (2016) performed a research study on state policies relating to special education students in virtual schools. The study reported no states offered guidance on parental involvement in online learning. The researcher would urge virtual schools to establish guidelines around parent involvement to encourage best practices while meeting state and IDEA guidelines for teacher requirements.

This study established four Idaho virtual schools have passionate teachers and parents working hard to do what is best for their students with disabilities. Across Idaho and the United States, hundreds of virtual schools have talented educators serving students with disabilities. All of these virtual schools have strengths to share and face similar challenges. The researcher recommends the establishment of workshops, conferences, and online forums to allow for the sharing of best practices and the creation of problem-solving activities. One consistent research

finding in this study and the majority of studies on students with disabilities in virtual schools is the need for additional research to assure the quality of education for these students (Basham et al., 2015; Mellard et al., 2018; Pace et al., 2017; Stahl et al., 2017). The researcher is proud to add value to current conversations surrounding this subject and encourage continued research. As virtual education continues to expand at an exponential rate, students with disabilities deserve exceptional educators working together collaboratively to establish appropriate guidelines, share best practices, and appropriately train educators to meet their needs.

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Appendix A

NIH Certificate of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Terri Sorensen** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 07/01/2017.

Certification Number: 2428005.

Appendix B

Signed OSD Site Permission Letter

[redacted] ph: [redacted] fax: [redacted]

[redacted]

Caring & Educating.

11/1/17

Northwest Nazarene University
Attention: HRRC Committee
Helstrom Business Center 1st Floor
623 S. University Boulevard
Nampa, ID 83686

RE: Research Proposal Site Access for Terri Sorensen

Dear HRRC Members:

This letter is to inform the HRRC that Administration at [redacted] has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and the purpose of the study. Terri Sorensen has permission to conduct her research in the district of and with students and staff of the [redacted]. The authorization dates for this research are July 2018 to April 2019.

Respectfully,

[redacted]

Superintendent

[redacted]

[redacted]

[redacted]

3/28/2018

Northwest Nazarene University
Attention: HRRC Committee
Helstrom Business Center 1st Floor
623 S. University Boulevard
Nampa, ID 83686

RE: Research Proposal Site Access for Terri Sorensen

Dear HRRC Members:

This letter is to inform the HRRC that Administration at [redacted] has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and the purpose of the study. Terri Sorensen has permission to conduct her research in the district of and with students and staff of the [redacted] The authorization dates for this research are July 2018 to April 2019.

Respectfully,

[redacted]
Executive Director
[redacted]

[redacted]

[redacted]

Date 4-16-18

Northwest Nazarene University
Attention: HRRC Committee
Helstrom Business Center 1st Floor
623 S. University Boulevard
Nampa, ID 83686

RE: Research Proposal Site Access for Terri Sorensen

Dear HRRC Members:

This letter is to inform the HRRC that Administration at [redacted] has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and the purpose of the study. Terri Sorensen has permission to conduct her research in the district of and with students and staff of the [redacted] The authorization dates for this research are July 2018 to April 2019.

Respectfully,

[redacted]
Administrator
[redacted]

[redacted]

[redacted]

April 20, 2018

Northwest Nazarene University
Attention: HRRC Committee
Helstrom Business Center 1st Floor
623 S. University Boulevard
Nampa, ID 83686

RE: Research Proposal Site Access for Terri Sorensen

Dear HRRC Members:

This letter is to inform the HRRC that Administration at [redacted] has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and the purpose of the study. Terri Sorensen has permission to conduct her research in the district of and with students and staff of the [redacted]. The authorization dates for this research are July 2018 to April 2019.

Respectfully,

[redacted]

[redacted]
Head of School
[redacted]

Appendix C

Research Assistant Confidentiality Agreement

CONFIDENTIALITY AGREEMENT

Title of Research Project: Special Education in Idaho Virtual Schools: An Analysis of the Efficacy of Service Delivery

Local Principal Investigator: Terri Sorensen

As an assistant to the research team I understand that I may have access to confidential information about study sites and participants. By signing this statement, I am indicating my understanding of my responsibilities to maintain confidentiality and agree to the following:

- I understand that names and any other identifying information about study sites and participants are completely confidential.
- I agree not to divulge, publish, or otherwise make known to unauthorized persons or to the public any information obtained in the course of this research project that could identify the persons who participated in the study.
- I understand that all information about study sites or participants obtained or accessed by me in the course of my work is confidential. I agree not to divulge or otherwise make known to unauthorized persons any of this information, unless specifically authorized to do so by approved protocol or by the local principal investigator acting in response to applicable law or court order, or public health or clinical need.
- I understand that I am not to read information about study sites or participants, or any other confidential documents, nor ask questions of study participants for my own personal information but only to the extent and for the purpose of performing my assigned duties on this research project.
- I agree to notify the local principal investigator immediately should I become aware of an actual breach of confidentiality or a situation which could potentially result in a breach, whether this be on my part or on the part of another person.

[redacted]

Signature	2/10/2018 Date	[redacted] Printed name
Jeri Sorensen Signature of local principal investigator	2/8/2018 Date	Terri Sorensen. Printed name

Appendix D

Institutional Review Board (IRB) Approval

---------- Forwarded message ----------
From: **Northwest Nazarene University** <jabankard@nnu.edu>
Date: Wed, May 2, 2018 at 1:39 PM
Subject: Full approval
To: Heidi Curtis <hlcurtis@nnu.edu>

Dear Terri,

The IRB has reviewed your protocol: 5032018 - Special Education in Idaho Virtual Schools: An Analysis of the Efficacy of Service Delivery. You received "Full Approval". Congratulations, you may begin your research. If you have any questions, let me know.

Joseph Bankard
Northwest Nazarene University
IRB Member
623 S University Blvd
Nampa, ID 83686

To view this submission:
https://nnu.submittable.com/submissions/10213282

Appendix E

Emails to Explain Study and Solicit Participants

Teacher Email to Explain Study and Solicit Participants

Hello,

My name is Terri Sorensen and I am a Doctoral Student at Northwest Nazarene University studying special education services in Idaho virtual schools. You are receiving this email because you currently work as a special education teacher at (Name of School) and your school district has given me permission to gather data for my research project.

I am looking for a sample of special education teachers that have worked with special education students in your school for a minimum of two full years. Selected special education teachers will participate in one interview with me this fall and allow my attendance at two IEP meetings. The interview questions will center around what methods are Idaho virtual school pecial education teachers using to carry out a valid IEP process aligned to state and IDEA regulations and provide appropriate special education services for full-time students with disabilities in a virtual school environment? Each interview will be around 30 - 45 minutes.

If you are interested in participating in my research study, please reply to this email and include your name and phone number in your reply. I will then reach out to you via a phone call to answer any questions you may have and discuss the next steps in the research process.

I believe that your responses will provide valuable information for policy makers, school administrators, and others in the field of special education in virtual school environments as we endeavor to better understand how to help students with disabilities be successful. Thanks for taking time to consider your participation in my study. If you have any questions, please don't hesitate to contact me at terrisorensen@nnu.edu or [redacted].

Sincerely,

Terri Sorensen
Doctoral Student
Northwest Nazarene University

Parent Email to Explain Study and Solicit Participants

Hello,

My name is Terri Sorensen and I am a Doctoral Student at Northwest Nazarene University studying special education services in Idaho virtual schools. You are receiving this email because you currently have students enrolled in (Name of School) and your school district has given me permission to gather data for my research project.

I am looking for a sample of parents with one or more special education students that have been enrolled at (Name of School) for a minimum of one full year. Selected parents will be asked to participate in one interview with me this fall, provide me a copy their child's eligibility and IEP documents, and allow my attendance at their child's yearly IEP meeting. The interview questions will center around what parents perceive to be their role in developing the IEP and implementing special education services in a virtual school environment. Each interview will be around 30 - 45 minutes.

If you are interested in participating in my research study, please reply to this email and please include your name and phone number in your reply. I will then reach out to you via a phone call to answer any questions you may have and discuss the next steps in the research process.

I believe that your responses will provide valuable information for policy makers, school administrators, and others in the field of special education in virtual school environments as we endeavor to better understand how to help students with disabilities be successful. Thanks for taking time to consider your participation in my study. If you have any questions, please don't hesitate to contact me at terrisorensen@nnu.edu or [redacted].

Sincerely,

Terri Sorensen

Appendix F

Telephone Script

Telephone Script

Hello, my name is Terri Sorensen and I am a doctoral student at Northwest Nazarene University. Do you remember recently receiving an email that explained my study and asked for volunteer participants? You responded to the e-mail indicating that you would be willing to participate in my study. Is this a good time for me to take a few minutes to answer any questions you may have and explain how to move forward if you are still interested in participating?

If yes, proceed

If **no**, is there a time that would be better that I can call again? Thank you for your time. I will call back at our appointed time.

Do you have any questions about my study that were not answered in the original email?

Do you have any concerns about participating in my study?

Would you be willing to agree to participate in my study by signing a consent form?

Verify contact information and preferred method of contact.

I will email a consent form to you. After reading the form you can either contact me for a follow-up phone call to answer any questions you have or return the signed consent form to me via email or regular mail. After I receive the consent form I will contact you to schedule an interview time.

Thank you for your willingness to visit with me today. Do you have any other questions for me? I will send the consent form out to you today via email. Thanks again for your time.

Appendix G

Informed Consent Form

INFORMED CONSENT FORM

A. PURPOSE AND BACKGROUND

Terri Sorensen, in the Department of Graduate Education at Northwest Nazarene University, is conducting a research study related to special education services in Idaho virtual schools. There is a wealth of information about successes and concerns regarding service delivery to special education students in virtual schools across Idaho that, if shared, could be of benefit to administrators, teachers, parents, and policy makers as they strive to serve students with disabilities in a virtual environment. We appreciate your involvement in helping us investigate how to better serve and meet the needs of students with disabilities in virtual school environments.

You are being asked to participate in this study because you are a healthy volunteer, over the age of 18.

B. PROCEDURES

If you agree to be in the study, the following will occur:

1. You will be asked to sign an Informed Consent Form, volunteering to participate in the study.
2. You will be contacted to set up a convenient interview time.
3. You will meet with Terri Sorensen, primary researcher, for one interview via the Internet using a webcam and the Zoom web conferencing platform.
4. You will answer a set of interview questions and engage in a discussion on special education services for students in a virtual school setting. This interview will be recorded on the Zoom web conferencing platform and is expected to last approximately 30 to 45 minutes.
5. You may provide the researcher documents pertinent to the study.
6. You give permission for Terri Sorensen, primary researcher, to attend online IEP meetings in which you are participating.
7. You will be asked to reply to an email at the conclusion of the study asking you to confirm the data that was gathered during the research process.

These procedures will be competed at a location mutually decided upon by the participant and principal investigator and will take a total time of about 30 to 45 minutes.

C. RISKS/DISCOMFORTS

1. Some of the discussion questions may make you uncomfortable or upset, but you are free to decline to answer any questions you do not wish to answer or to stop participation at any time.
2. Confidentiality: Participation in research may involve a loss of privacy; however, your records will be handled as confidentially as possible. No individual identities will be used in any reports or publications that may result from this study. All electronic data from observation notes, document analysis, video-taping, and transcribing will be kept in a secure location in the cloud with only the primary researcher having the password. All hand written or printed data will be kept in a locked file cabinet in the researcher's office and the key to the cabinet will be kept in a separate location. In compliance with the Federal-wide Assurance Code, data from this study will be kept for three years, after which all data from the study will be destroyed (45 CFR 46.117).

3. Only the primary researcher, the research assistant, and the research supervisor will be privy to data from this study. As researchers, all parties are bound to keep data as secure and confidential as possible.

D. BENEFITS
There will be no direct benefit to you from participating in this study. However, the information you provide may help educators to better understand special education services in Idaho virtual schools.

E. PAYMENTS
There are no payments for participating in this study.

F. QUESTIONS
If you have questions or concerns about participation in this study, you should first talk with the investigator. Terri Sorensen can be contacted via email at terrisorensen@nnu.edu, via telephone at [redacted]. If for some reason you do not wish to do this, you may contact Dr. Heidi Curtis, Doctoral Committee Chair at Northwest Nazarene University, [redacted]
Should you feel distressed due to participation in this, you should contact your own health care provider.

G. CONSENT
You will be given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point. Your decision as to whether or not to participate in this study will have no influence on your present or future status in your online school.

I give my consent to participate in this study:

_____ _____
Signature of Study Participant **Date**

I give my consent for the interview and discussion to be video-taped in this study:

_____ _____
Signature of Study Participant **Date**

I give my consent for direct quotes to be used in this study:

_____ _____
Signature of Study Participant **Date**

Terri Sorensen 2/10/18
Signature of Person Obtaining Consent **Date**

THE NORTHWEST NAZARENE UNIVERSITY HUMAN RESEARCH REVIEW COMMITTE HAS REVIEWED THIS PROJECT FOR THE PROTECTION OF HUMAN PARTICIPANTS IN RESEARCH.

Appendix H

Protocols (Interview, Observation, and Document Analysis)

Special Education Teacher Interview Protocol

Good (afternoon or morning) and thank you for being willing to participate in this interview. The purpose of this interview is to review your experiences as a special education teacher as they pertain to special education students in a virtual environment. There are no right or wrong, or desirable or undesirable answers. I want you to feel comfortable with saying what you really think and how you really feel.

I will be recording our interview. I assure you that all your comments will remain confidential. Are you ready to begin?

Q1. Can you please state your name for the recording?
Q2. What virtual school do you work for?
Q3. How long have you been a special education teacher in this school?
Q4. How many students with disabilities do you work with in your school?

Q5. Have you been part of the special education referral and eligibility processes in your school?

Yes No Skip to Q5

Q5a. Please describe your school's Child Find activities, specifically those unique to a virtual environment.

Q5b. Please describe your response-to-intervention (RTI) process and how the RTI strategies are implemented with virtual students.

Q5c. How are the assessments needed to determine eligibility administered to students?

Q5d. Who is part of the IEP team that determines special education eligibility and what does that process look like?

Q5e. When determining an eligibility for a Specific Learning Disability (SLD), how do you gather the required data?

Q5f. Name one strength of your special education referral and eligibility process and note anything specific to a virtual school environment.

Q5g. Name one area that needs improvement in your special education referral and eligibility process or something that is a specific challenge for a virtual school.

Q6. Do you participate in the development of Individualized Education Plans (IEPs) for students with disabilities in your school?

Yes No Skip to Q6

Q6a. Who is part of the IEP team that develops and implements the IEPs for students with disabilities in your virtual school.

Q6b. Do you feel the roles of IEP team members differ in a virtual school and if so how?

Q6c. Who makes sure the IEP is compliant with all state and IDEA regulations?

Q6d. Do you find any challenges in the IEP development process because of the virtual school environment?

Q6e. How do you monitor progress on IEP goals and meet reporting requirements?

Q7. Are you involved in providing special education services to students with disabilities in your school?

Yes No Skip to Q7

Q7a. What types of support (personnel, equipment, or other) are available to students with disabilities in your school and how are they provided to students?

Q7b. Do you provide a continuum of services for students with disabilities that includes support in the regular classroom, tutoring, and resource classes? If so, describe what that looks like in your school.

Q7c. Please describe the roles of the teacher and the parent in providing special education services to students in your school.

Q7d. How are related services (OT, Speech, Physical Therapy) provided to students with disabilities in your virtual school?

Q7e. Share with me one or two examples of successes you have experienced with providing special education services in your virtual school.

Q7f. Share with me one or two challenges you have faced as you provide special education services to students in your virtual school.

Q8. Please name two advantages you perceive for students with disabilities attending a virtual school.

Q9. Please name two challenges you perceive for students with disabilities attending a virtual school.

Thank you for your time. I appreciate your commitment to our students with special needs and your willingness to share in my research. When all my research data has been collected and analyzed, I will send you an email outlining the themes developed through my research. Do you have any questions or concerns?

Parent Interview Protocol

Good (afternoon or morning) and thank you for being willing to participate in this interview. The purpose of this interview is to review your experiences as parent of a special education student attending a virtual school. There are no right or wrong, or desirable or undesirable answers. I would like you to feel comfortable with expressing what you really think and how you really feel.

I will be **recording** our interview. I assure you that all your comments will remain confidential. Are you ready to begin?

Q1. Please state your name for the recording.
Q2. What school does your special education student attend?
Q3. How long has your student attended this school?
Q4. Does your child attend this school full-time?

Q5. Have you been part of the special education referral and/or eligibility processes in this school?

Yes No Skip to Q5

Q5a. Did you feel included in your child's referral and/or eligibility process?

Q5b. Were you asked to give input in the process? If so, did you feel your input was valued?

Q5c. How were assessments used to determine eligibility given to your child?

Q5d. Were the assessment results explained clearly to you at the eligibility meeting by the person that performed the assessments?

Q5e. Did you feel like all required members of the IEP team were present?

Q5f. Did you feel enough information was presented to determine special education eligibility for your child?

Q5g. Did you note any strengths pertaining to the special education referral and eligibility process specific to a virtual school?

Q5h. Did you note any areas that needed improvement pertaining to the special education referral and eligibility process specific to a virtual school.

Q6. Did you participate in the development of the Individualized Education Plan (IEP) for your special education student?

Yes No Skip to Q6

Q6a. Who was part of the IEP team that developed and implemented the IEP for your child.

Q6b. Do you feel the roles of IEP team members differ in a virtual school and if so how?

Q6c. Please describe your role in developing an IEP for your child.

Q6d. Do you feel your child's IEP is compliant with all state and IDEA regulations?

Q6e. Do you find any challenges in the IEP development process because of the virtual school environment?

Q6f. What role do you play in the implementation of the IEP for your child and making sure all IEP components are followed?

Q7. Are you involved in providing special education services to your child?

Yes No Skip to Q7

Q7a. What types of support (personnel, equipment, or other) are available to your special education student and what is your role in implementing those supports?

Q7b. Do you receive a continuum of services for your child that includes support in the regular classroom, tutoring, or resource classes? If so, please describe what that looks like for your student.

Q7c. Please describe the roles of the teacher and yourself in providing special education services to your child.

Q7d. Does your child receive any related services (OT, Speech, Physical Therapy)? If so, how are they provided to your student and what is your role in implementing related services?

Q7e. Share with me one or two examples of successes you have experienced with your student receiving special education services in the virtual environment.

Q7f. Share with me one or two challenges you have faced with your student receiving special education services in the virtual environment.

Q8. Please name two advantages you perceive for students with disabilities attending a virtual school?

Q9. Please name two challenges you perceive for students with disabilities attending a virtual school?

Thank you for your time. I appreciate your commitment to your child's education and your willingness to share in my research. When all my research data has been collected and analyzed, I will send you an email outlining the themes developed through my research. Do you have any questions or concerns?

IEP Meeting Observation Protocol

Observer: **Date:**

Location: **Time:** **Length:**

Name of Person Attending	Role of Person Attending

IEP Meeting Guidelines:

Introductions	**Purpose Stated**	**Procedural Safeguards**
Eligibility	**Parental Input**	**Current Goals/Progress**
New Goals	**Services**	**Extended School Year**
Placement	**Accommodations**	**Testing**
Special Considerations		

Descriptive Notes	Reflective Notes

IEP Document Analysis Protocol

Reviewer: **Date:**

Location: **Time:** **Length:**

IEP Document Guidelines:

Attendance	**Purpose**	**Procedural Safeguards**
Eligibility	**Parental Input**	**Goals**
Progress Reports	**Services**	**Extended School Year**
Placement	**Accommodations**	**Testing**
Special Considerations		

Descriptive Notes	Reflective Notes

Appendix I

Email Participant Debrief

Email - Participant Debrief

Hi,

Thank you for your participation in my study on special education services in Idaho virtual schools. I really appreciate your willingness to further educational research to benefit all educational stakeholders.

After I have an opportunity to analyze the data, I will email you the results and ask for feedback. Mainly I want to ensure that I captured the essence of our discussion, accurately portraying our discussion and your thoughts. This study will conclude by March 31, 2019.

In the meantime, if you have any questions or concerns, I can be contacted via email at terrisorensen@nnu.edu, via telephone at [redacted], or by writing: Terri Sorensen, [redacted]

Sincerely,

Terri Sorensen
Doctoral Student
Northwest Nazarene University

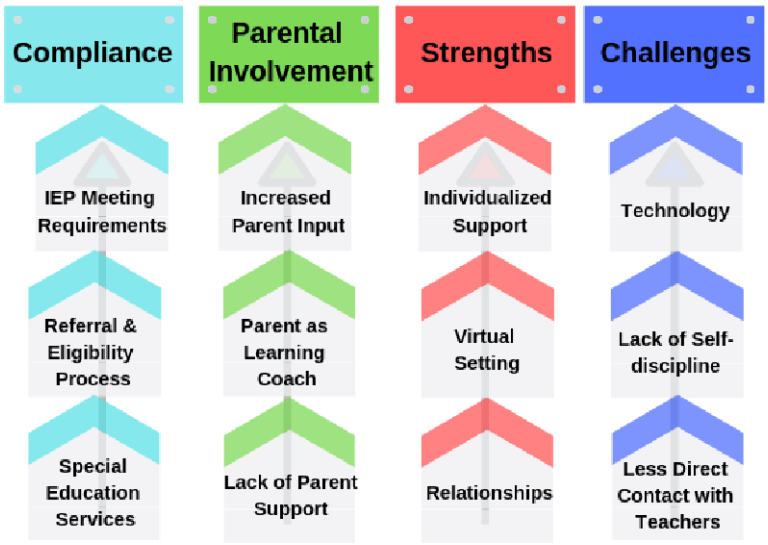
Appendix J

Email Member Checking

Email - Member Checking

Dear—

Thank you for your participation in my research study on special education services in Idaho virtual schools. I wanted to let you know some of the themes that resulted from the interviews of all participants (see below). Please let me know if these accurately depicted our conversation or if you have any suggestions or modifications.



Thank you again for your help and we look forward to hearing from you.

Sincerely,

Terri Sorensen
Doctoral Student
Northwest Nazarene University