Spring 5-18-2018

The Implementation of the Individuals with Disabilities Education Act in a Virtual Public Charter School

Sarah E. Clifford
University of New Orleans, scliffor@uno.edu

Recommended Citation

The Implementation of the Individuals with Disabilities Education
Act in a Virtual Public Charter School

A Dissertation

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
Special Education

by

Sarah E. Clifford

B.A., Tulane University, 2001
M.S.Ed., City University of New York, 2009

May 2018

Dedication

This dissertation is dedicated to Marilyn and Buzzy, who taught me well.

Acknowledgements

Robert, thank you for doing all the extra dishes.

Molly and Jacques Imo, thank you for never letting me write alone.

To the parents and professionals who chose to participate in this study, thank you for telling your stories.

Table of Contents

Abstract

The Individuals with Disabilities Education Act (IDEA) guarantees certain rights and protections to students with disabilities enrolled in public schools, and to their families. Even though virtual schools are one of the fastest growing trends in public k-12 education, there is evidence that these schools may not be fully implementing IDEA for enrolled students with disabilities. There has been some concern regarding the appropriateness of virtual education for student with disabilities, as well as some concern for the spectrum of services being offered in virtual schools. This case study examined the implementation of special education supports and services in one public virtual k-12 school in the United States. Interviews, document review, and participant observations were used to collect data. Findings indicated that components of IDEA were not being universally implemented for students with disabilities. Limited programming options, large special education caseloads, and an over-dependence on parents and other non-teacher adults limits students' access to Free and Appropriate Public Education, Least Restrictive Environment, and Individualized Education Plans. Issues were also identified in the provision of Appropriate Evaluation, Parent Participation, and Procedural Safeguards. Regardless of documented challenges, benefits to virtual education were noted. Parent, faculty and staff participants reported being happier with virtual school than brick-and-mortar. Faculty enjoys easy access to a multitude of academic data. Relationships and communication among community members was reported to be stronger than what was previously experienced in brick-and-mortar schools. Faculty, staff and parent participants discussed students' emotional and physical safety as a benefit of virtual education.

Keywords: virtual education, virtual school, virtual special education, IDEA, Individuals with Disabilities Education Act, children with disabilities, compliance, charter school

CHAPTER ONE

Introduction

Overview of Virtual Schools

Virtual schools are commonly documented as one of the fastest growing trends in public education in the United States (Franklin, Burdette, East & Mellard, 2015; Tindle, East & Mellard, 2015; Ferdig, Cavanaugh, Dipietro, Black & Dawson, 2009; U.S. Department of Education, 2010; Center on Online Learning and Students with Disabilities, 2012; Rose & Blomeyer, 2007; Rice, East & Mellard, 2015). Virtual (or cyber) schools are defined in the literature as public or non-public schools that deliver instruction via Internet-based platforms to typically home-based students in locations that are geographically separate from their teachers (Carnahan & Fulton, 2013; Center on Online Learning and Students with Disabilities, 2012; Clark, 2001). Virtual schools were first conceived in the 1990s as educational program components that were supplementary to traditional brick-and-mortar instruction (Repetto, Cavanaugh, Wayer & Liu, 2010). In its earliest incarnations, virtual schooling was meant to either enrich or remediate these traditional brick-and-mortar school experiences.

While the model of virtual k-12 education that began over three decades ago was meant to augment or recover educational opportunities for students at the high and low ends of the achievement spectrum (Ronsisvalle & Watkins, 2005), a different approach has more recently developed. In this new paradigm, virtual schools offer comprehensive kindergarten-through-twelfth grade curricula for students and families looking for a wholly alternative educational option rather than a supplement to a traditional educational establishment (Rhim & Kowal, 2008; Center on Online Learning and Students with Disabilities, 2012; Franklin, Burdette, East & Mellard, 2015; Bernstein, 2014). Families are turning to virtual schools in increasing numbers for

1

a variety of reasons including, but not limited to, access to academically rigorous public education (Beck, Egalite & Maranto, 2014; Lin, 2009), social issues or bullying experienced by students in traditional brick-and-mortar schools (Harvey, Greer, Basham & Hu, 2014; Beck, Egalite & Maranto, 2014; Beck, Maranto & Lo, 2014), and flexibility of pacing of virtual curricula and scheduling (Gedera, 2014; Center on Online Learning and Students with Disabilities, 2012; U.S. Department of Education, 2010; Lin, 2009; Beck, Egalite & Maranto, 2014).

Data About Virtual Schools

An increasing body of literature dedicated to the field of k-12 virtual education reports a lack of reliable, empirical evidence documenting its scope or success. In December of 2015, the National Center for Education Statistics (NCES) published a study listing the number of virtual public schools and total student enrollment in those schools on state and national levels for the 2013-14 school year (see Table 1.1*)*. NCES reported that there were no such schools or enrolled students in the state of Louisiana for the 2013-14 school year (U.S. Department of Education), but an Internet search shows that two virtual public charter schools have been in Louisiana since the 2011-12 school year. This point is not to criticize the accuracy of NCES or the data reported by each state, but to highlight the confusing and often times contradictory nature of this relatively new field of study. Given the lack of empirical evidence of learning outcomes for students with disabilities in the larger virtual schooling silo, and the often times inconsistent literature regarding virtual k-12 education as a whole, it is imperative that general and special education programming and practices be closely considered in this newer model of internet-based public education.

Table 1.1

Number of Virtual Public Schools and Virtual Public School Students in the United States for the

2013-14 School Year

State or jurisdiction	Number of virtual schools	Enrollment		
		Total state	Virtual school	Virtual school as percentage of total state
United States[1]	**478**	**49,709,977**	**199,815**	**0.4**
Alabama	1	743,018	†	†
Alaska	0	130,942	†	†
Arizona	53	1,096,885	13,742	1.3
Arkansas	2	489,979	1,334	0.3
California	†	6,215,786	†	†
Colorado	36	876,147	14,576	1.7
Connecticut	0	546,020	†	†
Delaware	†	131,539	†	†
District of Columbia	1	78,153	147	0.2
Florida	182	2,720,739	12,065	0.4
Georgia	0	1,723,909	†	†
Hawaii	0	186,825	†	†
Idaho	14	294,262	7,187	2.4
Illinois	1	2,049,231	687	#
Indiana	7	1,047,385	8,358	0.8
Iowa	4	494,278	550	0.1
Kansas	14	491,553	8,631	1.8
Kentucky	0	675,587	†	†
Louisiana	0	695,632	†	†
Maine	0	176,881	†	†
Maryland	0	866,169	†	†
Massachusetts	1	955,739	454	#
Michigan	7	1,506,431	6,780	0.5
Minnesota	20	850,454	5,783	0.7
Mississippi	0	492,586	†	†
Missouri	2	916,933	50	#
Montana	0	144,129	†	†
Nebraska	1	307,677	37	#
Nevada	4	451,831	6,646	1.5
New Hampshire	2	185,299	102	0.1
New Jersey	0	1,369,790	†	†
New Mexico	0	339,058	†	†
New York	0	2,719,824	†	†
North Carolina	1	1,498,344	†	†
North Dakota	†	101,687	†	†
Ohio	27	1,722,183	38,169	2.2
Oklahoma	2	680,989	5,734	0.8
Oregon	12	554,656	7,401	1.3
Pennsylvania	16	1,734,286	36,596	2.1
Rhode Island	0	140,605	†	†
South Carolina	7	742,982	8,956	1.2
South Dakota	3	130,837	278	0.2
Tennessee	9	993,556	3,298	0.3
Texas	†	5,149,025	†	†
Utah	18	625,093	5,162	0.8
Vermont	0	85,407	†	†
Virginia	0	1,273,785	†	†
Washington	†	1,058,509	†	†
West Virginia	0	280,958	†	†
Wisconsin	31	873,841	7,092	0.8
Wyoming	0	92,563	†	†

† Not applicable. State did not report having any virtual schools or reported virtual schools as not applicable.
# Rounds to zero.

Note. From U.S. Department of Education, Institute of Education Science, National Center for

Education Statistics (2015).

Description of Virtual Education

A number of businesses exist that produce and sell curricular programs for use in public and non-public virtual schools. These businesses also provide national and regional management services for virtual schools. Two such businesses are K12 Inc. and Connections Educations, LLC (a subsidiary of Pearson, PLC), both of which are for-profit entities. Because the researcher was previously employed by a virtual school operated by K12 Inc. and is, therefore, more familiar with the K12 Inc. educational system, this section of the present proposal will focus on the descriptive and organizational features of one K12 Inc. school as an example of a virtual school. For a visual overview of the organization of such schools, see figure 1.1.
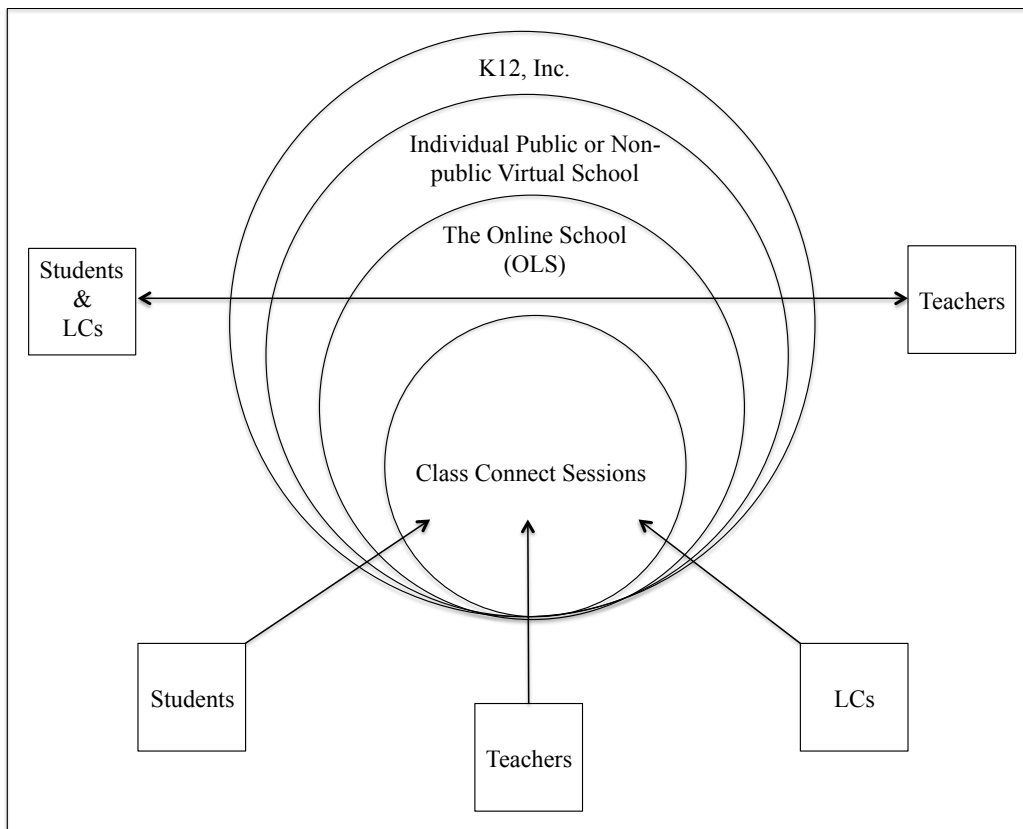
Figure 1.1. The organization of virtual schools operated by K12, Inc.

In this model, the individual school is managed by K12 Inc. and implemented via an Online School (OLS) system. Students, teachers and Learning Coaches (LCs) can communicate with one

another and access live classes (Class Connect Sessions) through that OLS. Typically, LCs are parents of the enrolled students.

A virtual school is a school in which students are in locations—typically their homes—that are geographically different from their teachers, and in which students' school days are not organized within a physical school building, but within an Internet platform called an "Online School," or OLS. The OLS varies in appearance and organization depending on the grade level of the student accessing the system (see Figures 1.2 and 1.3). Students log into the OLS to access their live class schedules and virtual classrooms, monitor their progress within different courses, complete independent lessons and homework, communicate with their teachers and classmates, submit assignments, and take assessments.
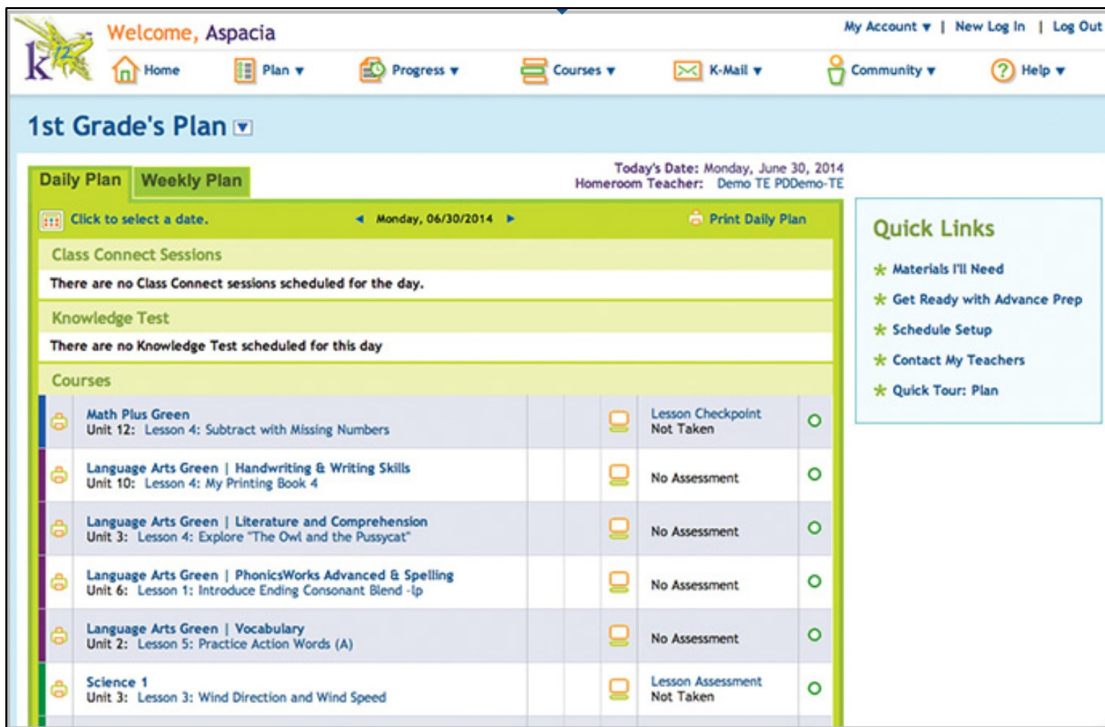
Figure 1.2. Example of an elementary or middle school student's Online School (OLS). From K12, Inc. (2018).
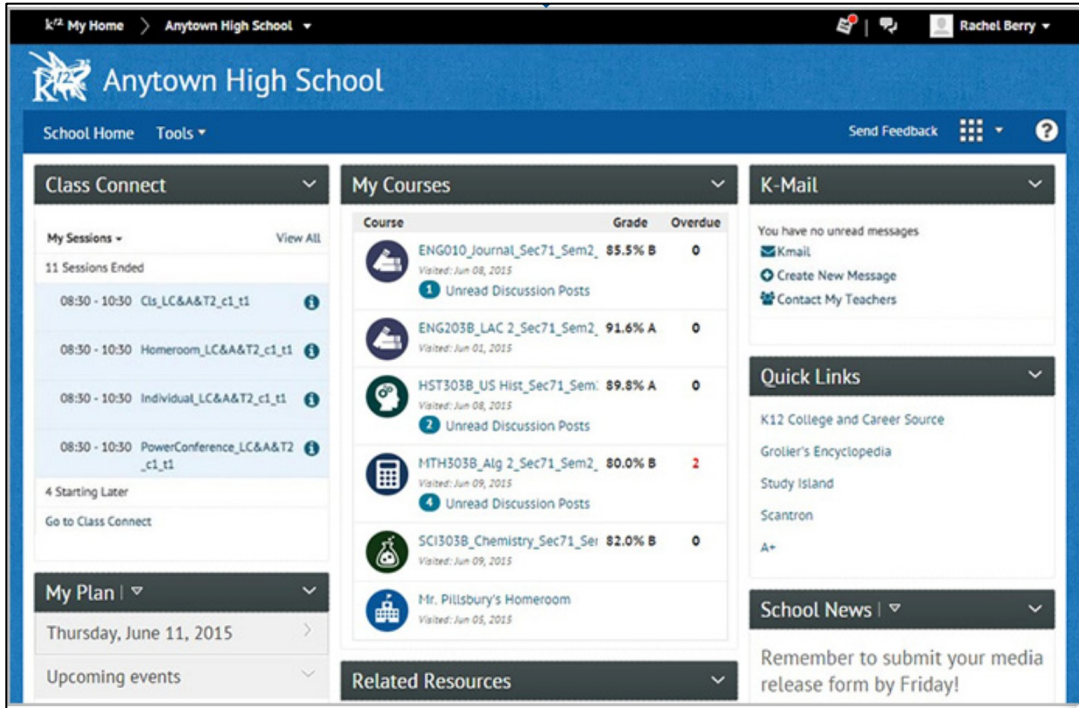
Figure 1.3. Example of a high school student's Online School (OLS). From K12, Inc. (2018).

Within the Online School, students' "classrooms" are accessed via Internet-based

conferencing systems such as Blackboard Collaborate or Adobe Connect (see Figure 1.4). These

live classes are called "Class Connect Sessions."
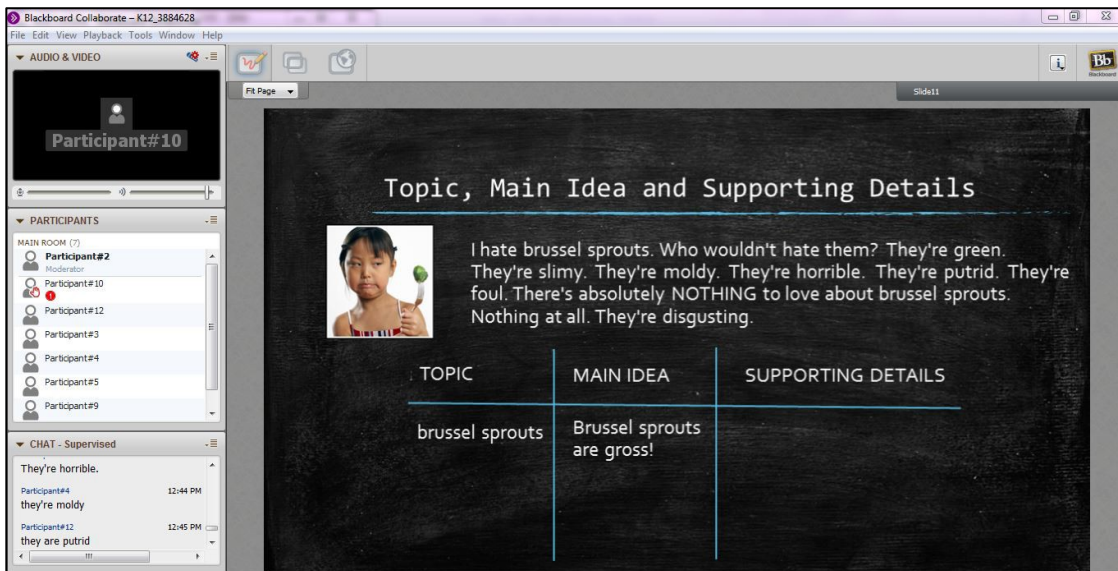
Figure 1.4. Example of a virtual k-12 classroom. Taken from a lesson designed and implemented

by the current researcher.

In the example of a virtual classroom above, participants are listed on the left of the screen; the "Moderator" label differentiates the instructor from the students. The instructor can see students in the "Audio & Video" portion of the screen if those students have webcams and internet service sufficient for streaming live video, and if they are given administrative permission by the instructor to do so. Only one student can be seen at a time. Though live video streaming is available to students and teachers, it is not typically a requirement in virtual schools. This is, in part, due to large class sizes. It is not uncommon for teachers to have over 100 students in a given class session which makes individual screen time impractical. Students and teachers are also able to interact with one another via the chat box in the lower-left of the screen or by talking into microphones connected to their respective computers. All of these modes of communication require the permission of a moderator, typically the course teacher.

The main portion of the screen, the "whiteboard," is located on the right. The whiteboard is typically preloaded with slides prepared by the teacher. Students and teachers can write on and otherwise interact with the whiteboard using different tools such as pencil, highlighter, pointer, and drawing tools. Again, students require moderator permission to access these tools. Learning Coaches (typically a parent) can log into and participate in Class Connect Sessions, though this is not a general practice.

Learning Coaches are responsible for supervising all aspects of their child's online education. According to K12's informational web page, "[a] Learning Coach supports the student in the learning process while they are enrolled in the K12 program. They are responsible for ensuring their student is on track with assignments and coursework as well as communicating with their teachers throughout the school year," (2016). Also per K12's online description, Learning Coaches are expected to commit anywhere from one to six hours a day for managing

their students' educational experiences, depending on the grade level of that particular student (2016).

Special Education in Virtual Schools

While the corpus of literature on virtual k-12 education as a whole is still very much developing, the set of literature on special education in such schools is even more scarce. A small collection of studies exist addressing the physical and sensory accessibility of virtual curricula (Greer, Rowland & Smith, 2014; Hashey & Stahl, 2014; Smith & Basham, 2014), a few studies addressing strategies for special educators in specific content area (Serianni & Coy, 2014; Vasquez & Straub, 2015), and some that seek to describe various aspects of different virtual school communities (Rice & Carter, 2015; Beck, Egalite & Maranto, 2014; Spitler, Repetto & Cavanaugh, 2013; Repetto, Cavanaugh, Wayer & Liu, 2010; Beck, Maranto & Lo, 2014; Harvey, et al., 2014). While this body of work is invaluable in exploring and establishing a new pedagogy of virtual special education, there remains a documented lack of clear, explicit study of topics that are related to the needs, experiences and support of students enrolled in virtual special education (Carnahan & Fulton, 2013; Vasquez & Straub, 2012; Burdette, Greer & Woods, 2013;

U.S. Department of Education, 2010; Ferdig, Cavanaugh, Dipietro, Black & Dawson, 2009; Harvey, et al., 2014; Repetto, Cavanaugh, Wayer & Liu, 2010; Barbour, 2009). Moreover, of all the studies, only one study exists that addresses academic outcomes in empirical terms for students with disabilities in any virtual school (Carnahan and Fulton, 2013).

Implementation of IDEA

Findings explored in the literature (Lin, 2009; Bernstein, 2014; Currie-Rubin & Smith, 2014; Franklin, Burdette, East & Mellard, 2015; Burdette, Greer & Woods, 2013; Rice & Carter, 2015; Coy, 2014; Keeler & Horney, 2007) suggest that virtual charter schools are reimagining the

structure and delivery of special education services. The most basic tenant of special education is the Individuals with Disabilities Education Act (IDEA). The six principles of IDEA are Free and Appropriate Public Education, Least Restrictive Environment, Individualized Educational Plan, Appropriate Evaluation, Parent Participation, and Procedural Safeguards (U.S. Department of Education, 2014).

Since its inception, many interpretations of the components of IDEA have been expounded. The tenant of Free and Appropriate Public Education is meant to protect the rights of students with disabilities to an education appropriate to their needs at no cost to their families, in the environment that least restricts their access to the general education curriculum and their typically developing peers (Least Restrictive Environment). This education should be implemented according to an Individualized Educational Plan (IEP) that is the result of a culturally and individually appropriate evaluation. All special educational processes, including evaluative processes, must include parent participation that is protected by a host of procedural safeguards including prior notice of evaluative and planning activities; consent of all evaluative activities and educational programming; due process hearings; and independent mediation, should the student's family and school disagree on the appropriateness of current special education instruction and services (U.S. Department of Education, 2014).

The Individuals with Disabilities Education Act was authored before virtual education and charter schools were widely conceived. IDEA was originally designed to protect the rights of students with disabilities in traditional brick-and-mortar, district-run public school systems, not in k-12 schools without physical structures or boundaries, nor in schools that may not belong to a larger educational district. Even though a growing body of work on k-12 virtual education is available, a relatively few number of studies have addressed the challenges faced with the implementation of IDEA within virtual school systems.

The idea of the Least Restrictive Environment in virtual public schools is one that has been considered in current literature (Burdette, Greer & Woods, 2013; Bernstein, 2014; Rice, East & Mellard, 2015; Rhim & Kowal, 2008; Sze & Cowden, 2012). In traditional brick-and- mortar schools, LRE is meant to ensure that students with disabilities have access to the general education curriculum and their non-disabled peers to the greatest extent possible (U.S. Department of Education, 2010). In consideration of Part B of IDEA (ages 3-21, including k-12 education), LRE is widely interpreted to mean a student's physical classroom or school placement. Students in these grades are typically enrolled in a school or school system with a prescribed point of access: their school building (Wright, 2016). Virtual charter schools employ a school-classroom organizational structure similar to those in Part B programs, but virtual schools are an ambiguous arena for the implementation of the LRE.

The roles of teachers and parents in virtual special education programming have also been examined (Currie-Rubin & Smith, 2014; Rice & Carter, 2015; Bernstein, 2014; Franklin, Burdette, East & Mellard, 2015; Barbour, 2009; Basham, Stahl, Ortiz, Rice & Smith, 2015; Burdette & Greer, 2014; Rhim & Kowal, 2008; Lin, 2009). It is common among this research that parents spend considerable time on their children's educations, and that teachers' roles have shifted more toward case management and away from the delivery of instruction. Some research describes the parental role as equal to that of a para-educator or teacher's assistant in a traditional brick-and-mortar school (Rhim & Kowal, 2008). Other literature asserts that parents of students with disabilities are expected to take on the roles of special education and content teachers (Rice & Carter, 2015; Rice & Greer, 2014; Bernstein, 2014; Franklin, Burdette, East & Mellard, 2015; Barbour, 2009; Basham, Stahl, Ortiz, Rice & Smith, 2015; Burdette & Greer, 2014). There is even some suggestion that the role of teachers in virtual special education is to support the parents of

students with disabilities in providing instruction to their children (Rice & Carter, 2015). While IDEA articulates the necessity of parent involvement many times over, the use of parents as teachers, para-educators, or teachers' assistants was possibly neither the intention nor the spirit of the law.

Statement of Purpose

The purpose of the current study is two-fold. First, the researcher will describe aspects of a model of special education instruction utilized by one virtual school—a kindergarten-through-twelfth grade public charter school in a state in the south eastern region of the United States— and its alignment with the Individuals with Disabilities Education Act. Second, the researcher seeks to describe the specific roles that teachers, parents and other staff play in supporting the success of students with disabilities. Thus, the following research questions will be explored.

Central Research Questions

The current study will seek to answer the following research questions:

1. To what extent are the tenants of the Individuals with Disabilities Education Act implemented for students in special education in one virtual public charter school?

2. What specific roles do parents, teachers and other staff play in supporting the success of students with disabilities in one virtual public charter school?

Significance of the Study

The current study will add to current research by developing a picture of special education practices in one kindergarten-through-twelfth grade virtual public charter school, by identifying aspects of that program that may or may not successfully adhere to the Individuals with Disabilities Education Act, and by examining the roles of various adults in virtual special education including how those roles may or may not support the success of students with

disabilities. This study will assist in improving practices by highlighting areas of strength and areas of potential improvement evident in the model of virtual special education instruction. Finally, this study will serve as a guide for virtual school administrators and educators as they continue to expand their special education programs to meet the needs and protect the rights of students with disabilities.

Definition of Terms

For the purposes of the current study, the definition of key terms are as follows:

- Virtual School: a school in which students are in locations—typically their homes—that are geographically different from their teachers, and in which classrooms are accessed via Internet-based conferencing systems

- Brick-and-Mortar School: a traditional school building in which students and teachers meet for the purposes of engaging in compulsory educational activities. More simply, a school building with a physical address where instruction takes place.

- Charter School: a school that is publicly funded but privately managed. Can be open enrollment or have an admissions' criteria, but cannot charge tuition. Charter schools are based on the central tenant of autonomy: school administrators are not immediately accountable to a district for the purposes of day-to-day operations or instructional/curricular planning and, therefore, are free to make independent decisions regarding student achievement, staffing, and instructional practices.

- Learning Coach: an adult, typically a parent, who is responsible for overseeing and organizing a virtual student's in-home (or other remote learning site, such as a public library) school experience.

- Disability: a condition that falls into one of thirteen federal categories of

classification: Autism, Intellectual Disability, Other Health Impairment, Specific

Learning Disability, Deaf-Blindness, Deafness, Hearing Impairment, Blind or

Visual Impairment, Orthopedic Impairment, Emotional Disturbance, Speech

Language Impairment, Traumatic Brain Injury, and Multiple Disabilities.

- Online School (OLS): the Internet-based platform through which virtual

  classrooms, virtual lessons, virtual assignments, grades, virtual school

  communication and other aspects of virtual education are housed and accessed by

  students, teachers and Learning Coaches.

- "K12" versus "k-12": In the current study, the term "K12" will refer to the for-

  profit virtual school management company, K12, Inc. The term "k-12" will refer to

  the set of grade levels from kindergarten through twelfth grade.

Conceptual Framework

A conceptual framework was established to show the interrelatedness of virtual special

education via a Venn diagram (Figure 1.5). Pertinent variables are divided into two separate sets

(A and B), which overlap at the point of the present proposal, labeled "Intersection 1."
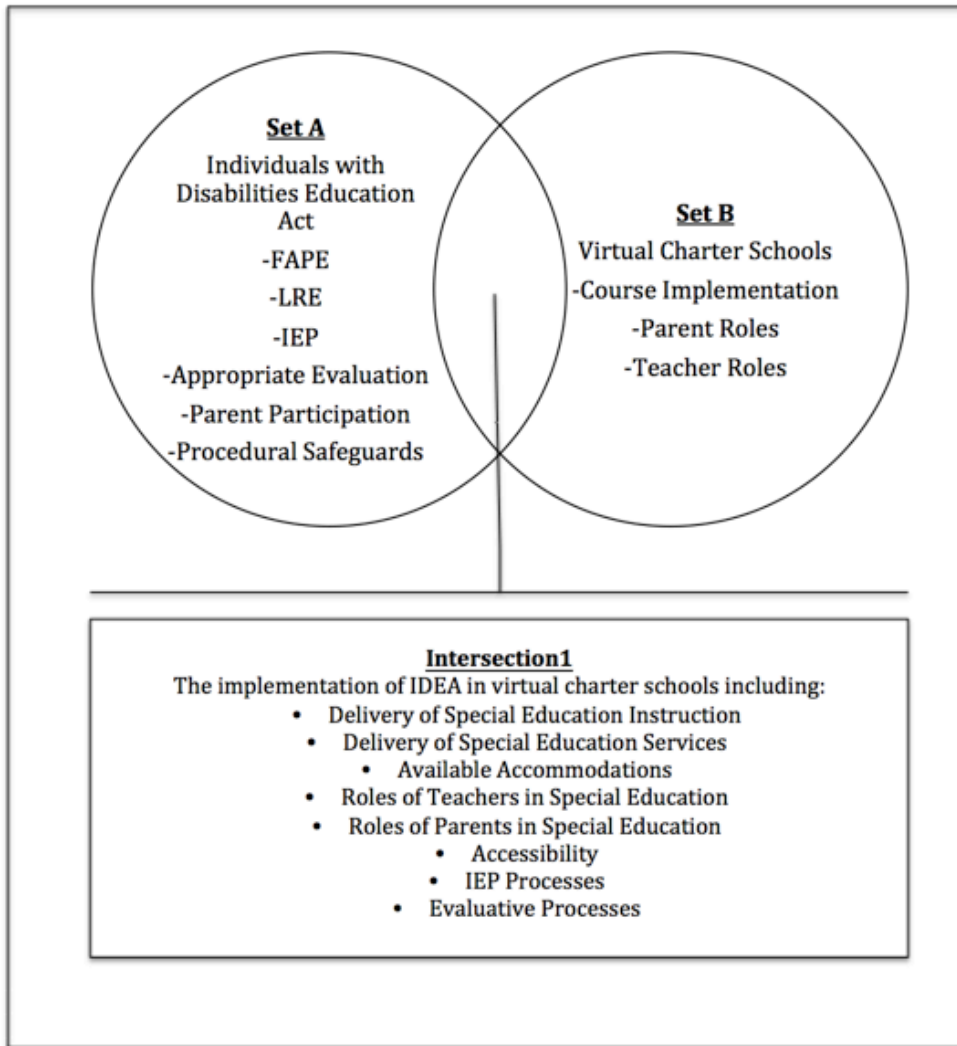
Figure 1.5. Concepts related to the Implementation of the Individuals with Disabilities Education Act in Virtual Charter Schools.

Sets A and B. In figure 1.5, Set A contains what are often called the "pillars of IDEA." These pillars are Free and Appropriate Public Education; placement in the Least Restrictive Environment; instruction tailored and organized according to an Individualized Education Program; access to Appropriate and Non-Discriminatory Evaluation; Parent and Student Participation in all aspects of educational programming; and Procedural Safeguards including Due Process. Set B contains major variables related to the organization and delivery of instruction in schools that are completely online, or, as they are named in the current study, virtual schools.

These variables include the delivery of instruction in virtual schools, and the roles of teachers and parents in such schools.

        Intersection 1. Intersection 1 illustrates the confluence of IDEA and virtual education. Themes discovered in current literature address questions of the legality of the changing shape of the delivery of these services as a result of the nature of virtual education (Bernstein, 2014; Lin, 2009; Lazarus, Thompson & Thurlow, 2006). Researchers have questioned whether the changing roles of parents and teachers in such schools have compromised free access to public education for students with disabilities, and how these new roles have impacted the way educators author and implement IEPs (Bernstein, 2014; Lin, 2009, Rice & Carter, 2015; Barbour, 2009; Franklin, Burdette, East & Mellard, 2015; Burdette & Greer, 2014). Researchers have also questioned the nature of the Least Restrictive Environment in virtual schools. The concept of "location" of virtual education is described in some literature as the point of access of the Online School (OLS). For most students, that point of access is their home (Rhim & Kowal, 2008). Other research suggests that virtual classrooms themselves should be the environment that is considered when LRE is discussed (Rice, East & Mellard, 2015). Others still argue that it is the accessibility of the online content to students with a variety of disabilities that dictates the restrictiveness of the given environment (Sze & Cowden; 2012; Keeler & Horney, 2007). Even though special education is a service and not place, the "location" of virtual school has the potential to impact students' success and needs to be explored.

Summary

        Virtual education is a relatively new model of instruction to the compulsory educational world. Though families are increasingly choosing virtual education for a variety of reasons, a lack of empirical research exists that demonstrates the efficacy of general and special educational practices in Internet-based schools. While the body of literature addressing special education

practices in virtual schools is growing, very little has been written regarding compliance with the Individuals with Disabilities Education Act in these schools. Conditions unique to virtual schooling, such as the lack of a physical location, and the changing roles of parents and teachers, have made the assessment of IDEA compliance in virtual settings a nebulous and confusing task.

The current study will describe the implementation of special educational services and instruction in one virtual school. By examining the intersection of virtual education and the Individuals with Disabilities Education Act, the current study will also determine if aspects of that model of implementation are in compliance with IDEA. Finally, the current study will contribute to the field of virtual education by describing areas of success and areas in need of improvement in the special education programming of one virtual public school.

CHAPTER TWO

Review of the Literature

This literature review explores topics related to the participation of students with disabilities in virtual educational systems. First, concepts of virtual education and virtual schools as outlined in current literature are discussed. This discussion includes documented response to virtual k-12 schools including praise and concerns, and research related to different stakeholders in virtual school environments including teachers, parents and families, and students themselves. Next, the implementation of special education services in virtual schools is discussed, including topics of participation, stakeholders, accessibility and compliance.

Defining Virtual Education

When researchers discuss "virtual education," they are actually discussing a wide range of educational tools and organizations that have one thing in common: the Internet. Virtual classes, which were piloted in the late twentieth century as a means to bring increased course availability to students in rural Canadian school districts (Barbour & Reeves, 2008), have evolved into an all-inclusive model of instruction that some hope will eventually replace traditional brick-and-mortar public schools (Barbour & Reeves, 2008; Toppin & Toppin, 2015). Early virtual educational options included credit recovery and expanded advanced course offerings (Hasler-Waters, Barbour and Menchaca, 2014), but new incarnations of online learning cover the gamut of compulsory and higher educational programs (Barbour & Reeves, 2008; Toppin & Toppin, 2015; Hasler-Waters, et al., 2014; Dillon, 2011; Brady, Umpstead & Eckes, 2010). In today's virtual-educational landscape, a student can attend school beginning in his/her kindergarten year and ending with any number of higher educational degrees or certifications having never set foot in a physical classroom (Coy, 2014).

But "virtual education" is not limited to schools with purely online courses. This term can apply to a supplementary web-based class offered within a brick-and-mortar school, just as it can be applied to a completely online school system. Some virtual schools offer curricula via Internet platforms to students who are home-based (Glass & Welner, 2011; Barbour & Reeves, 2009) while others offer a brick-and-mortar location in which students access web-based lessons (Barbour & Reeves, 2009). Some brick-and-mortar district schools offer virtual courses as a means to meet certain remedial, advanced or supplementary credit requirements without taking a course in a physical classroom (Hasler-Waters, et al., 2014). Still others offer face-to-face instruction to supplement virtual classroom learning (Glass & Welner, 2011). In order to make some sense of the wide variety of virtual educational offerings, Morgan (2015) and Archambault & Crippen (2009) adopted Allen & Seaman's 2006 model. This model defines the structure of virtual-educational courses and systems according to the amount of time that students spend engaged in face-to-screen, versus face-to-face, instruction:

- *Online:* At least 80% of instructional time is spent in face-to-screen learning.

- *Blended/hybrid:* 30-79% of instructional time is spent in face-to-screen learning.

- *Web-facilitated*: 1-29% of instructional time is spent in face-to-screen learning.

As is evident given the examples above, "virtual education" is a very broad term that only implies some degree of web-based learning. It does not describe the extent of involvement of Internet platforms and tools with any quantitative or qualitative specificity.

Defining Virtual K-12 Schools

To paraphrase Barbour & Reeves's 2008 paper, "virtual schools" are entities that are sanctioned by state governments to deliver educational opportunities to students using distance delivery models, most frequently via the Internet. According to Torre (2013), virtual schools are

schools that educate students "…through blended or completely online curricula." To apply the Allen-Seaman model, virtual schools are schools in which students spend 30-100% of their instructional time engaged in face-to-screen learning. In his 2001 report, Tom Clark succinctly defined virtual schools as "… educational organizations that offer k-12 courses through Internet- or Web-based methods." Basham et al. state schools are virtual "… when a student attends school through a virtual interface and does not attend classes at a brick-and-mortar building," (2015).

Virtual k-12 schools are operated by a variety of institutions with a variety of funding sources and profit statuses. For example, virtual schools can be wholly public schools that receive public funding and are run by governmental or district administrative teams (Hasler- Waters, et al., 2014); wholly private schools with private funding—typically tuition-based systems—run by private administrative teams (Clark, 2001; PR Newswire, 2009; Saiger, 2016); or charter schools, which typically receive public funding but operate outside the direct purview of a traditional school district (Hasler-Waters, et al., 2014; Brady, Umpstead & Eckes, 2010; Dillon, 2011). Virtual schools can be run entirely by non-profit or for-profit institutions (Clark, 2001), or by a partnership of not- and for-profit entities (Saiger, 2016; Glass & Welner, 2011). Virtual schools and programs can be their own local public school district. They can be run by traditional public school districts at the state and local levels (Barth, Hull & St. Andrie, 2012; Clark, 2001), by for-profit designers of virtual curricula (PR Newswire, 2009), or by a partnership of a public educational entity—such as a state or local school district—and the for- profit corporation that designs and sells that entity's academic curricula (Hasler-Waters, et al., 2014; Saultz & Fusarelli, 2017). This final model, that of a public school sanctioned by a state government but run by a private, for-profit corporation, dominates the virtual school market with75% of all public virtual school students being enrolled in schools that are managed by for-profit corporations (Glass &

19

Welner, 2011). Examples of different types of virtual school management structures are distilled in the table below.

Table 2.1

Examples of Virtual Schools by School Type, Management Structures, For-profit Affiliate, and Governing Districts

Name of School	School Type	Management Structure	For-Profit Affiliate	Governing District	Source
California Virtual Academies	charter	public-private partnership	K12 Inc.	California Virtual Academies	Calefati (2017)
eAchieve Academy	charter	public	n/a	Waukesha School District	https://www.eachieve.com
FLVS Full Time	public	public-private partnership	Connections Academy	Florida Virtual School	https://www.flvs.net/about/newsroom/main
FLVS Global School	non-public	public-private partnership	Connections Academy	Florida Virtual School	https://www.flvs.net/about/newsroom/main
International Connections Academy	private	private	Connections Academy	n/a	http://www.internationalconnectionsacademy.com
Laurel Springs School	private	private	Nobel Learning Communities, Inc.	n/a	http://laurelsprings.com
Louisiana Virtual Charter Academy	charter	public-private partnership	K12 Inc.	Community School for Apprenticeship Learning	http://www.csalcharterschools.org http://lavca.k12.com
North Carolina Connections Academy	charter	public-private partnership	Connections Academy	North Carolina Virtual Public School	http://www.connectionsacademy.com/north-carolina-virtual-school

As is evident in Table 2.1, the virtual school landscape is equally as complex as the concept of virtual education itself. No one model exists that can singularly define what it is to be a "virtual school."

Response to Virtual K-12 Schools in Available Literature

Response to virtual schools in available literature has been mixed, with little consensus to date. Perhaps the most common theme documented in the virtual school literature is, paradoxically, a lack of available research (Barbour 2009; Bath, Hull & St. Andrie, 2012; Ferdig, Cavanaugh, DiPietro & Dawson, 2009; Harvey, et al., 2014; Morgan, 2015; Toppin & Toppin, 2015; Wang & Decker, 2014; Hasler-Waters, et al., 2014). The U.S. Department of Education went so far as to call it a "very flawed…ad-hoc" collection of literature that "…lacks a coherent body of linked studies that systematically test theory–based approaches in different context," (2010).

Virtual schools have been celebrated in some literature for their potential to offer more flexible learning opportunities to more students than traditional brick-and-mortar schools (Marsh, Carr-Chellman & Sockman, 2009; Sze & Cowden, 2010). For example, Toppin and Toppin (2015) discuss the benefits of flexible scheduling to families with high degrees of mobility, students in rural parts of the nation, and students with personal and vocational commitments outside of school. Currie-Rubin and Smith (2014) acknowledge the benefits of personalized learning, pacing, leveling, content and curricula for many students, but especially those with learning differences. Welch (2015) mentions virtual schools as an option for students who have been bullied in brick-and-mortar schools. Miron and Urschel (2012) discuss trends in literature suggesting not only that virtual schools support the school choice movement, but also that the technological component of virtual schooling allows teachers to respond more effectively with many, and more, students than traditional forms of communication in brick-and-mortar schools and classrooms.

Though virtual schools have been lauded for their ability to offer flexible learning options to students with a variety of learning and situational needs, they are not without criticism. Issues

such as high attrition rates, low student achievement, the domination of for-profit institutions in the public school market, and a lack of literature have drawn much concern. Bausell (2016) discusses a "... [h]ighly mechanistic, accreditation-driven schooling arrangement that has transformed the roles and functions of teachers, students, and parents," in which attrition, achievement and very high student-to-teacher ratios are but a few concerns. Multiple studies discuss the shifting of instructional responsibilities from teachers to parents and other family members, and the necessity for full-time parental or other full-time familial involvement in order to secure positive academic results in virtual schooling systems (Bausell, 2016; Barbour, 2009; Barth, Hull & St. Andrie, 2012; Currie-Rubin & Smith, 2014). Barbour and Reeves (2008) point out that the characteristics that are associated with success in virtual education—high literacy skills, effective time management, intrinsic motivation, strong technology skills, and an independent orientation toward learning—are most commonly associated with adult learners, not with students participating in kindergarten through twelfth grade classes. One study suggests that K12 Inc., the largest provider of virtual curricula and the largest for-profit virtual school management group, purposely cut $20 million in school funding in the 2013 fiscal year in order to increase corporate profitability (Miron & Urschel, 2012).

Concerns expressed about the practices of virtual charter schools have not been limited to academic research. Some legal action has been taken against virtual schools and the systems that operate them. In June of 2015, for example, thirty-plus teachers employed by California Virtual Academies, a K12, Inc. school, filed a total of sixty-nine complaints against their employer alleging that the school mismanaged money collected from federal funding sources, failed to provide special educational services, and manipulated enrollment data for corporate benefit. The teachers also accused the state itself of a failure to provide any sort of regulatory oversight in the operation of the school (State of California v. California Virtual Academies; Adams, 2015; Pierce,

2017). Ohio's largest virtual public school, the Electronic Classroom of Tomorrow (ECOT), was found guilty of vastly overstating student attendance, claiming that they provided service to twice as many full-time students as they actually did in the 2015-16 school year. ECOT collected state and federal per-pupil funding for some 15,322 full-time students when, in fact, only 6,312 of their students completed enough coursework to be considered full-time (Prothero, 2016). One class action complaint filed against K12, Inc. in June of 2012 alleged violations of various oversight laws by schools in Arkansas, Pennsylvania, Ohio, Hawaii, Michigan and California, and securities fraud by K12, Inc. (David Hoppaugh v. K12, Inc., Ronald J. Packard, and Harry T. Hawks).

Teachers in Virtual K-12 Schools

As with responses to virtual k-12 schools, literature that considers the experiences of, and describes teachers in virtual schools is limited and can be contradictory. Archambault and Crippen (2009) determined that teachers in online settings are nearly identical to teachers in brick-and-mortar schools when looking at demographics, education level, and years of experience. However, teachers in virtual settings were slightly more likely to have more experience and a higher level of education than their brick-and-mortar counterparts. This same study determined that teachers in virtual schools frequently report that teaching in virtual settings is "challenging" because the field lacks a body of best practices, and because of the large number

of students assigned to their caseloads, anywhere from zero to 2,000 according to the study. Rice and Carter (2016) cite the average caseload of participating content teachers at 150 students, with as many as 50% of those students having some sort of identified special need.

Hawkins, Barbour and Graham (2012) found that teachers in virtual schools felt disconnected from "… their students, from their traditional notions of what it meant to be a teacher, and from their fellow teachers." Participants described feeling no personal connection to

students as individuals, and a sense of being at a loss about how to engage and motivate "nameless" and "faceless" community members beyond checking in via email. These teachers believed that this disconnect from students has had a detrimental effect on student achievement. However, neither the authors nor the participants showed any empirical data to support or disqualify this impression. Participants described their roles in virtual schools as more managerial than that of traditional teachers, saying that their job was to process qualitative assignments and communicate with families in a customer service model.

Rice, Dawley, Gasell and Florez's 2008 report agreed with Hawkins, Barbour and Graham's 2012 description of the experience and education levels of teachers in different virtual school environments. Participants working in completely online settings, not those in blended or supplemental programs, report a lack of parental partnership, struggles with time management, a feeling of isolation, and an unmanageable workload as major challenges in virtual school settings. Parental support, isolation, and workload were found to be challenges unique to purely virtual teachers, while time management was a concern across program models.

A 2014 study by Beck and Maranto that compared the virtual and brick-and-mortar experiences of teachers who have worked in both school settings was largely positive. This study showed that participants looked forward to their workday more in the virtual setting than

they did in brick-and-mortar schools, that they felt they shared a professional mindset with their colleagues, and they enjoyed trusting relationships with their school leadership teams. This positive experience of teachers in virtual school settings seems to be at odds with the more negative teachers' perceptions of working in virtual school settings described in previous studies. Also in contrast to previous studies, participants in this study believed that familial involvement did not impact a student's ability to achieve, and that "…teachers can make a difference in

students' lives even when family support is not present," (p. 67). While the majority of feedback provided to Beck and Maranto celebrated the day-to-day realities of working in a virtual school environment, participants did report having the impression that virtual schools fall short of the potential to be educational innovators due to a lack of professional learning opportunities being implemented by virtual school administrative teams.

Parents and Families in Virtual K-12 Schools

One point that is nearly unanimous across available literature is the reality that virtual schools require a significantly greater investment of time on the part of parents or other family members than do traditional brick-and-mortar schools (Black, 2009; Lin, 2009; Liu, Black, Algina, Cavanaugh & Dawson, 2010; Bernstein, 2014; Barth, Hull & St. Andrie, 2012; Hasler-Waters, 2012; Burdette & Greer, 2014; Rice & Carter, 2015; Currie-Rubin & Smith, 2014; Franklin, et al., 2015; Basham, Stahl, Ortiz, Rice & Smith; 2015; Gill, Walsh, Smither Wulsin, Matulewicz, Severn, Grau, Lee & Kerwin, 2015; Welch, 2015; Ortiz, et al., 2017). In his 2009 dissertation study for the University of Florida, Black found that virtual school students whose parents provided encouragement, modeling and instructional r*einforcement* had higher academic achievement than their classmates whose parents did not provide such supports. Interestingly, Black also found that parental *instruction* had a negative effect on virtual school students'

academic achievement. Several confounding variables included the quality of parent instruction, parents' relevant academic skill sets, and the fact that some parents don't offer instruction until after their student has demonstrated poor academic performance. Thus, it becomes difficult to pinpoint the relationship between parental instruction and diminished student achievement.

Liu et al. (2010) argued that, "In virtual learning environments, parental involvement in student academic activities are especially important for student academic achievement

25

considering the lack of physical presence of teachers and the chunk of time students spend on learning at home," (p. 120). Franklin, et al. echoed this sentiment in their 2015 discussion with members of state and local educational agencies. Participants expressed an urgent need for parental preparation and involvement in virtual school environments, as these are significant factors in students' "understanding, persistence, and success." Currie-Rubin and Smith (2014) took this concept one step farther and described a system of schooling in which parents and other family members were taking on the roles of teachers. They illustrated that it is the parent, not the teacher, who guides the student through learning, modifies curricular materials as needed, makes content relevant to the individual learner, seeks new and innovative instructional strategies, and is vital to the student's success. Hasler-Waters (2012) found that parents of students in virtual schools indeed felt their roles as "learning coaches" were challenged by a lack of time, lack of immediate access to teachers, and by the complex nature of the role. Interestingly, despite the reported challenges, she argued that parents were often times better suited to fill these roles than teachers in virtual school settings due to the parents' familiarity with their children as learners and their proximity to their children during the school day (Ortiz, et al., 2017).

Beck, Maranto and Lo (2014) found that parents of students across demographic categories were more satisfied with their children's virtual schools than they were with their children's brick-and-mortar schools. In a study conducted by the virtual school for-profit provider Connections Academy, 84% of 17,860 respondents said that they happier with their current school placement than their previous school choice (PR Newswire, 2015). One should be cautious in interpreting that specific data point as the study surveyed parents with children currently enrolled in virtual schools, and these parents may be more likely to be satisfied with their school placement than parents who have removed their children from a given virtual school. Further, no additional

information about the type of school previously attended was provided, so there is the potential for virtual school-to-virtual school comparisons. This makes it difficult to determine if those parents preferred virtual schools to brick-and-mortar options.

Students in Virtual K-12 Schools

The literature related to students in virtual k-12 schools can be divided into two main categories: student achievement, and student-centered research. This research examines students' perceptions of, and participation in, virtual k-12 schools including behavioral patterns of students in such schools.

Student achievement in virtual k-12 schools. The literature regarding student achievement in virtual k-12 schools presents a typically bleak and often confusing picture of the efficacy of online learning. A 2015 study by the Center for Research on Educational Outcomes compared the academic growth of virtual school students to the academic growth of students with similar academic and demographic profiles enrolled in brick-and-mortar schools. This study found that students in virtual schools had weaker growth than did their matched-profile brick-and-mortar peers. Results indicated that 67% of participating virtual schools had weaker student growth in reading than their brick-and-mortar counterparts, and some 88% had weaker growth in math (Woodworth, Raymond, Chirbas, Gonzalez, Negassi, Snow & Von Donge).

According to this study, students in virtual schools lost an average of 72 days of reading instruction and an average of 180 days of math instruction as compared to their brick-and-mortar school peers (Layton, 2015). Finally, the study found that enrolling in a virtual school made students two-to-three times more likely to change schools than their brick-and-mortar peers. Only 16% of students enrolled in virtual schools in the 2008-09 school year remained enrolled in the same virtual school for five consecutive years.

Molnar, Miron, Gulosino, Shank, Davidson, Barbour, Huerta, Shafter, Rice and Nitkin (2017) found that, due to legal loopholes related to the rollout of the Every Student Succeeds Act (ESSA, 2015), school performance systems have been frozen in many states to allow for updates in accountability standards. This left data on school performance available from just 18 of the 38 states that house virtual and/or blended schools. According to this small set of reported data, just 37.4% of virtual schools received "acceptable performance ratings," in the 2015-16 school year. Performance ratings were calculated based on data garnered from school report card scores and on-time high school graduation rates. The authors suggested that policymakers focus on student-to-teacher ratios in virtual schools by limiting school and class sizes. To quote directly from their report:

…virtual schools and blended learning schools have large numbers of students for each teacher. Given the overwhelmingly poor performance evidence, it is surprising that the schools are not investing more on instruction (p. 9).

Barbour, Miron and Huerta (2017) looked more closely at five of the states included in the 2017 Molnar et al. report. They found that students enrolled in virtual schools in five states—Washington, Idaho, Michigan, Ohio and Wisconsin—underperformed as compared to their peers enrolled in traditional brick-and-mortar schools in those same states. They

highlighted a significant lack of empirical research related to topics in virtual k-12 education, and strongly suggested that policymakers prioritize research that would shed light on the factors leading to consistently poor performance trends in virtual schools nationally. These findings agree with much of the currently available literature regarding virtual school student performance. However, the authors used data published by Molnar et al. earlier in 2017, so it is not surprising that findings agree with that particular study.

A 2012 study of virtual charter schools operated by K12, Inc. found that those schools consistently underperformed as compared to traditional brick-and-mortar schools (Miron & Urschell). The authors found that only 27.7% of K12 schools met Adequate Yearly Progress (AYP) for the 2010-11 school year, whereas 52% of traditional brick-and-mortar public schools met AYP nationally in that same academic year. Virtual schools operated by K12, Inc. also had lower on-time graduation rates than their traditional brick-and-mortar counterparts, 49.1% versus 79.4% respectively. Additionally, K12 schools had fewer students in grades 3 through 11 meeting or exceeding standards for reading and math achievement in their respective states. The authors echoed concerns expressed in other studies regarding high attrition rates. They found that 67% of K12 students remained enrolled in a K12 school for fewer than two years. A separate study (de la Varre, Irvin, Jordan, Hannum & Farmer, 2014) found that students in virtual schools were less likely to complete classwork than their peers enrolled in comparable classes in brick-and-mortar schools.

One study (Chingos & Schwerdt, 2014) found that students enrolled in the Florida Virtual School performed similarly to, if not better than, their peers enrolled in traditional brick-and-mortar schools on state standardized assessments. However, the validity of this study was later called into question by the National Education Policy Center due to flaws in both methodology and the literature used as the basis of the study (Barbour, 2014). Fernandez et al. (2016) found that participating students with health care needs including, but not limited to, asthma, autism, ADHD, diabetes, developmental delays, and depression, and that participating African-American students were worse off academically in virtual schools than they were in brick-and-mortar schools. They found that enrollment in a virtual school environment had no detrimental effect on the academic performance of students in any other demographic subgroup.

Virtual k-12 student-centered research. The limited literature that is available on student perceptions of their experiences in virtual schools presents an unclear picture of those experiences. Harvey, Greer, Basham and Hu (2014) found that most participating middle and high school students perceived to have limited interactions with their teachers and peers in virtual school settings. The data indicated that nearly 59% of their 140 participants reported that they liked taking online classes "a lot" because it allowed them flexibility to learn at their own pace, in their own homes (2014). Students also reported being satisfied with the amount of interaction they had with their teachers in their virtual schools, but dissatisfied with the limited opportunities for social interactions and extracurricular activities provided by virtual schools.

When asked to complete a Likert-scaled survey that assessed their satisfaction with their virtual school teachers, the majority of the 1,648 student-participants in the North Carolina Virtual Public School reported that their teachers were knowledgeable, appropriately trained, used a variety of online tools to support instruction, and did a good job teaching in the online environment," (Oliver, Osborne & Brady, 2009). However, responses to open-ended questions in this same study found patterns of student dissatisfaction including a disconnect from virtual school teachers, a sense that virtual school teachers gave assignments and moderated online modules but didn't actually teach content. Also, the students reported a lack of academic guidance that negatively impacted their learning.

Student engagement has been modestly studied in virtual k-12 schools. Gill et al. (2015) found that student engagement is the concern most often expressed by principals of virtual charter schools. In her 2012 study, Ingerham found that students enrolled in virtual classes engaged with appropriate online content for a "significant portion" of their 90-minute class time. Students' time on task varied from 0% to 83% of class time, though the researcher did not define what amount of

on-task time qualifies as a "significant portion" of the 90 minutes. The vast majority of students, 13 out of 16, visited off-task websites during class time, and half of students spent at least 15 minutes of class time engaged with off-task websites.

Louwrens and Harnett (2015) asked four virtual middle and high school teachers and ten students about the types of virtual schooling components that engage students. Participating teachers reported that the opportunity for choice activities offered by virtual schools *outside* of the Online School was motivating for students, as was teacher and peer feedback, and relationship-building. Students largely agreed with their teachers and reported that peer and teacher relationships, a variety of feedback, and a connection with the content/task led to greater engagement with online coursework. Interestingly, none of these modes of engagement are unique to virtual school environments. Since peer and teacher relationships, varied feedback, and relevant content exist in brick-and-mortar schools as well as in virtual schools, this study may be more of an assessment of engagement in classroom environments in general than an assessment of engagement in virtual environments specifically.

Special Education in Virtual K-12 Schools

Special education in virtual school environments is very much an emergent field of study (Basham et al., 2015). Currently, available literature regarding special education in virtual classrooms addresses topics related to student enrollment, parent participation, teacher preparedness, accessibility, "flexibility," and IDEA compliance in virtual public schools.

Students in virtual special education. A limited body of research describes students enrolled in special education services in virtual schools in the United States. According to the 3,884 parent-participants in the 2016 study of Fernandez et al., a total of 24.3% of students enrolled in virtual schools across the country were identified as having "a special health care

need," as opposed to 13.3% of students in brick-and-mortar schools in the same state distribution. According to reported data, 47% of those students were identified as being diagnosed with asthma and/or allergies, 38% with ADD/ADHD, 24.8% with "other," (cancer, visual impairment, hearing impairment, scoliosis, ulcerative colitis, and dermatological issues), 24.6% with emotional disorders (depression, anxiety, eating disorders), 13% migraines, and 6.7% with Autism Spectrum Disorders. Other reported healthcare needs were arthritis, epilepsy, heart issues, cognitive disabilities, developmental disabilities, and blood disorders.

Carnahan and Fulton (2013) reported average special education enrollment data from the Pennsylvania Department of Education for the 2005-06 through 2008-09 school. Per Table 2.2, it is difficult to compare the two data sets as there is no standardization to reporting methods. For example, the 2013 data set uses the IDEA-specific classification "Other Health Impairment," which would include some, but not all, categories of disability included in the more ambiguous 2016 data set, "other." Conversely, Fernandez et al.'s "other" category included cancer and scoliosis, which would likely be included in Carnahan and Fulton's "Other Health Impairment" category, but visual/hearing impairments would not.

Table 2.2

A Comparison of Virtual School Special Education Enrollment Data

	Carnahan & Fulton (2013) average of 2005-2009 PA State virtual k-12 school enrollment	Fernandez, et al. (2016) national sample of virtual k-12 school enrollment
Autism	7.22%	6.7%
Emotional Disorder	13.99%	24.6%
Cognitive Disability	6.02%	1.4%
Other Health Impairment	7.08%	n/a
ADD/ADHD	n/a	38%
Asthma/Allergies	n/a	47%
"other"	n/a	24.8%

In fairness, the two data sets were never intended to be directly compared. The 2013 data were collected from official enrollment data reported to the Pennsylvania Department of Education. The 2016 data were collected directly from parents of students enrolled in virtual schools in an effort to begin to represent students with "special health care needs" in the literature. This data reflects an issue of incongruent research purposes and designs.

As part of their study that sought to understand if students with dyslexia were at a disadvantage in synchronous virtual classes, Woodfine, Nunes and Wright (2008) collected data reported by such students in virtual schools in the United Kingdom. In synchronous virtual classes, students are often required to interact with their peers and teachers via multiple text-based tools including instant message platform, interactive whiteboard, and shared documents. Student-participants reported feeling embarrassment, anxiety, shame, and guilt due to their perception of having a diminished ability to participate in these text-based activities. Therefore, they were hesitant to interact with their classmates and teachers. This hesitancy to interact was reported to impact the students' falling behind, task avoidance, withdrawal, loss of credibility, and exclusion from class activities. Other issues reported by students with dyslexia were struggling to remember passwords needed to access synchronous classes and work platforms, being misunderstood due to difficulties with typing and spelling, and struggles with time management, a skill that is cited in existing literature as necessary to student success in virtual school environments (Barbour & Reeves, 2008).

Interestingly, Beck, Egalite and Maranto (2014) determined that special education students were more likely to be satisfied in virtual schools than their non-disabled peers. Students with disabilities—30% of respondents as reported by parents, but only 19% of respondents as reported by the students themselves—were more likely than their general education peers to give lower

evaluation scores to teachers at their previous brick-and-mortar schools. Moreover, they were more likely to say that teaching and learning, and bullying were reasons they decided to move from brick-and-mortar schools to virtual schools.

Parents and families in virtual k-12 special education. Even more pronounced than the commitment required by parents of general education students in virtual schools is the commitment of parents of students with disabilities (Ortiz, et al., 2017). Studies have assessed the amount of time parents spent supporting students with disabilities in their virtual school activities as a range from one-to-three hours per day (Basham et al., 2015; Burdette & Greer, 2013) to as much as five-and-a-half (Bernstein, 2014) or seven hours per day (Ortiz, et al., 2017). According to Smith, et al. (2017), parents of students with disabilities assumed that a full-time commitment on the part of the parent was necessary to student success in virtual school environments.

Parents' roles in implementing virtual special education has been described in the literature as spanning the spectrum from management or coaching (Franklin, et al., 2015), to that of special education teacher and service provider (Lin, 2009; Bernstein, 2014; Basham et al., 2015). Ortiz, et al. (2017) found that parents described their roles in the virtual education of their children with disabilities primarily as that of "educator." They were the person who was responsible for "…finding materials, engaging in instructional sequencing…assuming considerable responsibility for conveying content knowledge to their children…reading texts to their children, managing their behavior, and advising the school as to their children's needs," (p. 18). Other roles described by parents in this 2017 study were those of medical aide, reward manager, and performer of executive function responsibilities.

As part of their 2015 report on equity in digital education for the Center on Online Learning and Students with Disabilities (COLSD), Basham et al. used Burdette and Greer's parent

survey (2013) to assess the experiences of parents of students with disabilities in both blended and

fully virtual schools. The authors illustrated subsequent data in the figure below.
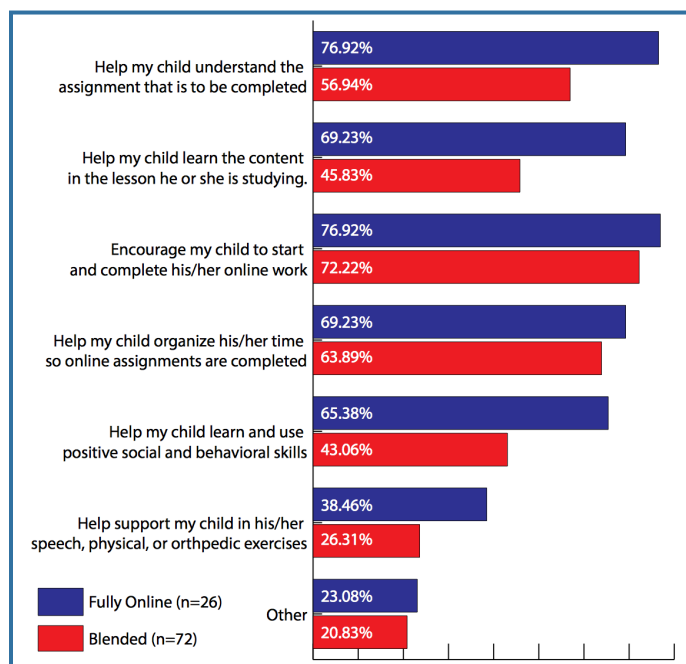
Figure 2.1. Parents' perception of their roles in facilitating the virtual education of their students

with disabilities. From Basham, et al. (2015).

Figure 2.1 describes parents' perceptions of the roles that they play in the day-to-day

implementation of their children's special education services in blended and full-time virtual

school environments. The overwhelming majority of parents of students with disabilities enrolled

in full-time virtual schools reported helping their children to learn the content, helping their

children to understand assignments, encouraging their children to start and complete academic

tasks, helping their children to manage time over the course of their school day, and helping in the

development of the social-behavioral skills of their children. All of these roles and tasks are

required of teachers in traditional brick-and-mortar public schools.

Burdette and Greer (2013), again as part of COLSD, developed a comprehensive survey

that asked parents about their experiences since enrolling their children in virtual schools.

According to the survey, parents of children enrolled in virtual k-8 classes reported challenges with learning the content to be taught, finding time to master technology skills and teaching those skills to their children, and overseeing their children's studies. Parents of high school students reported challenges more closely associated with their children's experiences rather than their own, such as reading comprehension, scheduling conflicts, and students' attitudes toward online learning.

Though parents in virtual schools are spending considerably more time actively participating in their children's instructional days and oftentimes taking over the traditional roles played by teachers in brick-and-mortar schools, some evidence exists that parents of students with disabilities are happier in virtual school environments than they were in brick-and-mortar schools. Beck, Egalite and Maranto (2014) surveyed parents of students with and without disabilities in virtual schools in order to determine the motivations for all participant groups to choose such schools. The researchers found that parents of students with disabilities were more likely than general education parents to have chosen virtual school placement because of issues with bullying, behavior and discipline, and because their child's special needs were not being served in traditional schools. This study found that the parents of general education students and the parents of students with disabilities were equally likely to rate their virtual school experience as superior to their previous brick-and-mortar school experience, which is in line with other research conducted with both populations. This positive view of virtual schools, specifically when considering the parents of students with disabilities, is perhaps not surprising. A number of studies cite the failure of brick-and-mortar schools rather than the strengths of virtual schools as the primary reason for parents' enrolling students with disabilities in virtual schools (Smith, Ortiz, Rice & Mellard, 2017; Beck, Egalite & Maranto, 2014; Beck, Maranto & Lo, 2014). To quote Currie-Rubin and Smith (2014), "parents may be running *from* the challenges of a brick- and-

mortar school, not necessarily *to* an online classroom," (p. 121).

     Pilot study with parents of students with disabilities in a virtual k-12 school. These studies were in agreement with a pilot study conducted by the current author concerning parent perceptions of the achievement of students with disabilities in a virtual school (see Table 2.3). Of the twelve parent-participants, half responded that their children were doing better in their virtual school than they did in their previous brick-and-mortar schools. Parents reported that this improvement was due to the amount of time that they were devoting to their children's instructional day. When a mother was asked if her child was making as much progress as she expected when enrolling the child in a virtual school, she reported the difference in available supports from teachers and herself. She believed that her child made progress due to the one-on-one support that she provided, along with help, at times, from her teachers. In addition, she indicated a desire for more one-on-one instructional time with a math teacher for her child.

     Additionally, ten of twelve parent-participants reported being satisfied with the progress their children made since enrolling in virtual school. The remaining two participants reported that, while their children made progress at the time of response, they recognized that their children's educations remained "works in progress." Seven of twelve respondents explicitly cited failures of brick-and-mortar schools as their reason for choosing to enroll their children in a virtual school. These data points, when taken in tandem, seem to imply that parent-participants are happier with their child's progress in virtual school than they were with their child's progress in brick-and-mortar.

Table 2.3

Parent Perceptions of the Achievement of Student with Disabilities in Virtual Schools

Researcher Question	Examples of Parents' Responses
How long has your child in special education been enrolled in a virtual (online) school?	Average: 2.14 years (6 months – 5 years)
Why did you choose virtual (online) education for your child?	Not learning in regular classrooms Unhappy with regular school Flexibility with pacing Special education needs Liked the idea of home-based school Flexible schedule Social challenges in regular school
How many minutes of special education instruction does your child to receive each week in virtual (online) education?	Average: 43 minutes (10 minutes – 1 hour)
Has your child made as much progress as you expected since enrolling in virtual (online) education? Why or why not, do you think?	Yes Yes, due to parent support Yes, due to one-on-one support Yes, but it's a work in progress
Is there anything else you would like to share about your child experiences in virtual (online) education?	Parent would like more teacher involvement Sometimes the work is overwhelming Parent is better able to see where support is needed 6 hour school days take us 8 hours Student enjoys virtual school

Overall, parents indicated that they choose virtual education for their child due to their child's previous lack of success, the flexibility of an online format, and the unique social and academic challenges of their child. Parents reported that they provided individual support for their child in the virtual school. Additionally, parents reported that they were happy with the progress their child had made since enrolling in the virtual school.

Teachers in virtual special education. At the time of the writing of this proposal, the current author could find just three papers that specifically discussed teachers in virtual special education environments (Coy, 2014; Rice & Carter, 2016; Crouse, Rice & Mellard, 2017). This lack of literature could be a result of the relative "newness" of virtual k-12 special education. In addition, the changing roles of parents and teachers in virtual school environments may impact the

lack of literature. Specifically, teachers are performing fewer instructional tasks than they were in traditional brick-and-mortar public schools.

All available literature describes the roles of special education teachers in virtual schools as more "facilitators of" than "designers of" instruction. Special education teachers are described as sending emails to families (Coy, 2014; Rice and Carter, 2016), checking in on students' progress through their courses (Coy, 2014; Rice and Carter, 2016), encouraging students to be self-reliant (Rice and Carter, 2016) and being dependent on parents as learning coaches to design and implement daily instructional activities (Coy, 2014). Crouse, Rice and Mellard (2017) described a role not unlike that of a brick-and-mortar special education teacher— the teacher provides scaffolding, creates instructional groupings, and communicates with parents—with one important distinction. Special education teachers in participating virtual schools do not design instruction, but rather are expected to deliver lessons according to a pre- packaged, scripted curriculum. Both Coy and Crouse et al. cited "technology support" as one of

the most important services offered to students and families by virtual special education teachers. Additionally, both studies reported that participating special education teachers received no formal training on how to teach students with disabilities in virtual schools prior to taking on such roles.

Accessibility in virtual schools. When we discuss "accessibility" in regard to traditional brick-and-mortar classrooms and school buildings, we typically consider the physical (elevators, ramps) and sensory (braille, hearing aid, sign interpreter) needs imposed upon learners with relevant disabilities (Smith & Basham, 2016; Smith, 2016). However, since there are no physical characteristics of a virtual classroom or virtual school, we must broaden our understanding of what it is to be "accessible" to include the Internet and Internet-based instructional materials

(Burgstahler, 2001; Tindle, East & Mellard, 2015; Keeler, Richter & Ditson, 2007; WebAIM, 2012; Keeler & Horney, 2007; Smith & Basham, 2016; Hashey & Stahl, 2014).

In the current literature, "Web accessibility" is defined in two distinct ways: (1) financial, meaning an individual's ability to procure access to the Internet, and (2) social, meaning the navigability of the Internet to people of diverse experiences and abilities. Rose and Blomeyer (2007) described the financial facet of "accessibility" as a student or family having the resource of a physical point of access to the Internet. They describe obstacles to this sort of Web accessibility such as not owning a family computer, and insufficient Internet bandwidth to support Web-based platforms, including those used by virtual schools. Given that most public virtual schools provide computers and necessary accessories to families that lack financial resources, if not to *all* enrolled families, (Gill et al., 2015), the social definition of Web

accessibility is perhaps more relevant to the participation of students with disabilities in virtual education.

Yesilada, Brajnik, Vigo and Harper (2012) considered "Web accessibility" as a social, rather than financial, concept, and argued that the literature available to them lacked a consensus definition. They surveyed 300 people "with an interest in accessibility," in order to build just such a definition. Their study resulted in definitions of accessibility as it is related to the Internet, and as it is related to technology at large:

1. Web accessibility means that people with disabilities can use the Web. More specifically, Web accessibility means that people with disabilities can perceive, understand, navigate and interact with the Web, and that they can contribute to the Web.

2. Technology is accessible if it can be used as effectively by people with disabilities

as by those without.

A body of research was conducted regarding the accessibility of the Internet for people with physical and sensory disabilities, with less research in regard to people with cognitive and learning disabilities (Keeler & Horney, 2007; Rose & Blomeyer, 2007; Keeler, Richter & Ditson, 2007; Burgstahler, 2001; Smith & Basham, 2016). While educators must still consider the physical and sensory barriers imposed upon students of differing needs in Web-based educational platforms (Smith, 2016; Hashey & Stahl, 2014; Rose & Blomeyer, 2007), they must also begin to more carefully consider the academic barriers imposed upon students with cognitive and learning disabilities (Rice & Greerm 2014; Smith & Basham, 2014; WebAIM, 2012; Tindle, East & Mellard, 2015; Keeler & Horney, 2007).

Text complexity has been identified in the literature as a barrier to the accessibility of virtual curricula for students with cognitive and learning disabilities (Greer, Rice and Deshler, 2014; WebAIM, 2012; Tindle, et al., 2015; Rice & Greer, 2014; Burgstahler, 2001; Smith & Basham, 2014). Tindle, et al. (2015) described online lessons as challenging for students who do not read at or above grade level because of the proliferation of specialized content vocabulary without any sort of differentiated support with vocabulary acquisition. Rice and Greer (2014) also express this concern, but further argued that the isolated nature of virtual schooling makes students less able to socially construct meaning in complex texts. Without ready access to peers in a learning community, students with disabilities cannot engage in peer-to-peer learning and, thusly, have fewer strategies available to them to aid in the navigation of challenging texts (Johnston, Greer & Smith, 2014). Because of the text-dependent nature of communicating in a virtual school environment where students are required to email teachers, instant message with classmates, and engaged with shared documents, text-accessibility can also be seen as a barrier to

virtual communications with teachers and peers (Woodfine, Nunes & Wright, 2006; Keeler & Horney, 2007; Burgstahler, 2001).

The design of virtual educational components including online course materials and learning management systems, such as K12's Online School, has been cited as a barrier to the accessibility of virtual curricula for students with a variety cognitive disabilities (WebAIM, 2012; WebAIM, 2013a; WebAIM, 2013b; Burgstahler, 2001; Keeler & Horney, 2007; Keeler, Richter & Ditson, 2007; Smith, 2017; Greer, Rowland & Smith, 2014). Visual clutter (Burgstahler, 2001), inconsistent screen layout (Burgstahler, 2001; Keeler & Horney, 2007; WebAIM 2012), lack of white space (Keeler & Horney, 2007; WebAIM 2012) and insufficient color balance (Keeler & Horney, 2007; WebAIM 2012) have all been cited as barriers to the learning of students with cognitive disabilities in virtual schools. Basham et al. (2015) suggested that virtual educational tools and systems should be evaluated not just for student usability, but also for *parent* usability in order to account for the increased participation required of parents in virtual school environments.

Some available literature argues that accessibility in virtual school environments is a design-level challenge, and that it is the vendors, rather than schools or teachers, who must address accessibility issues (Burgstahler, 2001; Smith, 2016; Tindle, et al., 2015; Keeler, Richter & Ditson, 2007). Several studies have argued that the principles of Universal Design for Learning (UDL) should be used to measure and design the accessibility of virtual courses and platforms for all users (Smith, 2016; Smith & Basham, 2014; Tindle, et al., 2015; Keeler, Richter & Ditson, 2007; Hasjey & Stahl, 2014; Rhim & Kowal, 2008). UDL is defined as "…a framework to improve and optimize teaching and learning for all people" by providing students with multiple pathways for engagement, representation, and expression (Center for Applied Special Technology, 2015).

Using the UDL Scan Tool created by the Center on Online Learning and Students with

Disabilities, (http://centerononlinelearning.org/resources/udl-scan-tool/), Smith (2016) evaluated

1,115 randomly selected lessons from six virtual school curriculum vendors across all thirteen

compulsory grade levels (kindergarten through twelfth grade) for alignment to the three core

principles of UDL: multiple pathways for engagement, multiple pathways for representation, and

multiple pathways of expression. According to this review, none of the six vendors provided

online curricula that were consistently inline with the UDL framework because they provided

students with limited options for comprehension, engagement and expression. Since such

vendors provide some 90% of virtual school curricula, this means that upwards of 90% of virtual

school curricula may not be accessible to students with disabilities (Smith, 2016).

Flexibility/Personalization. Much of the literature on virtual k-12 education emphasizes

the benefits of "flexibility" and "personalization" to non-traditional students, including those with

disabilities (Marsh, Carr-Chellman & Sockman, 2009; Sze & Cowden, 2010; Toppin & Toppin,

2015; Currie-Rubin & Smith, 2014; Welch, 2015; Coy, 2014). When authors cite flexibility and

personalization as benefits of virtual education, they point to a variety of features including

flexible pacing (Allday & Allday, 2011; Currie-Rubin & Smith, 2014; Archambault et al., 2010;

Rice, et al., 2015; Center on Online Learning and Students with Disabilities, 2012), flexible daily

scheduling (Beck, Egalite & Maranto, 2014; Rhim & Kowal, 2008; Ortiz, Rice, Smith & Mellard,

2017), flexible enrollment dates (Archambault et al., 2010), flexible placement within online

curricula (Currie-Rubin & Smith, 2014), personalized curricula and instruction (Marsh, Carr-

Chellman & Sockman, 2009; Hashey & Stahl, 2014; Smith, 2017; Rice, East & Mellard, 2015;

Rhim & Kowal, 2008; Center on Online Learning and Students with Disabilities, 2012), and a

student's ability to personalize the learning management system (Tindle, et al., 2015). Little or no

empirical research exists that measures the benefits of flexibility or personalization in virtual

school environments, so it seems that these benefits may be assumed rather than proven.

However, some empirical research exists that seems to contradict the benefits of flexibility, specifically in pacing and scheduling, in virtual schools. Allday and Allday (2011) analyzed the pacing data and academic outcomes for 345,422 students with and without disabilities enrolled in a total of 934,080 courses in virtual schools across one "southeastern state" over seven years. They found that virtual high school students with and without

disabilities completed online courses at the same pace and with the same academic outcomes. Self-pacing and additional time did not improve the final grades of student-participants, regardless of the presence of a disability. Further, the study found that the use of extended time to complete a given course correlated with lower final grades, again, regardless of disability status. This seems to imply that the "flexibility" of virtual schooling may not have the positive impact on academic achievement that has been assumed in much of the literature.

A study of one virtual school by Beck, Egalite and Maranto (2014) found that, while "flexible schedule" and "personalized curriculum" were significant reasons for choosing to enroll students with disabilities in virtual schools, both students with disabilities and their parents reported being more dissatisfied with flexibility once they were enrolled (see Table 2.4).

Table 2.4

Group means, special education students and parents reasons for enrolling in virtual schools, and satisfaction with elements of virtual education.

	Personalization as a reason to enroll in VS	Flexibility as a reason to enroll in VS	Satisfaction with flexibility of VS
Students with disabilities	3.71	4.33	2.9
Their parents	4.03	4.13	2.48

Note. From Beck, Egalite and Maranto (2014).

Table 2.4 consists of group means of special education students and parents reasons for enrolling in virtual schools, and satisfaction with elements of virtual education on a 5-point Likert scale where 1=strongly disagree/very dissatisfied, 2=disagree/dissatisfied, 3=neutral, 4=agree/satisfied and 5=strongly agree/very satisfied. According to the data, students with disabilities reported feeling neutral about "personalization of curriculum" before enrolling in virtual school, or agreeing that it was a reason for choosing to enroll in a virtual school (mean = 3.71). Their parents reported personalization as a reason for enrolling their child with a disability in a virtual school (mean = 4.03). When it came to "flexibility of learning schedule," both students with disabilities (mean = 4.33) and their parents (mean = 4.13) agreed that it factored into their decision to enroll in a virtual school. However, once enrolled, students with disabilities (mean = 2.9) and their parents (mean = 2.48) reported feeling neutral-to-dissatisfied with the flexibility of scheduling offered in virtual school environments. So, even though parents and researchers often cite flexibility and personalization as reasons for choosing virtual education, when quantified through statistical analysis, the "benefit" of flexibility does not seem to live up to its promise.

IDEA Compliance in Virtual Schools. Though the Individuals with Disabilities Education Act (2004) guarantees certain rights and protections to students with disabilities and their families in all public schools, a growing body of literature suggests that these mandates are not understood, monitored, or implemented in virtual public schools (Center on Online Learning and Students with Disabilities, 2012; Deshler, East, Rose & Greer, 2012). For example, Crouse, Rice and Mellard (2017) found that virtual special education teachers:

> … received little to no preparation to work with students with disabilities online before
>
> taking a position as an online teacher…were unable to describe specialized instructional
>
> practices for students with disabilities, and they did not name particular policies for

legalities specific to students with disabilities that affected their work (p. 21).

This statement is alarming in that, if we take it at face value, students with disabilities in virtual schools are being denied access to highly qualified teachers, denied access to appropriate and individualized instruction, and are not being protected by the Individuals with Disabilities Education Act by virtue of their teachers' lack of knowledge.

Just as alarming was the Basham, et al. 2015 report for The Center on Online Learning and Students with Disabilities (COLSD). For this comprehensive study, the authors performed a "policy scan" of all 50 states' departments of education, as well as those in U.S. territories, for publicly available evidence of IDEA compliance in virtual schools. The authors found that at least 50% of all U.S. states and territories failed to provide evidence of compliance. Their data are distilled in the table below.

Table 2.5

Percentage of U.S. states and territories found to have unclear evidence, or no evidence of

implementation of "IDEA domains."

IDEA Domain Processes	Percentage of States & Territories Failing to Produce Sufficient Evidence of Implementation
Regulations for supporting students with disabilities in virtual school environments Clear understanding of entity responsible for FAPE in virtual school environments Ensuring accessibility for students with disabilities in virtual school environments	50%
Review of IEP prior to enrollment Guidance to consider online learning variable when developing an IEP for virtual school students Example of appropriate accommodations in virtual school environments Clear statement of child find and identification considerations Monitoring procedures for ensuring online schools are in compliance with IDEA Guidance for considering parent involvement	75%

Note. From Basham, et al. (2015).

According to the data in Table 2.5, 50-75% of U.S. states and territories do not provide

sufficient publicly available evidence that the virtual schools housed in those states and territories

are implementing the basic tenants of IDEA. 75% of all U.S. states and territories do not provide

sufficient publicly available evidence of having IDEA monitoring procedures in place for virtual

schools. Similarly, Burdette, Greer and Woods (2013) found that less than one- quarter of state

directors of special education reported collecting data on students with disabilities receiving

instruction through virtual platforms, and that less than 9% collected data on students with

disabilities receiving related services through online models.

Evidence of compliance concerns in presently available literature can be divided into four main categories: parent participation, students' access to a Free and Appropriate Public Education, child find and evaluation processes, and provision of the Least Restrictive Environment. Though these domains certainly overlap, there is distinct literature available on each individual domain.

Compliance issues related to parent participation. According to the Individuals with Disabilities Education Act (§§ 300.168-300.504, 2004), parents of students with disabilities must be afforded the opportunity to participate in the educational evaluation, eligibility, and placement of their children with disabilities. This is achieved through a parent's federally protected right to prior notice of all evaluative and placement activities (§ 300.503), to grant consent for (§ 300.9) and to refuse (§ 300.300(d)(3)) any service or activity, and to participate as a member of their child's IEP team (§§ 300.321-300.322), in addition to a host of other protections.

Although home-school communication regarding the day-to-day academic activities via parents serving as their child's learning coach in virtual platforms has been well documented in available literature, the flow of federally mandated communication when it comes to special education processes is less clear. Franklin, East, Burdette and Mellard (2015) found that some parents were informed that their child with a disability was ineligible for enrollment in a public virtual school without being given any insight into how or why that decision was reached. COLSD (2016) found that, while virtual schools are relaying information to parents, they are not consistently involving parents in decision-making processes related to the education of their students with disabilities. Smith, et al. (2017) found that some parents of students with disabilities reported being informed of, and included in, IEP reviews upon enrolling their children in virtual schools. However, other parents reported that the process by which such a review was completed

was either unclear or not shared with them at all. All of these data points should raise concerns that parents' rights to prior notice, participation and consent under IDEA are not being upheld in at least some public virtual schools.

Compliance issues related to students' access to Free and Appropriate Public Education (FAPE). Sections 300.17(a) and 300.17(d) of IDEA state that students with disabilities are guaranteed the right to individually appropriate public education that:

- Are provided at public expense, under public supervision and direction, and without charge; [and]

- Are provided in conformity with an individualized education program (IEP) that meets the requirements of §§ 300.320 through 300.324.

There is some concern in the literature that the educational programming being offered to students with disabilities in virtual schools does not meet the "appropriate" mandate of IDEA as it relates to the authorship and implementation of IEPs. For example, Rice, et al. (2017) found that opportunities for instruction in cooperative learning groups, collaboration with peers, and project-based learning are "entirely absent from the lives" of the students included in their study,

even when such instruction was prescribed by those students' IEPs. Lazarus, Thomspon and Thurlow (2006) observed that accommodations were sometimes assigned based on institutional needs rather than the needs of individual students.

Carnahan and Fulton (2013) found that 94.69% of students with disabilities enrolled in Pennsylvania virtual schools in the 2008-09 school year spent 80% or more of their academic day in virtual general education classes, without any special education supports. Even though the authors assigned a minimum of six special education classifications (Autism, Cognitive Impairment, Specific Learning Disability, Emotional Disturbance, Other Health Impairment, and

Speech/Language Impairment) across thirteen grade levels (kindergarten through twelfth grade), there was no discussion of how the general education environment was individually appropriate to the needs of almost all of these diverse learners.

Similarly, for their 2015 report, Basham et al. reviewed the IEPs of 225 students with disabilities who attended virtual schools. They found 152 unique accommodations in those IEPs, and, when they analyzed these data according to age, grade placement, and classification of disability, they found that there were "no discernable patterns" in the way that these accommodations were assigned to students. This could indicate that IEP accommodations are being prescribed ad hoc in order to create the appearance of IDEA compliance rather than based on individual learners' educational goals and needs.

It is impossible to discuss compliance issues related to IEP implementation without discussing parents of students with disabilities in virtual k-12 schools because, in most cases, it is the parent who is implementing the services and accommodations outlined in the IEP. Basham et al. (2015) noted that parents often serve as the primary teacher of students with disabilities in virtual public schools, and that this fact "… raises the question of how IDEA's 'qualified teacher' requirements are being met" (p. 61). Burdette & Greer (2014) discuss the same concern based on their findings that most parent-participants reported performing tasks generally assigned to teachers in special education programming, and that 27% of parent-participants reported working with their children three hours or more per day, which is "…nearing the amount of time teachers in the U.S. spend with their students in an instructional role," (p. 85). This study also found that 28% of parent-participants reported that their children did not receive any special education services in their virtual schools despite having been identified as students with disabilities. It seems that, at least in the case of this 28%, the parents were in fact the only person

implementing special education instruction and supports for students with disabilities in virtual school environments. According to the 2017 of Smith, et al., parents of students with disabilities in virtual schools not only performed instructional duties, but were responsible for the coordination and implementation of supplemental services such as speech and occupational therapies. Bernstein (2014) assessed parental involvement in the implementation of IEP instruction and services simply by saying, "Relying on parents to provide special education services is illegal," (p. 516).

At least one author (Lin, 2009) argued that the participation requirements placed on parents of students with disabilities in virtual schools violates the "free and without charge" clauses of IDEA. He suggested that requiring a significant investment of time on the part of parents is tantamount to charging tuition. Lin argued that time is a resource, and that if parents do not have access to the resource of time—whether this is because they have employment outside the home, other children, or any other time-based conflict—they must forego the option of enrolling their students in public virtual schools. Therefore, because virtual education requires such a significant investment of time on the part of parents of students with disabilities,

it cannot be considered a free public education. At the time of the writing of this literature review, no court has considered whether or not requiring significant parent involvement in virtual education equates to a denial of a free public education.

Compliance issues related to child find and evaluation processes. The child find mandate of IDEA requires educational agencies to identify, locate and evaluate all students in need of special education services, and to have a developed and implemented system to determine which children are currently receiving needed special education and related services (IDEA, §300.111). A concern is emerging in available literature that due to the lack of face-to- face interaction with

teachers and other virtual school staff, students in need of special education supports are not being identified and evaluated in virtual public schools (Swenson & Ryder, 2016; Rice & Carter, 2015). There is also a documented concern that virtual schools and educational agencies are not developing systems by which to monitor the provision of special education and related services (Rhim & Kowal, 2008; Burdette, Greer & Woods, 2013; Deshler, East, Rose & Greer, 2012; Basham et al., 2015; Center on Online Learning and Students with Disabilities, 2016).

Compliance issues related to the provision of Least Restrictive Environment (LRE). The LRE mandate of IDEA (§300.114) requires that children with disabilities are educated with their non-disabled peers to the maximum extent appropriate. The major concern regarding LRE in virtual schools seems to be that there is no understanding of how to measure the relative "restrictiveness" of a given virtual program (Deshler, East, Rose & Greer, 2012). Though there is no consensus regarding the definition of LRE in virtual schools, a few studies have raised questions about how we consider restrictiveness in online schools and courses. Rhim and Kowal (2008) argued that, because most students enrolled in virtual schools receive their education at home, the student's home should always be considered the least restrictive environment. According to COLSD's 2016 report on equity in virtual schools, because *all* students, not just students with disabilities, have a great variability in the quantity and nature of interaction with their peers in virtual school communities, limited access to non-disabled peers may not constitute a more restrictive environment for students with disabilities. Finally, Rice, et al. (2015) noted that the flexibility of time and place associated with virtual education makes maintaining access to general education curriculum simpler for students with special needs, but that ensuring access to their peers remained difficult in virtual school placements. This research did not offer any suggestion or guidance in defining the statute in virtual platforms, but did note it as an area of study that requires additional attention.

Summary

Virtual education is comprised of a broad field of educational tools and systems that incorporate some degree of face-to-screen learning via the Internet. Virtual education includes online classes, online resources, and fully online schools. Enrollment in fully virtual k-12 schools has dramatically increased over the last ten years. Fully virtual k-12 schools can be public, private, or charter and are operated by non-profit and for-profit organizations.

Response to fully virtual k-12 schools has been mixed. Some literature lauded virtual schools' ability to meet the needs of individual learners by offering flexible scheduling, pacing, curriculum, and online learning environments. Other literature raised questions about low student achievement, high attrition rates, the involvement of for-profit corporations in public education, a dependence on significant parental involvement, and a lack of understanding of best practices and school performance in empirical terms.

Specific concerns have been raised regarding the experience of students with disabilities in virtual k-12 schools. Some research suggested that virtual k-12 schools are not providing instruction and services that are individually designed to meet the needs of learners as required by the Individuals with Disabilities Education Act. Much of the available literature expressed concerns that students with disabilities are being denied access to highly qualified special education teachers due to a disproportionate reliance on parents to fill instructional roles. Other research suggested that the design of Web-based educational platforms must be reconceived because in its current form it is not accessible for students with a variety of academic and cognitive disabilities. Finally, there is a body of work that argued that virtual k-12 schools are not tracking, nor practicing, compliance with the Individuals with Disabilities Education Act.

Despite the criticisms presented in some of the available literature, other literature has

reported that parents and students are satisfied with special education in virtual schools. Parents have reported being happier with their children's progress in virtual schools than they were in traditional brick-and-mortar schools. Parents have also reported satisfaction with the flexibility of daily scheduling allowed by virtual programming. Students have reported being more satisfied with teachers, and with teaching and learning in virtual schools than they were in traditional brick-and-mortar schools.

CHAPTER THREE

Methodology

The purpose of the current study was two-fold. First, the researcher sought to describe aspects of a model of special education instruction utilized by one virtual school—a kindergarten-through-twelfth grade public charter school in a state in the Southern region of the United States—and its alignment with the Individuals with Disabilities Education Act. Second, the researcher sought to describe the specific roles that teachers, parents and other staff play in supporting the success of students with disabilities. Thus, the following research questions were explored.

Research Questions

The current study sought to answer the following research questions:

1. To what extent are the tenants of the Individuals with Disabilities Education Act implemented for students in special education in one virtual public charter school?

2. What specific roles do parents, teachers and other staff play in supporting the success of students with disabilities in one virtual public charter school?

Design of the Study

A case study design was employed because the current study sought to explore "in depth a program," (Creswell, 2014, p. 241), specifically, the special education program in a virtual k-12 public school. Further, an explanatory, embedded case study methodology was appropriate for two reasons. First, the study's purpose was best suited for explanatory case study design because the researcher sought to describe "how" and "why" (Yin, 2014, p. 4) special education practices and processes were implemented within the context of a virtual public school. Second, the researcher collected "subunits" of both qualitative and quantitative data in order to best describe the larger context of the case study (Yin, 2014, 53). These subunits were selected based on themes

distilled from currently available literature and included:

1. Roles of parents in virtual special education

2. Roles of teachers in virtual special education

3. Student demographics

4. IEP processes

5. Special education intake processes

6. The selection and implementation of IEP accommodations

7. Descriptions of a variety of virtual classrooms

8. Description of the placement of students with disabilities in virtual classrooms

9. Special education department staffing

10. Operational structure of special education department

11. Child find processes

12. Evaluative processes

This explanatory, embedded case study design has been visually represented in the figure below.
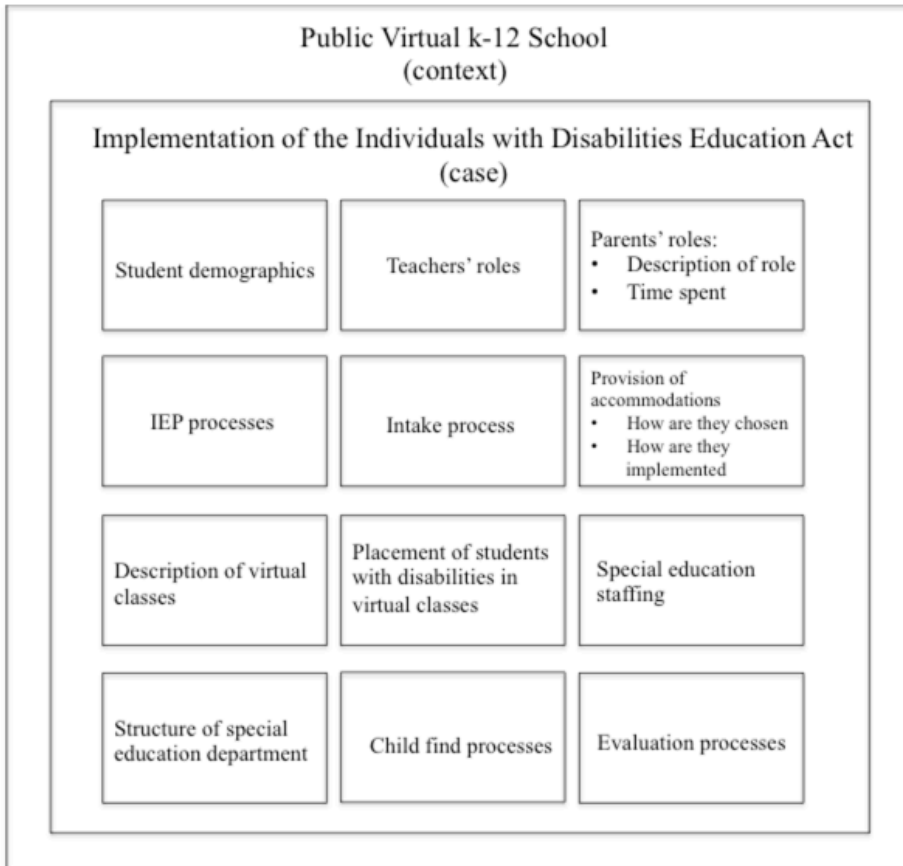
Figure 3.1. Visual representation of the current explanatory, embedded case study including the context, the case, and the embedded subunits of study.

Site of the Study

The researcher chose a non-profit, public virtual school located in the United States as the site of the current study. In order to protect the anonymity of participants, the school site will be referred to by a pseudonym: American Virtual School (AVS). As is stated on the school's website, American Virtual School (AVS) was founded in 2011 as a partnership between K12 Inc. and a local charter management organization (CMO). This CMO is described on the AVS website as a not-for-profit educational agency that seeks to provide students with alternate learning opportunities. According to enrollment statistics published by the state Department of Education, AVS serves some 1,901 kindergarten-through- twelfth grade students in the 2017-18 school year, and earned school performance letter grades of "D" in both 2015 and 2016.

Student Demographic Information. Student demographic information was copied from the state's public education online database and represented in Figure 4.1 below.

Enrollment	Students by Gender		Students by Race/Ethnicity								English Proficiency	
	% Female	% Male	American Indian	Asian	Black	Hispanic	**Hawaiian/ Pacific Islander	White	**Multiple Races (Non-Hispanic)	Minority	% Fully English Proficient	% Limited English Proficient
1,901	49.87%	50.13%	35	15	453	51	2	1,327	18	574	99.95%	0.05%

Figure 4.1. Demographic information for all students enrolled in AVS for the 2017-18 school year.

Per the state database for the 2017-18 school year, the school enrolled 1,901 enrolled students. Slightly more than half (50.15%) are male, with the remaining students (49.87%) registered as female. The majority of students (69.8%) are reported to be white, with 30.2% registered in a racial or ethnic minority category. Of these students, 23.82% are reported to be Black, 2.6% Hispanic, 1.8% Native American, .9% Multiracial, .7% Asian, and .1% Hawaiian or Pacific Islander. These students live across their home state in rural, suburban and urban locales.

Role of the Researcher

The current researcher was employed by AVS as a Special Education Teacher for grades four, five and six during the 2015-16 school year, and left on good terms in order to complete a cross-country relocation. Therefore, the researcher was classified as a "participant- observer." According to Yin, a participant observer is a researcher that "assumes a variety of roles within a fieldwork situation," (2014, p. 114) such as serving as a staff member in the organization being studied (2014, p. 114). Even though the current researcher was not employed by AVS at the time of the study, this designation was appropriate and ethical for a number of reasons. First, as a participant-observer, the researcher was able to contribute personal observations of and experiences with AVS to the current study. Second, the current researcher had easier access to the current site and participants by virtue of standing professional relationships, which is a key benefit

of the participant-observer (Yin, 2014, pp. 116-117). Finally, by designating herself as a participant-observer, the current researcher called attention and focus to her own biases that she may bring to the current study.

Participant Recruitment and Selection

The goal of the current case study was to observe and describe the entirety of the phenomena (the implementation of IDEA) in its real-world context (American Virtual School). An initial email to school leaders requesting site access went unanswered after multiple attempts at contact. Because no "gatekeeper" could be established, the researcher used her existing professional contacts to solicit data from individuals within the school community. This resulted in "snowball," or chain-referral sampling.

A variety of individuals from AVS, including thirty-five employees and approximately 150 parents, were directly approached for participation via email and social media (see Appendices D, E and F). Of these potential participants, several declined to participate or did not respond to the researcher's request. Some individuals (teachers and parents) were no longer affiliated with the school. From this initial wave of recruitment, five faculty participants were identified. Further word-of-mouth among confirmed and potential participants identified five additional participants from various stakeholder groups in the AVS community. A total of ten participants were recruited for the study; eight were faculty and staff members, two were parents. These participants are described in Table 3.1, below. In order to protect their identities, participants' specific titles within the AVS community have been replaced with more general descriptions of roles. All of the subjects have knowledge of special education programming.

Table 3.1

Descriptions of participants' roles.

Participant Number	Participant Role
1	Mid-level school administrator
2	Special education staff
3	General education teacher
4	Special education staff
5	Special education teacher
6	Special education teacher
7	General education support teacher
8	Parent
9	Parent
10	Special education teacher

By including a variety of stakeholders as participants, the researcher was able to collect and verify a variety of data from a variety of perspectives. This resulted in a more valid result than if the researcher only included one type of stakeholder.

Data Collection

One of the fundamental principles of case study design is the use of multiple types of data sources (Yin, 2014, p. 105). Yin teaches that, by developing "converging lines of inquiry" (2014, p. 120) from these multiple data sources, a case study researcher is better able to triangulate reliable findings. In order to maximize the integrity of the current study, the researcher collected data in the form of interviews, documents, and participant observations. These data sources are distilled in the table below.

Table 3.2

Types of data collected, including examples of each type, and method of collection.

	Data Source	Method of Collection
Interviews	• Special education teacher • General education teacher • Parent of students in special education • Non-instructional special education staff • General education support teachers • Midlevel school administrator	• Phone interviews conducted and recorded via Google Voice • Transcription of recorded interviews via Temi, then checked by the researcher for accuracy
Documents	• Student handbook • Instructional staff schedules • School Enrollment data • Special education enrollment data • SBLC responsibilities and procedures	• Collected from faculty, staff and publicly available information
Participant Observation	• Descriptions of personal observations and experiences over the 2015-16 school year	• The researcher used personal observations and experiences to frame other data collected when necessary.

Collecting data from these multiple sources allowed the researcher to corroborate findings through the triangulation of diverse data, but required the researcher to employ multiple means of collecting and processing data. The methods used for collecting and processing interviews, documents, and participant observations are outlined in the sections below.

Interviews. Rather than seeking to test a hypothesis, the goal of the current study was to understand and describe (Seidman, 2013) the ways in which IDEA was implemented for students with disabilities in a public virtual k-12 school. Therefore, the researcher's primary body of data was collected via interviews with AVS faculty, staff, parents, and administrators. Interview protocols were developed for faculty (see Appendix A), special education staff (see Appendix B), and parent (see Appendix C) participants based on themes that were discovered in available literature. Participants in these different categories are represented in the table below.

Table 3.3

Three protocol types and participant categories.

	Participants Included
Faculty	• Special education teachers • General education teachers
Special Education Staff	• Mid-level school administrator • Non-instructional special education staff
Parent/Guardian	• Parents of students in special education

These separate protocols employed open-ended questions that were intended to elicit views and opinions from participants (Creswell, 2014). The current researcher was careful to draft questions that did not presume any particular response, which allowed participants the freedom to describe their actual experiences within the framework of the themes revealed through literature review (Seidman, 2013) and the researcher's personal experiences. Additionally, these protocols were developed with the unique position and perspective of each stakeholder in mind. As data was collected, the researcher validated findings among participants and between participant groups during phone interviews.

Because the current researcher is located in a different state than each of the participants, interviews were conducted via telephone. Phone interviews were recorded via Google Voice, an internet-based phone system, transcribed using Temi, an internet-based transcription service, and then edited for accuracy by the researcher.

Documents. According to Yin (2014), document review is a staple of any case study because documents can corroborate and augment data being collected from other sources. Creswell (2014) argues that documents are valuable to case study research because they allow the researcher access to the words and language of the participants without requiring a great investment of the researcher's time. Further, documents are "stable," "unobtrusive," "specific" and "broad" (Yin, 2014, p. 106). That is, pertinent documents can be reviewed many times without changing. This review does not interfere with the case-context being observed, documents are inherently specific to the case-context being observed, an can shed light upon large spans of time, events, and/or settings (Yin, 2014). The current researcher reviewed various documents over the course of data collection. These documents have been represented in the table below.

Table 3.4

Documents reviewed.

Document Categories	Specific Documents
Process and policy information	- AVS student handbook - Policy statements shared by faculty and staff
Demographic information	- School-wide student demographics (2017-18) - Special education student enrollment (2017-18
Miscellaneous documents	- Instructional staff schedules - Sample student schedules

Having access to a variety of policy documents, sample schedules and demographic information allowed the current researcher to understand a variety of processes and structures employed by AVS. For example, having sample student schedules allowed the researcher to more fully understand the time commitment that families invested in virtual education.

Participant Observation. Participant observation allows for incredible access to a given site or phenomena, but also comes with unique ethical considerations (Yin, 2014). Among these ethical concerns are the challenges of keeping personal biases from interfering with objective data collection and analysis (Iacono, Brown, & Holtham, 2009), and the way in which the researcher presents herself to other participants (Guest, Namey, & Mitchell, 2013). Even though the researcher is not currently a member of the AVS community, her status as a former employee required the explicit, conscious consideration of these ethical concerns. She utilized her observations and experiences from the 2015-2016 school year. Thus, her contributions in this component were retroactive. In order to prevent the appearance of any impropriety, the researcher disclosed her former employment at AVS in initial email contact to potential participants (Appendix D) and confirmed all findings with participants via follow-up phone conversations and emails. It is important to note that the researcher terminated her employment with AVS on good terms, only having left due to the necessity to accompany a family member on a interstate move.

Data Analysis Strategies

Creswell (2014) suggests a general system for data analysis in case study research. This system begins with raw collected data, moves through stages of organization, processing, coding, distillation, interpretation, and, finally, the validation of the accuracy of findings. An adaptation of this system is represented in the figure below.
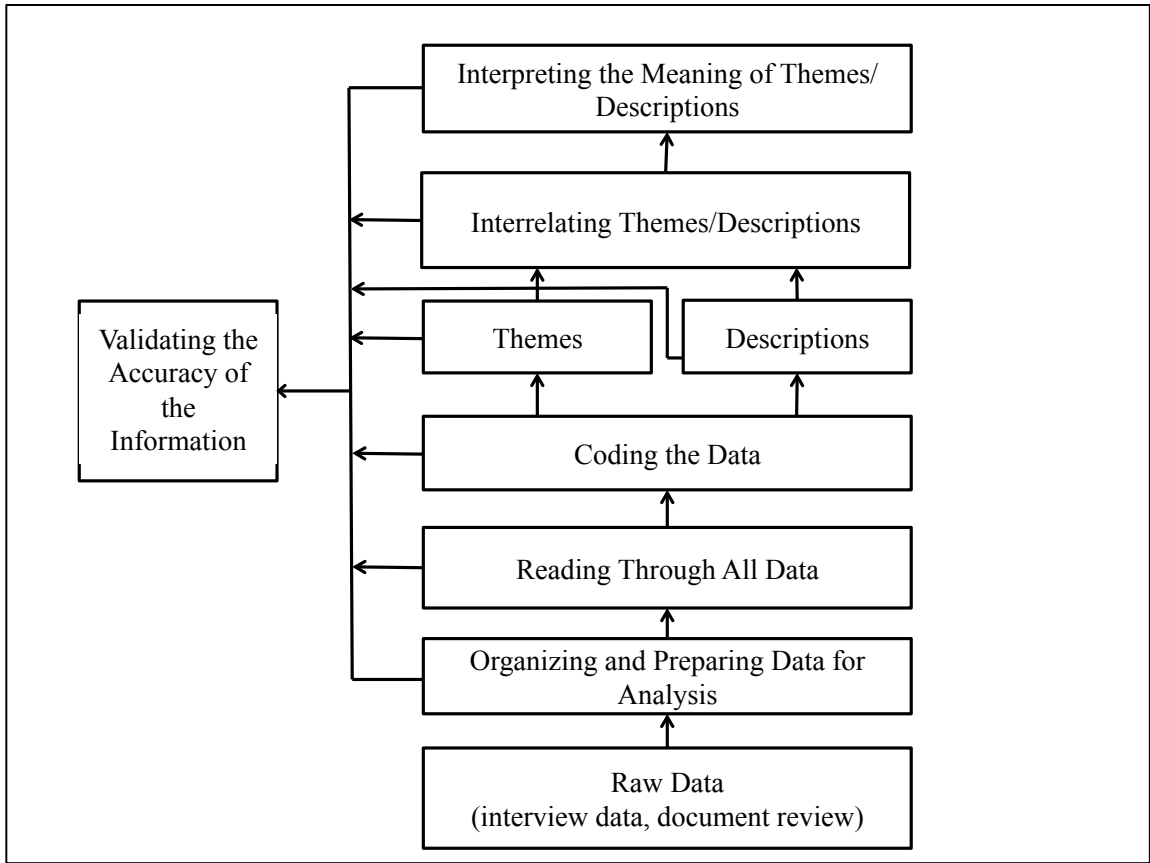
Figure 3.2. Visual representation of the process of case study data analysis. Adapted from Cresswell (2014).

As described in Figure 3.2, raw data was collected in the form of recorded interviews and relevant documents. Raw data was organized, prepared for analysis and analyzed on a rolling basis. This included transcribing and coding interviews, cataloguing collected documents, and continuously reading through all data to "get a sense of the whole," (Creswell, 2014). Codes were determined by patterns that emerged from the data collected from participants (Creswell, 2014). The researcher used the processes of coding and statistical analysis to generate common themes and a description of special education programming at AVS. These themes and early descriptions were validated by participants and used to generate a narrative overview of how emerging findings are related to one another within the context of the schoolsite. Finally, the researcher

interpreted these findings to develop a full description of the process of implementing the Individuals with Disabilities Education Act in a public virtual k-12 school. Data triangulation was used to corroborate the findings of the study at large.

Data Triangulation. Data triangulation is defined as "the convergence of data collected from different sources, to determine the consistency of a finding," (Yin, 2014, p. 241). The current researcher used triangulation to corroborate findings among all the multiple sources of data included in the study. This process is represented in the figure below.
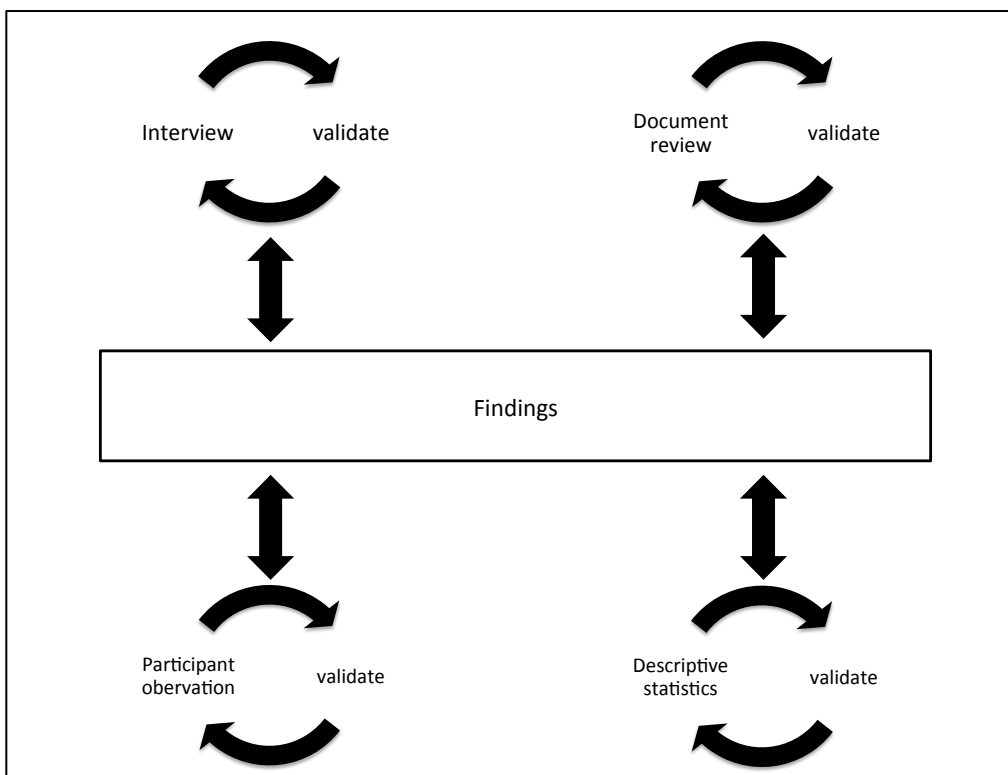
Figure 3.3. Data triangulation through multiple sources.

Converging data collected through interviews, document review, and participant observation allowed the researcher to strengthen the construct validity of the current case study by providing multiple measures of the same phenomena (Yin, 2014). The researcher engaged in a circular process of collecting raw data, analyzing those data, discerning preliminary findings, validating new findings with participants and against other data, and updating findings based on

new data and new validation.

Outline of Research Procedures

       The exact timing and duration of the study was fluid and dictated by the number of participants recruited, scheduling interviews, and the amount of time that was required in the field to reach data saturation. IRB approval (see Appendix F) was received on January 5, 2018 and the components of the study were executed as follows:

1. Initial Components of Study:

   1.1. Gained IRB Approval

   1.2. Explained study to potential participants and solicited participation via email, social media contact and word-of-mouth

   1.3. Gained informed consent from interested parties

2. Data Collection:

   2.1. Scheduled phone interviews with participants

   2.2. Conducted and transcribed phone interviews on a rolling basis

   2.3. Requested any clarifying conversations or documentation that may be pertinent to the raw data collected

   2.4. Continued interviews, observations and document review until data saturation was achieved

3. Data Analysis

   3.1. Organized raw data

   3.2. Coded transcribed interviews and documents on a rolling basis

   3.3. Generated common themes and a description of special education programming at AVS

   3.4. Developed a description of the process of implementing IDEA in a public virtual k-12 school

3.5. Validated findings through triangulation and participant confirmation

3.6. Related findings to the tenants of IDEA

Summary

The current researcher conducted an explanatory, embedded case study design to describe the implementation of the Individuals with Disabilities Education Act and special education programming in a public virtual k-12 school. The study was conducted at American Virtual School (AVS) and consisted of qualitative and quantitative data collected in the form of interviews, document review and participant observation.

The primary means of data collection were phone interviews conducted with parents, teachers, special education staff, and other pertinent stakeholders. Additional data collection was conducted in the form of document review. Where relevant and ethical, the researcher used her position as a participant observer to "fill in gaps," or otherwise corroborate findings. Broad analysis of qualitative data was conducted according to Creswell's 2014 model. Subunits of data were analyzed according to qualitative methods, and used to determine and corroborate findings. Finally, the current researcher validated findings using the triangulation of multiple sources, and by participant confirmation, and then related the findings to the tenants of IDEA.

Chapter Four

Results

The purpose of this explanatory, embedded case study was to discover and describe the implementation of IDEA and special education programming at a virtual public k-12 school. The research questions that drove this study were, (1) To what extent are the tenants of the Individuals with Disabilities Education Act implemented for students in special education in one virtual public charter school; and, (2) What specific roles do parents, teachers and other staff play in supporting the success of students with disabilities in one virtual public charter school? These questions were explored through a series of interviews with various stakeholders associated with American Virtual School (AVS). Relevant documents were reviewed when available. Special education enrollment data from AVS for the 2017-18 school year was gathered.

Special education enrollment data

While general, school-wide demographic information was publicly available, the researcher could not find publicly available special education data. According to data reported by participants in the current study, there were 243 students (12.8% of enrolled students) receiving special education supports and services in the school site. Thirty-two of these students (13.2%) were in a self-contained, multi-grade classroom. The remaining 211 (86.8%) were fully included in general education programming. A non-instructional special education AVS staff member participant provided the following special education enrollment data for the 2017-18 school year:

Table 4.1

AVS 2017-18 special education enrollment by disability type.

	Number enrolled	Percentage of special education enrollment
Specific learning disability	74	30.45%
Other health impairment	52	21.4%
Autism	39	16.05%
Intellectual impairment	32	13.17%
Speech-language disorder	26	10.7%
Emotional disturbance	9	3.7%
Developmental delay	6	2.47%
Orthopedic impairment	2	.82%
Visual impairment	1	.41%
Multiple disabilities	1	.41%
Hearing impairment	1	.41%
Total	243	100%

The most common type of student disability reported at AVS was Specific Learning

Disabilities (30.45%), followed by Other Health Impairment (21.4%), Autism (16.05%),

Intellectual Impairment (13.17%) and Speech-Language Disorder (10.7%). The remaining 8.22%

of enrolled students in special education was comprised of students with Emotional Disturbance,

Developmental Delay, Orthopedic Impairment, Visual Impairment, Multiple Disabilities and

Hearing Impairment. No further data was available regarding enrollment information. For

example, no delineation of the types of "Other Health Impairment," was available so more

specific analysis of sub-categories was not possible.

Faculty and Staff Demographics

Faculty and staff participants were all veteran teachers with experience in brick-and-

mortar as well as virtual education (see Table 4.2). Of all of the participants, only two faculty and

staff members were reported to be in their first year of working in a virtual school. One of these

was a special education teacher, the other was a member of the non-instructional special education

staff.

70

Table 4.2

Education and experience levels of faculty and staff participants.

Participant Number	Participant Role	Highest Degree Achieved	Years of Experience in Education	Years of Experience in Virtual School
1	Mid-level school administrator	Bachelor's	13	5
2	Non-instructional special education staff	Master's	7	4
3	General education teacher	Master's	13	3
4	Non-instructional special education staff	Master's	11	1
5	Special education teacher	Master's	15	4
6	Special education teacher	Bachelor's	9	4
7	General education teacher	Master's	14	7
10	Special education teacher	Master's	22	1
		mean	10.4	2.9

Per Table 4.2, faculty and staff in the school site had an average of 10.4 years of experience in the field of education, with an average of 2.9 years of experience in virtual school settings. Most faculty and staff members earned master's degrees in the field of education. Two earned a bachelor's degree in the field of education. All participants are female. Two identified as African American, and six identified as White.

Special Education Department

Through interviews with participant faculty and staff members, the current researcher created a hierarchical diagram of the special education department. This program consisted of a combination of general and special educators, administrators, support staff, and the parents of enrolled students with disabilities. This structure, which was confirmed by multiple participants, is illustrated in Figure 4.2, below. Participants reported that a large amount of faculty/staff turnover and frequent departmental reorganization confused departmental structures, resulting in a

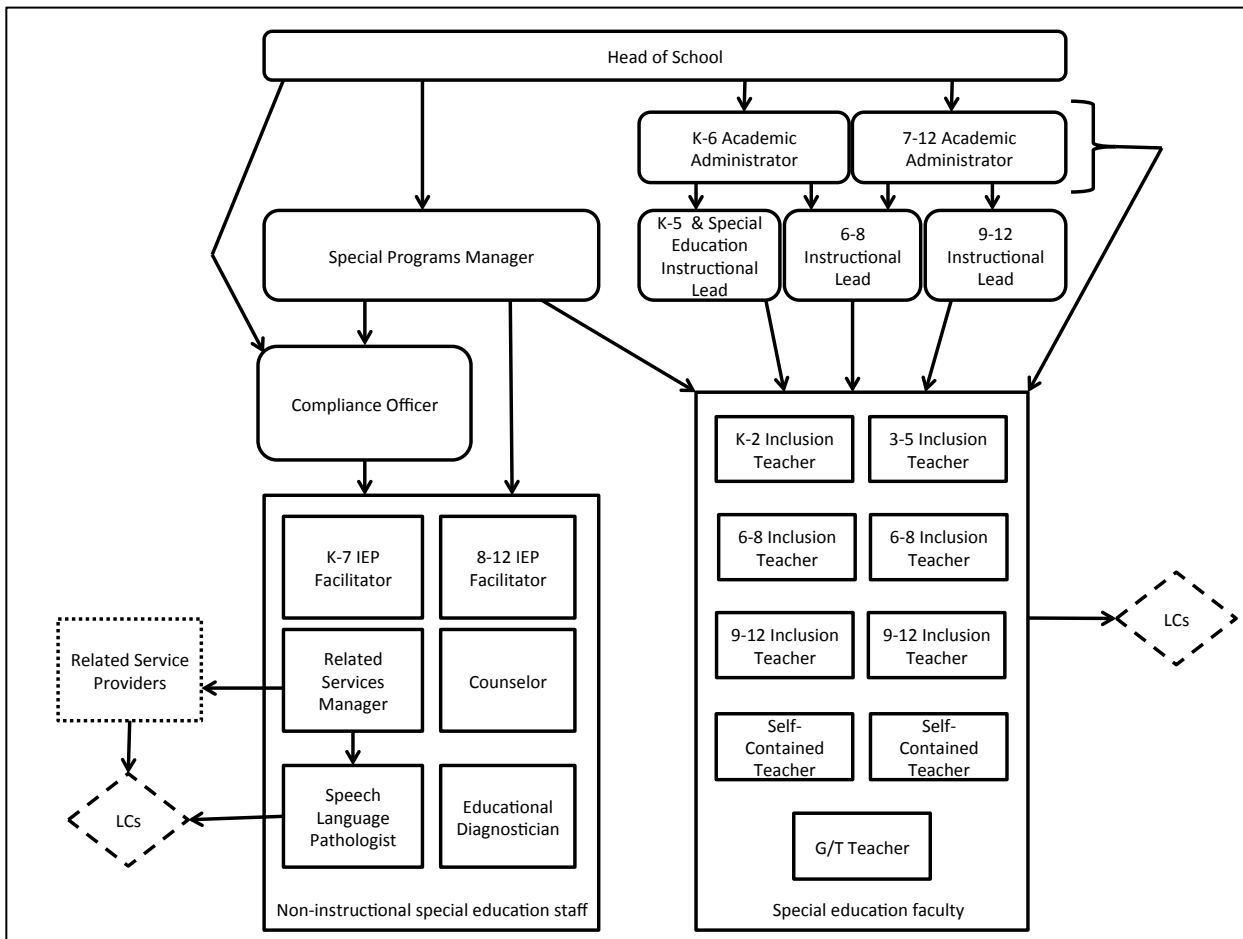looser functionality and chain-of-command than this diagram may imply.

Figure 4.2. Structure of special education department in one virtual public school.

The diagram above represents the current organization of the special education department of AVS. This department is comprised of members of the school leadership team, special educators, general educators, non-instructional special education staff, related service providers and the parents or other Learning Coaches of enrolled students with disabilities.

School, division, and department leadership. The Head of School oversees school- wide legal, financial, and operational matters. This is similar to a superintendent in a brick-and- mortar district, or, perhaps more accurately, the head of a private kindergarten-through-twelfth grade school. The overall school is divided into two grade band divisions: k-6 and 7-12. Academic Administrators oversee day-to-day school functions for their respective divisions, including staff

development, state and federal testing, and teaching and learning. Academic Administrators are similar to principals in brick-and-mortar schools. In addition, three Lead Teachers are responsible for teacher observations, data analysis, division-wide gatherings, and day-to-day management of instructional staff in specific grade bands, similar to Assistant Principals in brick-and-mortar schools.

The special education department is lead by the Special Programs Manager and the Compliance Officer. At the time of data collection, none of the participants could confirm a delineation of duties between the Special Programs Manager and the Compliance Officer more specific than "the Compliance Officer reports to the Special Programs Manager," the Compliance Officer is responsible for tracking special education enrollment, and that they are both responsible for "compliance." Non-instructional special education staff reports directly to both the Special Programs Manager and the Compliance Officer. Instructional special education staff reports to their respective grade-level Instructional Lead Teacher and/or the Special Education Instructional Lead Teacher. Depending on the grade levels served by a particular special education teacher, that teacher could have up to three Lead Teachers to whom they report. For example, the self-contained teachers work with students from all grade levels, so, depending on the nature of the professional issue with which they need support, they may have to report to the Special Education/K-5 Lead Teacher, the 6-8 Lead Teacher, and/or the 9-12 Lead Teacher, all of whom are general education teachers. Of the five special education faculty and staff participants, all expressed confusion about the leadership structures in the department.

Special Education Programming

AVS educates 243 students with 11 different identified disabilities, but only offers two special education models: (1) a fully inclusive model, and (2) a self-contained, non-diploma program. In order to support the discussion of IDEA implementation at AVS,

descriptions of each of these programming options are discussed and were verified by participants. Learning Coaches are expected to support all instructional activities for students in both programs. This role is further described in a subsequent section of this chapter.

Inclusive model. When data was collected, 211 students with various disabilities were placed in the model. In this model, students are fully immersed in their grade-level, general education curriculum. The main access that students have to their curriculum is through courses that are designed and distributed by K12, Inc. These courses consist of online and offline components such as videos, textbooks, workbooks, manipulatives, and other hands-on materials (K12, Inc., 2018).

As part of this K12 curriculum, students and their LCs receive a shipment of textbooks, lesson plans, supplementary texts, and related materials in the mail at the start of every school year (see Figure 4.3).

Figure 4.3. Examples of shipments of physical curricular materials. From One World Home School (2013) and Watts (2012).

Included in these shipments are one year's worth of materials for both students and their LCs including lesson plans, grade-level texts, workbooks, and assessments for each course, plus any supplementary materials or manipulatives that each course may require. For example, a science course may come with a set of scales and graduated cylinders, or a math course with base-ten

blocks and tangram tiles. LCs are expected to create an in-home learning space and to organize these physical materials within that space (see Figure 4.4). These materials are not the primary mode of lesson delivery. Rather, they are supplements to online courses that are delivered through the Online School.

Figure 4.4. Examples of LC-created in-home virtual learning spaces. From Getting Organized in an Online School (n.d.) and Watts, (2012).

The Online School, or the OLS, is an online course management and lesson delivery system. Students, supported by their LCs, are expected to work three hours per day, five days per week in the OLS. These hours are outside of the standard number of live class hours students attend. Examples of students' home screens in the OLS were included earlier in this dissertation as Figures 1.2 and 1.3. Students and their LCs access their daily lessons for each of their courses through this platform. Selected screen shots from a sample 3rd grade ELA lesson (taken from K12's publicly accessible website) are included in Figures 4.5, 4.6, and 4.7.
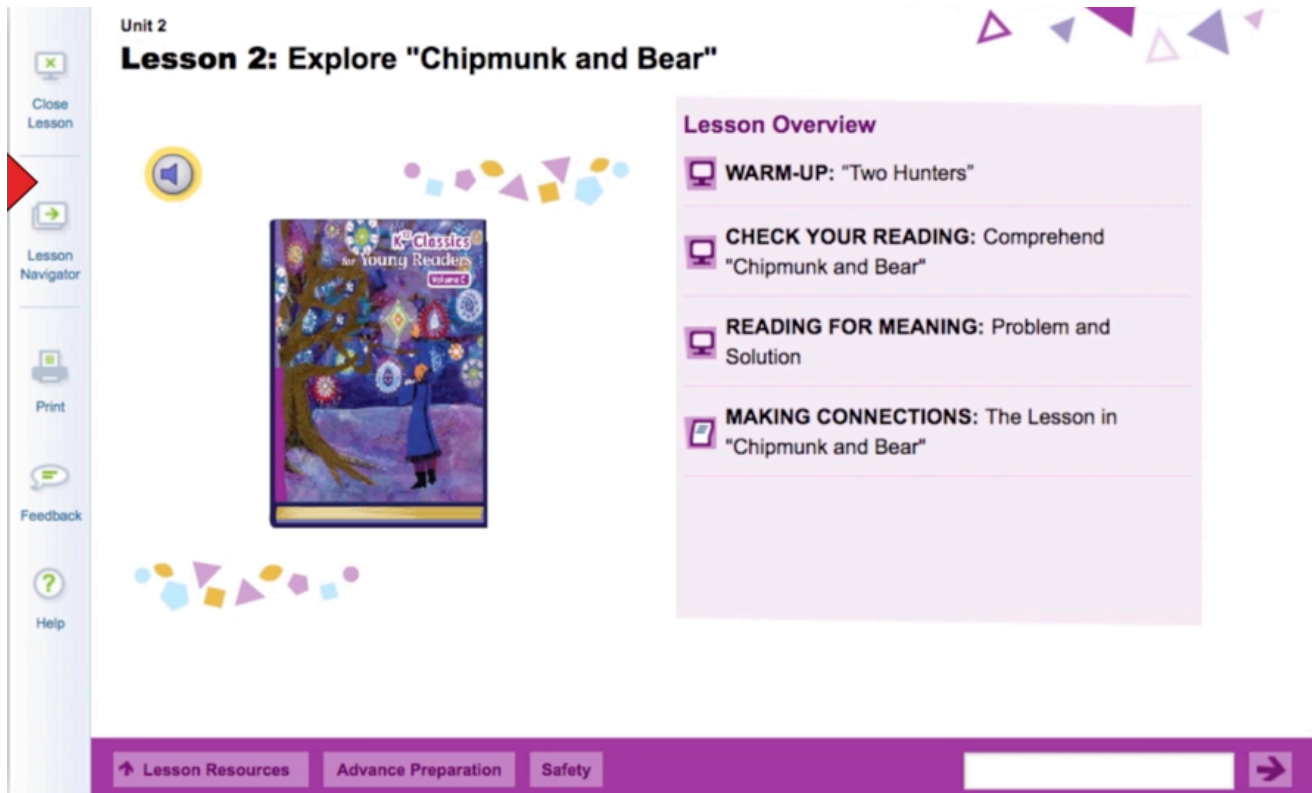
Figure 4.5. Lesson home screen. From K12, Inc. (2018).

The home screen for each lesson provides an overview of lesson activities, in this case:

Warm-up, Check Your Reading, Reading for Meaning, and Making Connections.
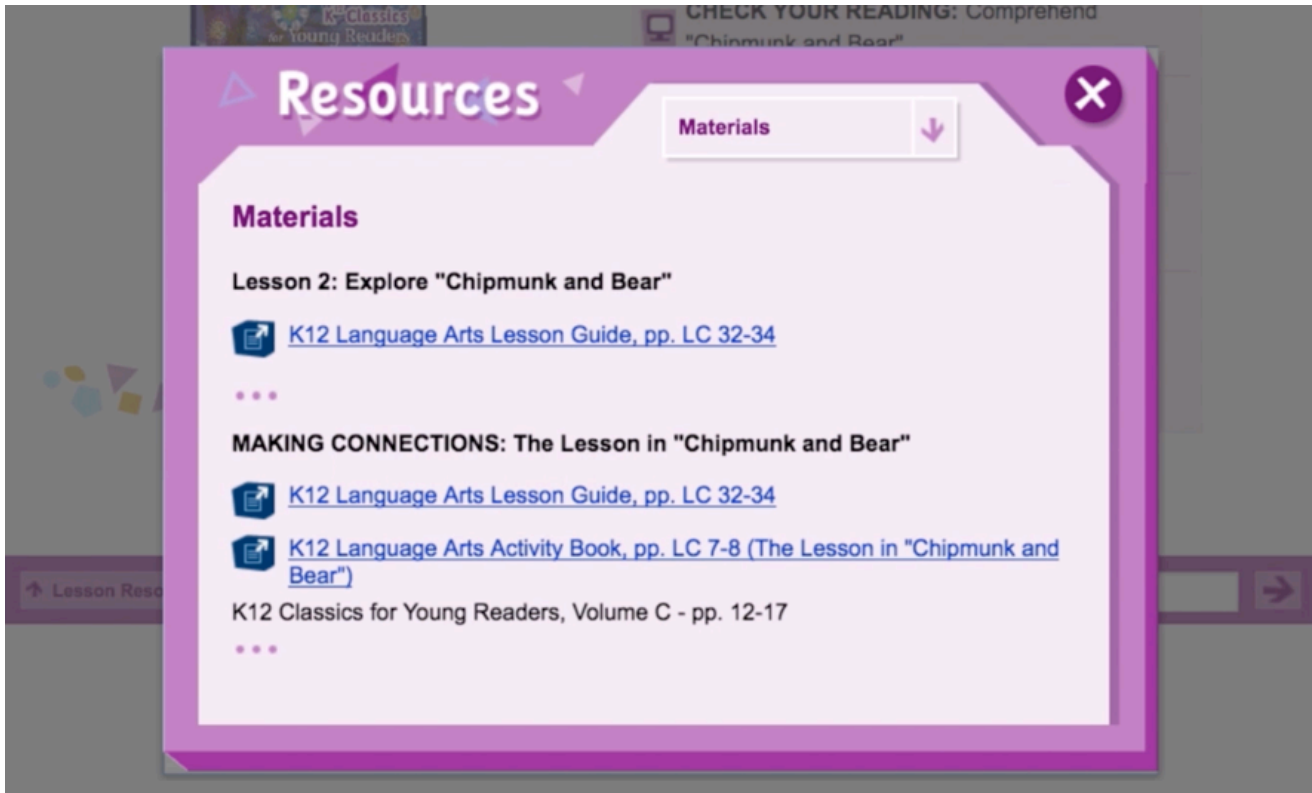
Figure 4.6. Offline resources associated with this virtual lesson. From K12, Inc. (2018).

Because LCs are expected to guide their students through each component of virtual learning including the OLS, each lesson module contains a cache of offline resources for the LC as well as the student. In this case, a lesson plan for the LC, workbook pages, and the text to be read are reflected in Figure 4.6. Links to digital copies of lesson plans and workbook pages are accessed directly from this navigating pane. These linked materials are also found in the hardcopies of the course materials.

Figure 4.7. Sample of an online comprehension question. From K12, Inc. (2018).

After reading the assigned text, the student then completes an online comprehension quiz. Students can attempt each individual comprehension question multiple times, and each attempt is recorded in the OLS.

Because the K12 curriculum is not aligned to individual states' standards, AVS employs state-certified teachers to tie the K12 curriculum to its state testing standards. These teachers do this though a combination of live instruction, OLS management, and homework assignments in the form of written tasks and supplementary online resources. Students attend two one-hour live class sessions per subject, per week. These "Class Connect Sessions," (see Figure 1.4) as they are called by AVS, are the only prescribed time that students have with their general education teachers over the course of a school week. Anywhere from fifty-to-one-hundred students are in a given Class Connect Session, eight-to-fifteen of whom will be students with IEPs. A sample schedule for these live classes is included in Figure 4.8, below. These live classes are recorded and

can be accessed at any time via a secure web link that teachers share with students immediately
following the lecture.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
8:00				
8:30				
9:00 / 9:30	Math	ELA	Math	ELA
10:00				
10:30				
11:00 / 11:30	History	Science	History	Science

Figure 4.8. Sample of a live class schedule.

All students, with and without IEPs, are required to attend these Class Connect Sessions,
and all students with IEPs receive the same supports within this model. For example, their grade-
level special education teacher pushes into their Math and ELA classes once per week and offers
additional 30-minute small group instruction once per week for both Math and ELA. These
special education small groups are meant to provide instruction in support of IEP goals. All IEP
goals are aligned to grade-level state academic standards. In total, students receive a maximum of
3 hours per week in special education instruction regardless of the nature or severity of their
disability. Faculty and staff participants described IEP goals as standardized without going so far
as to say they are identical from one like-grade-level student to the next.

Depending on a student's grade level and academic performance, other resources are
available to AVS students throughout the school week. Some of these supports are available to all
students regardless of their special education status. Others are only available as part of a
student's special education programming. Some are required components of the AVS curriculum,
others are supplemental. These additional programs and supports are organized in Table 4.3.

Table 4.3

Academic resources used as part of the AVS curriculum.

	Description	Who qualifies	Who provides	Method and frequency of instruction
Small group review	Small group re-teaching of weekly content and skills	All students not earning mastery schools for a given lesson	General education teachers	Thirty-minute Class Connect sessions, twice per week per class
Mark 12	Phonics-based reading intervention program taught in three semester-log blocks	All students reading two or more years below grade level expectations	No live instructor	Online platform, two hours per day, five days per week
National Math Lab	Live math skills intervention taught in five different nine-week content blocks (number sense, fractions, measurement, algebra, geometry)	All students in grades five through eleven who perform two or more years below grade level expectations	Teachers across the country who are trained in the program	Sixty-minute Class Connect sessions four-to-five days per week
MobyMax	Individualized content intervention	Special education students	No live instructor	Daily online platform
Reading Eggs	Independent practice of grade level reading skills	All students in grades kindergarten through two	No live instructor	Daily online platform
Math Seeds	Independent practice of grade level math skills	All students in grades kindergarten through two	No live instructor	Daily online platform
Study Island	High-stakes test skills practice	All students in grades kindergarten through two	No live instructor	Online platform
DRC	High-stakes test skills practice	All students in grades three and up	No live instructor	Online platform

Per the table above, multiple resources are available to AVS students outside of live instruction and the K12 curriculum. Depending on a student's grade level, academic performance, and special education status, that student could be responsible for four-to-six additional hours of academic interventions and supports per day. These resources would be in addition to general education Class Connect Sessions, special education small groups, homework assignments, and any related service hours the student may receive. A sample student schedule has been developed and included as Figure 4.9.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8:00	Email/ Newsletter	Email/ Newsletter	Email/ Newsletter	Email/ Newsletter		
8:30	Weekly Homeroom	Related Service	Special Education Math Small Group	Special Education ELA Small Group		
9:00	Math	OLS Modules	Math	OLS Modules		
9:30						
10:00	Math Small Group		Math Small Group			
10:30	Lunch	Lunch	Lunch	Lunch		
11:00	History	Science	History	Science	OLS Modules, Monthly Outings, Related Services	Complete Assignments, Makeup Work, Extra Time
11:30						
12:00	History Small Group	Science Small Group	History Small Group	Science Small Group		
12:30	Mark12	Mark12	Mark12	Mark12		
1:00						
1:30						
2:00						
2:30	DRC	DRC	DRC	DRC		
3:00						
3:30	Moby Max	Moby Max	Moby Max	Moby Max		
4:00						

Figure 4.9. Sample of a complete student schedule, including additional supports and resources.

The inclusive model of special education at AVS comprises a combination of general education curricula and classes, special education instruction, and supplementary supports and interventions. The greater a given student's academic needs, the greater the time commitment required of that student and his/her LC. General education classes and curricular materials are not modified in the inclusive program; all students access the same educational programming in the same way.

Self-contained model. The self-contained model was described by one participant as "a bubble outside a bubble outside a bubble." This is meant to imply that, as a self-contained program within a special education department that is housed inside a school that delivers instruction based on an alternate learning platform, it is very unique. It is further true that, even within the AVS community, a diverse understanding of the self-contained classroom exists. For instance, when asked how students are placed in the self-contained program, one staff participant

said that students had to be identified as having an intellectual disability, a faculty participant said students had to be two standard deviations below average academic performance, and a second staff participant said anyone could be placed in the classroom as long as it was a "team decision."

The self-contained class is, indeed, entirely separate from the general education program. There are two self-contained teachers, one of whom designed the program, who share case management and teaching duties. One teaches English and history, the other mathematics and science. Each teacher is responsible for case management and one-on-one intervention support for sixteen students. All of these students are identified as having intellectual disabilities.

The self-contained classroom is not a high school diploma track program. Teachers use alternative curricular programs, called Unique Learning System (Unique) and Conover Online (Conover), to instruct students in functional, rather than academic, skills. Unique is an alternative-standards-based, online learning system designed to prepare students for statewide alternative assessments. Students complete lessons in Unique during their one-on-one time with their case manager each week. They also log weekly school attendance in the Unique platform, much the same way general education and inclusive students log attendance in the OLS. Conover is a life-skills-based online educational platform. Students receive targeted instruction in "vocational assessment; self-determination; social/emotional learning; [and] independent living skills," (Conover Online, 2015).

Descriptions of Unique Special Education Processes

Faculty and staff participants described several processes that are in place to locate, identify and support students with disabilities enrolled in AVS that are impacted by the virtual nature and organizational structures

of AVS. These include special education intake, Child Find, evaluation, IEP processes including IEP development and IEP meetings, and LRE determination.

Intake. Initial enrollment is not managed directly by AVS staff. Rather, this process is conducted at the national level, by K12 Inc. Parents interested in enrolling their children in AVS make initial contact with the national K12 enrollment office via phone or web form submission. A K12 enrollment specialist then contacts the parent and collects pertinent information including locality for specific school enrollment and special education status. Once students are enrolled by K12, enrollment information and special education status is passed along to the local school, in this case AVS.

When a student is enrolled as a student with an IEP, the Compliance Officer checks that student's special education status in the state database and begins the process of requesting jurisdiction over that student's IEP. Additionally, the student is flagged as a student with an IEP in the school's enrollment database. This status is shared with teachers and support personnel as an IEP "icon" that appears next to their name on AVS class rosters. An IEP at-a-glance is created by the Compliance Officer for each student and uploaded into SharePoint, an online file server and document collaboration platform that can be accessed by anyone on AVS faculty or staff. According to national K12 regulations, the school has thirty days from the time of enrollment to review the IEP and make any service or accommodation changes required by the change to the virtual setting.

All non-instructional special education staff participants expressed concerns that this method of special education intake is problematic in that it relies on one stakeholder, the enrolling parent, to disseminate special education status. If the parent does not share that their child has an IEP, no standardized mechanism is in place for the school to discover that information in any other way. AVS special education staff recognized this as an issue and have been implementing

additional methods for discovering special education status. One non-instructional special education staff participant shared that the school is "…trying to do a better job of running everyone's name [through the state's special education database] as they enter [the school]," to identify any students with IEPs who may not have been reported by parents during the enrollment process.

Child Find. The process of Child Find is conducted via one of four avenues of discovery at AVS: 1) parent informant, 2) parent request, 3) annual "open enrollment" screening, or 4) Response to Intervention (RTI).

The first method, parent informant, is typically via the intake process, which has been described above. AVS faculty and staff participants report that there is a surge in parent reports of otherwise undisclosed special education status just prior to high-stakes testing season. They surmised that parents might realize they did not disclose IEP status when they were not contacted about testing accommodations. The second method, parent request, can be initiated at any time, by any parent, for any reason. Once a parent requests a special education evaluation, the school must follow federal timelines and regulations for completing the child find process.

In addition to parent informants and parent requests, AVS has two internal mechanisms for initiating Child Find procedures: open enrollment screening and RTI. "Open enrollment" is offered once annually, at the start of each school year. AVS reaches out to all parents of enrolled children to inform them of their right to have their child evaluated. Any request for evaluation is followed up with a face-to-face meeting and preliminary academic testing. Need for additional evaluation is based on the results of this academic screening.

The RTI process is somewhat new to AVS. While the school has been in operation for six-and-a-half years, a mid-level school administrator reported that the 2017-18 school year was the first year she felt that AVS had a functioning RTI process. It is unclear what processes were, or

were not, in place in previous years. The RTI process at AVS is similar to the processes in place at many brick-and-mortar schools and has been illustrated in Figure 4.10.
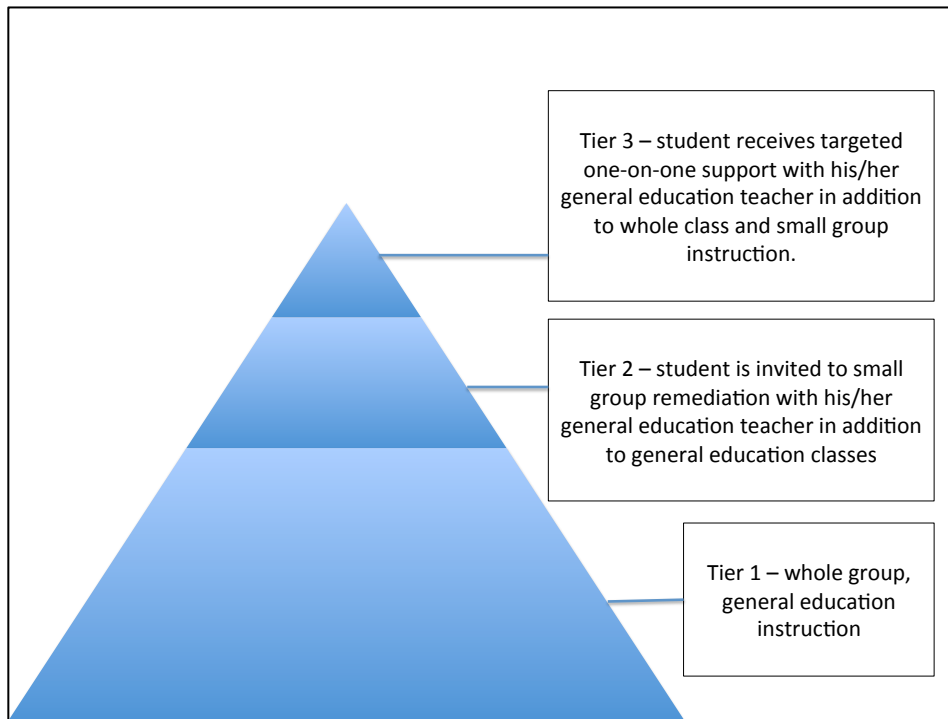

Figure 4.10. The RTI process at AVS.

The RTI process utilized at AVS should be familiar to many teachers in traditional brick-and-mortar schools, with one exception: all three tiers of instruction take place in virtual classrooms. For Tier I, students begin their courses in whole group, general education classes. At some point, teachers notice that specific students are not performing according to grade level expectations. For Tier II, the teacher invites those struggling students to participate in small group remediation, in addition to regular whole group classes, for three weeks. If students respond to small group remediation at the end of that three weeks, they are kept in general education but invited to small group remediation as needed. If students do not progress, they are moved to Tier III intervention. In this tier, students are invited to one-on-one remediation with their general education teacher for an additional three weeks. If the student responds to that one-on-one

support, they remain in general education with Tiers II and III supports, as needed, in order to maintain success. If the student is not successful given all three tiers of intervention, the general education teacher takes that student's case to School Building Level Committee (SBLC). SBLC will review any pertinent data and decide if further evaluation is warranted.

Evaluation. If the SBLC at AVS determines that a student's needs cannot be met within the school's three-tiered instructional model, they may refer the student for special education evaluation. AVS employs one educational diagnostician who is responsible for academic testing for all 1,901 AVS students. The educational diagnostician travels to the student to conduct academic testing in a face-to-face setting. This is frequently done in the student's home or in a neighborhood library. As an educational diagnostician this AVS staff member cannot conduct psychological testing. These services are contracted out to private practitioners in (or as close as possible to) the student's home community if and when needed. Any related service evaluation that can be conducted virtually, via phone call or virtual conference room, is done so. Other service providers, such as occupational therapists or adapted physical education teachers, will be dispatched to the student's home community for any needed evaluative procedures.

IEP processes. Unique IEP processes at AVS can be divided into two categories: IEP development and IEP meetings. Even though it is a portion of the IEP process, Least Restrictive Environment (LRE) determination will be discussed in its own section of this chapter.

IEP development. AVS employs two IEP facilitators in addition to its special education faculty. IEP facilitators are assigned to students based on the grade level of that student: kindergarten through seventh grades, or eighth through twelfth grades. Faculty and staff participation in IEP development is dependent on the placement of students within special education programming. There are separate delineations of responsibilities for teachers and IEP facilitators in the inclusive program and the self-contained program. In the inclusive program, the

process of IEP development is a partnership between a given child's special education teacher and an IEP facilitator. In the self-contained program, IEP development is the sole responsibility of the special education teacher.

IEP development in the inclusive program. Within the inclusive program, both the special education teacher and the IEP facilitator participate in the process of developing students' IEPs. The special education teacher is responsible for assessing individual students' academic needs and developing appropriate goals. The IEP facilitator is responsible for all other IEP components including prior written notice, present levels of performance, designing accommodations, entering IEPs into the state special education database, planning and leading IEP meetings, and coordinating the participation of all service providers in the IEP meeting.

Inclusive teachers use Goalbook (see Figure 4.11), a web-based software application, to generate IEP goals based on individual academic needs. Goalbook allows users to search academic standards by grade level, and break these standards into component goals and objectives. Additionally, Goalbook scaffolds these goals and objectives based on the severity of need, and offers options for incorporating Universal Design for Learning (UDL) adaptations into goal instruction.

Figure 4.11. Screen shot of the goal design function in Goalbook. From Jeffreys (2018).

As is evident in Figure 4.11, Goalbook allows special education teachers to design IEP goals and objectives according to a student's grade-level standards. These goals can be scaffolded for students requiring mild, moderate or intense levels of support. Goals can also be designed with UDL strategies, including strategies for representation, expression, and engagement in mind. All

goals are linked to Common Core Standards, and can be vertically designed from one grade level to the next. To use something of a cliché, the point of Goalbook seems to be to "take the guesswork" out of IEP-writing.

Each IEP facilitator is responsible for all other IEP components for approximately 100 students across five (eighth through twelfth) or eight (kindergarten through seventh) grade levels, with a variety of identified disabilities (see Table 4.1). What's more, IEP facilitators do not have personal relationships with any of the students on their caseload; they do not know the students for whom they are writing IEPs. In order to author present levels of performance, accommodations, and any other required IEP components for these diverse students, IEP facilitators seek data from a variety of sources in the weeks leading up to a student's IEP meeting. They speak with parents, teachers and related service providers, run academic performance reports in the OLS, and review any evaluative data that they may have on file. They use these multiple data sources to generate a picture of a given student's strengths and in this pre-IEP process.

IEP development in the self-contained program. As stated above, IEP development in the self-contained program is the sole responsibility of the self-contained special education teachers. IEP facilitators do not contribute to the development or authorship of IEPs for students enrolled in this program at all. The self-contained teachers elect to write their own IEPs because they are most familiar with the specialized needs of their students within their alternative curriculum. One of these teachers said:

> "…we know our kids. We know their differentiated levels from the Unique program. We know where their mindset is. We would spend more time telling the IEP facilitators about our kids [than it takes to write the IEP ourselves]…"

What's more, self-contained special education teachers do not use Goalbook or any other assistive resource to write IEP goals. Goals for the students in the self-contained program are written entirely by their teachers based on their knowledge of individual student performance and curricular expertise. Self-contained special education teachers partner with any relevant related service providers by soliciting goals for inclusion in the IEP, but this is the only "outsider" participation in the development of IEPs for students in the self-contained program.

IEP meetings. As it was described by faculty, staff and parent participants, the process of conducting IEP meetings at AVS is very similar to the process in many brick-and-mortar schools, with one major exception: the meetings are held in virtual, not physical, conference rooms. The delineation of responsibilities between IEP facilitators and special education teachers for IEP meetings mirrors the structure of those responsibilities in IEP development. In the inclusive program, IEP facilitators are responsible for all aspects of the IEP meeting including scheduling, components of compliance, running the meeting, and updating and filing any paperwork. IEP meetings are typically attended by the special education teacher, a general education teacher, an administrator to serve as Official District Representative (ODR), the student's parent or LC, and the student, to the greatest extent possible. As may be obvious, IEP facilitators attend IEP meetings for students in the inclusive program, but not for student in the self-contained program.

Different faculty and staff participants had very different views of the purpose of IEP meetings at AVS. One non-instructional special education staff member described IEP meetings as a way for school representatives to disseminate instructional decisions to parents, rather than as a forum for IEP development. One mid-level school administrator gave two examples of the

school "explaining" or "convincing" parents of the rationale behind chosen accommodations, rather than partnering to develop these accommodations together. Other faculty and staff participants described IEP meetings as opportunities for collaboration among team members. One non-instructional special education staff member was explicit in saying that she is "…always mindful to say that this is an open discussion and everyone has the mic." A general education teacher described the collaborative process, saying, "…the parent comments…we listen to the parent…and make any changes as needed." Differing opinions of the purpose and nature of IEP meetings was not dependent on grade level, program placement, or IEP meeting coordinator. It seems that individual participants simply have individual understandings of the underlying purposes of IEP meetings.

LRE Determination. As discussed earlier in this chapter, AVS has two special education programming options: full inclusive, or non-diploma track self-contained. According to all faculty and staff participants, the only major consideration to examine when determining LRE placement is whether or not the self-contained program is appropriate for the given student. There are two sets of circumstances that would qualify students to be placed in the self-contained program, and, therefore, the most restrictive environment. First, a student could be placed into the self-contained classroom if he/she is transferring from a self-contained classroom in a previous school. Second, a student could be placed in the self-contained program if an initial evaluation or re-evaluation demonstrates the presence of a qualifying disability, typically, but not exclusively, an Intellectual Disability. In addition to students with Intellectual Disabilities, currently students with special education classifications of Autism, Other Health Impairment, and Specific Learning Disability are enrolled in the self-contained class.

Because there is no "middle ground" for students who struggle to be successful in the

inclusive program, AVS is experimenting with part-time placements in the self-contained program. At the time of this study, two students were enrolled in general education science and history courses, but attending math and English courses in the self-contained class. All participants with knowledge of this unofficial programming option expressed concerns for the academic outcomes for such students. These students receive math and English instruction that is designed for students taking the alternative state assessment, but will be required to take their grade-level high-stakes state and federal assessments. One self-contained teacher described this dilemma, saying:

> "We've got two kids that come in for math and ELA only…we teach to the standards, the [alternate state assessment]. We're not teaching him seventh grade ELA, we're not teaching him seventh grade math…we don't teach to the state testing or regular testing… So when they go in and they take the [standard state assessment] for seventh grade for math and ELA, they're not going to have any clue because it's completely different than what we teach."

All faculty and staff participants struggled to discuss the process of LRE determination due to feelings that current programming options are inadequate for students' needs. Overall, they believed that the school should offer additional levels of support for students with different levels and types of need.

Themes

Over the course of analysis, several themes and subthemes emerged from the data collected.

These themes and subthemes are discussed below.

Theme 1: A lack of appropriate programming and support options for students with disabilities currently exists. With 243 students with a variety of eleven different

federally recognized disability classifications in two programming options, it is perhaps not surprising that faculty and staff participants expressed concern about the appropriateness of special education programming and support options for all students. This issue was evident most commonly in reference to the accommodations and modifications available to students in the inclusive program, and in reference to perceived special education staffing shortages.

Accommodations and modifications in the inclusive model need to be better individualized and implemented. Faculty and staff participants reported that the prescribed nature of the K12 curricula makes it impossible to implement modifications in the inclusive program. One non-instructional special education staff member reported that, "The platform doesn't allow for significant modifications…reduced answer choices or scaffold own the text…that can't happen in our platform." Therefore, curricular modifications are limited to the self-contained classroom. This reinforces the concept that all students in the inclusive program are not just enrolled in grade-level courses, but access course materials uniformly. Regardless of the nature or severity of their disability, all students in the inclusive model access learning in the same ways, Class Connect Sessions, the OLS, and related texts, without the benefit of curricular modifications.

Even though there are no curricular modifications in the inclusive model, participants describe a standardized set of accommodations that are offered to students, regardless of specific disability or need. Many of these accommodations apply only to high stakes testing environments. For example, extra time is described as a "given," because students are working at home and can take as long as they need to complete a given assignment. If students have ELA goals on their IEPs, they will be given a read aloud accommodation. Things like calculator and dictionary use are reported as common.

What's more, even when instructional accommodations or modifications are mandated on a student's IEP, it is the Learning Coach, not the faculty, who is expected to implement these supports. One non-instructional special education staff member summarized the discussion of accommodations and modifications:

> "No, [teachers] don't modify anything…[students] don't get modifications, [students] get accommodations, like extended time or…use of a calculator or maybe you just have a dictionary. [Students] get accommodations at home with their Learning Coach. So it's whatever that learning coach provides, that's their, that's a lot of their support."

The implementation of special education services and supports is designed around the current capacity of the school rather than the needs of the students who attend. One common sentiment among participants was that AVS needs more special education teachers. At the time of the present study, six special education teachers taught in inclusive classrooms serving 211 students with a variety of disabilities, in a variety of grade levels with an average of thirty-five students per teacher. As noted above, the two self-contained teachers are responsible for sixteen students each, with a total of thirty-two students in the self-contained program. Because so few teachers are responsible for special education instruction for so many students, administrators felt that the school could not effectively offer additional special education instructional models beyond the two already in place.

The model of delivery of special education instruction in the inclusive program is designed around the capacity of the school to deliver that instruction. All students receive thirty minutes of special education instruction, once per week, per academic area of IEP goal (math and/or ELA). In short, staff availability rather than student need drives special education programming. One special education faculty participant expressed concern over this model,

saying:

> "…we need more teachers…it kind of just goes down to some students need more
> minutes…more attention. So…if we can't modify the curriculum, then we need to give
> them more minutes…"

This concern was often raised in relation to the decision to place students in the self-contained class. All faculty and staff participants with knowledge of LRE determination expressed an understanding that placing a student in the self-contained program eliminated the possibility of that student earning a high school diploma, and acknowledged the serious impact that decision can have on a student's options after high school. They all expressed a desire for additional programming options to meet the various needs of their learners. One non-instructional special education staff member discussed the case of a specific student being moved from an inclusive to a self-contained classroom, saying:

> "One is an SLD student who is really low…thirty minutes once a week isn't going to
> help her, but they also can't provide thirty minutes every day…I was told she's going to
> go to [the self-contained] class…So she's going to go from getting her thirty minutes
> once or twice a week to being in…our self-contained, [she won't] get a diploma…I
> think she's a classic slow learner and she just needs more support, but we don't have an
> avenue to give her more support other than completely self-contained."

Theme 2: Learning Coaches (LCs) are expected to take on a large portion of responsibility in the academic experience of their student with a disability. All participants discussed the critical role of Learning Coaches (typically a parent or other family member) of students with disabilities enrolled in AVS. Many participants described Learning Coaches as the most important factor in predicting the success of students with disabilities in this virtual

school. One mid-level school administrator described the role of the LC as more important than the role of the school itself, saying, "…the parents' role in our school is incredibly important because if they're not engaged with their child then their child is not engaged, which means we can't do anything for them."

The specific roles of LCs were described as running a spectrum from "in-home monitor," to full time educational facilitator, with responsibilities including the teaching of academic lessons, delivery of in-home therapies and behavior reinforcement, depending on the age and relative needs of the specific child. For example, a second grade student with significant learning or executive function needs will require significantly more support than an eleventh grader who is academically gifted and dual-enrolled in college level courses. Eight-out-of-ten participants reported that the LCs of students with disabilities are expected to commit an average of 6.5 hours per day to their student's academic career.

The two parent participants reported very different roles as LCs. One, a parent with a child in the self-contained classroom, described offering minimal support and minimal time resources, saying she only helped to log her daughter into her Class Connect Sessions and then left her to work with her teachers. The other reported being at her son's side all day, six-to-seven days per week, attending every Class Connect Session and monitoring every independent assignment.

While the roles played by LCs depended largely on the specific child and specific LC, a dominant narrative of expectation existed among participants when describing the student-LC relationship. Learning Coaches are expected to log into the OLS first thing every morning to check their child's newsletter and set an agenda for the day. LCs then brief the student on the day's events, and then log their student into the OLS. The LC should attend live classes

alongside the student, learning the content so that he/she can better re-teach the concepts later in the day. After live classes and any mandated small groups, the Learning Coach guides the student through their OLS lesson modules and provides any accommodations, such as read aloud, that may be needed.

One non-instructional special education staff participant noted that, in the past, this expectation was not communicated sufficiently to parents prior to beginning the school year at AVS. She expressed a need to more specifically educate parents about the importance of the roles of LCs before the start of classes, saying:

"…our parents of students with disabilities haven't really understood the weight of their responsibility…in brick and mortar you have…more hands on deck and more support…your student's at school and the teachers and support folks are, you know, supporting your child. But in the virtual setting, that responsibility then becomes yours, and you are…responsible for making sure that your student is engaged with the lesson…staying on top of their work, that you are somehow mitigating any behavioral challenges that arise and that you are working to provide those accommodations."

Theme 3: Distinct challenges and distinct advantages exist to the virtual environment. Participants discussed several challenges and advantages that are unique to a virtual school environment. These included the impact of the physical separation between teacher and student, the "flexibility" of virtual education not living up to its promise, virtual education not being right for all learners, and teachers in virtual schools having a multitude of data available to them at the touch of a button.

Teachers are not physically present to monitor student learning. The most commonly expressed challenge among faculty and staff participants was the reality that teachers are not in

the same room with their students, and so have a limited amount of practical control over their learning and productivity. Seven-of-eight faculty and staff participants discussed this challenge in relation to the increased expectations placed on parents or other Learning Coaches in virtual schools (versus parents in brick-and-mortar schools) saying that it is the Learning Coach, and not the school staff, who is "sitting there to force them to do it."

Two instructional and three non-instructional special education participants also discussed this physical separation as an avenue that is conducive to "inappropriate levels of support," or, as another participant put it, cheating. These participants discussed seeing students who are reading multiple grade level behind their same- grade peers receiving grades of A on reading comprehension assessments, and wondering if it was the student or the LC who completed the assessment. They say that the relative anonymity of the virtual platform in combination with an LC's "vested interest" in the student's success can sometimes lead to a student's dependence on increased levels of parental support. Parent participants did not offer any insight about providing inappropriately excessive support to their child.

The flexibility that exists is in daily scheduling. All participants described a school environment that is flexible in that students can design their own daily schedules. Students have prescribed Class Connect Sessions a minimum of eight hours per week, but their schedules outside of those eight hours are completely in the control of the student and his/her LC. Whereas, in brick-and-mortar schools, every hour of a student's day is scheduled for them, in this virtual school, families decide what shape their school day will take. They may decide to assign one full day a week to each of their core academic classes, which creates a predictable routine. They may decide to break their 30-hour school week over seven days to minimize academic stress and fatigue. They may decide to work and take breaks in alternating 30-minute

windows to support their student's executive functioning stamina. Whatever the reason and whatever the plan, families have control over the day-to-day activities of their virtual school experience.

Parent participants expressed an appreciation for this freedom. They said they were satisfied with AVS, in part, because of the flexibility it allowed in scheduling extra-curricular commitments. Appointments with therapists, medical professionals, and related service providers were easier for them because they were in control of their child's school day. One parent participant expressed this by saying:

"…for us it's good because when he does have to go to his therapy outside of school… we can stop in the middle of the day and go to therapy and come back and then just restart school..."

While flexibility exists in the day-to-day scheduling of virtual school activities, more stringent policies have emerged over the last year. The mid-level administrator who participated in this study mentioned that, in the past, students could be placed in courses at their functional grade level rather than their chronological grade level. Additionally, in the past, they could adjust the percentage of a given course that individual students needed to complete in order to receive credit for that course. For example, if general education students were required to complete 80% of the lesson modules in a given course, that expectation could have been adjusted to 60%, or 40% depending on a student's relative ability and needs. These types of flexibility were eliminated due to a shift toward greater adherence to state-based standards. The school found it impossible to meet state standards in a given academic year with such programming modifications:

"…the concept of the children working slower or faster like we used to have is really

not there anymore because of the fact that we're a public school and we have to get the kids to meet those standards by the end of the year…"

Virtual learning works for some students, but not for others. Given that AVS houses 211 students with eleven separate classifications of disability in its general education program, it is perhaps not surprising that participants express concern for its "one size fits all" approach to special education. As is evident in the sample schedule (Figure 4.9), the greater the special education and academic needs of AVS students in the inclusive model, the greater the time commitment required of that student. Multiple participants expressed concern that, when students require multiple interventions or supports, it is not possible to complete programming commitments in the 30-hour school week. One participant, a mid-level school administrator, expressed this concern by saying:

"…when they have an hour a week in speech, and hour a week in mathematics, an hour a week in ELA…aside from their whole group classes which are eight hours a week, and any small groups that their [general education] teacher plans, which could be another four hours a week… for our students with more severe needs and more related services that they have to attend…the balance is a little tricky…"

Regardless of these specific concerns, participants also lauded the school's appropriateness for some students. One general education teacher participant discussed the virtual platform as convenient to the lifestyles of travelling families, or students who may have professions of their own – musicians, athletes and actors, for example. The program allows academically advanced students to enroll in high school and college courses without imposing the inconvenience of commuting from one campus to the next. One participant from the non-instructional special education staff specifically commended the benefits of the virtual environment for students with

very specific needs:

> "..So if you are autistic, like, a high functioning autistic kid, then AVS is perfect for you…especially if…your grades are good…Your parents can kind of deal with your ABA stuff…you can have all your therapies …work all the social stuff out…in a very comfortable setting…in those cases, [virtual school] works out really well."

There is abundant data at teachers' fingertips. Three faculty and two staff participants lauded the ease of data-driven decision-making in the virtual platform. Because students are logging into a variety of online systems (e.g.: the OLS, MobyMax, Study Island, Conover, and Unique) to complete lessons, assessments, and interventions, all performance data is tracked and is easily accessible to AVS employees. When faculty and staff need to consider performance data for special education screenings, RTI decisions, IEP progress monitoring, or LRE determinations, they need only to log into a variety of databases and run pertinent reports. Faculty participants also celebrated their ability to use data to make real-time instructional choices for individual students. One summarized this benefit, saying:

> "…the great thing with the platform is that the teachers can look and see, 'hey, I noticed you just did this lesson and you didn't master it,' or, 'you only scored 40 percent. Let's go back and look at that together,' and help them out that way. So having that platform and the data right there in front of your face makes it a lot easier for the teachers to make sure that they're focusing on what the child individually needs."

Theme 4: Regardless of any measured challenges, some parents and teachers are happier with the virtual environment than they were in brick-and-mortar schools. While all participants seemed very realistic about the challenges of teaching and learning in a virtual school, all expressed that they are significantly happier in AVS than in any previous brick-and-

mortar school. Themes of satisfaction with AVS can be divided into three main categories: communication and relationships, safety of students, and faculty and staff morale.

Communication and relationships between home and school are generally better in virtual school. Because school personnel are physically separated from students and their families, AVS requires that faculty keep in regular communication with Learning Coaches. This communication can be in the form of email, phone calls, videoconference, "snail mail," and even face-to-face meetings. All faculty and parent participants described being in "constant communication" with one another in support of student success, more so than they experienced in brick-and-mortar schools. Participants reported a great appreciation for this level of communication.

One general education faculty participant discussed communication and relationship-building as a necessary component of teaching in the virtual environment, but also as something that she values tremendously:

"…one of the most important things being a virtual teacher is getting to know the families as well as we do, better than a brick and mortar school…you're required to call them every month…you develop a relationship with these people."

One parent participant praised AVS teachers in general, and her daughter's virtual special education teacher specifically, saying:

"…[the teachers have] really strong connections with, with their students. Very, very strong connections...[my daughter's special education teacher] is the first teacher that gets [her], that gets her quirks…she knows by the tone of [her] voice when she comes online, this is going to be a good day or bad day…"

Parents know that children are safe. Several faculty and staff participants, and both parent participants discussed physical and emotional safety as a primary factor in their satisfaction with the virtual school environment. Faculty and parent participants told stories of bullying at brick-and-mortar schools of varying degrees of severity. Some students were called names. Others were hit, kicked, bit, concussed and burned while on school grounds. One student even went missing for nearly 24 hours and was found inside a locker at his school; he was, it was later determined, locked in by students who did not understand the nature of his disability. Because students are physically separated from their classmates in the virtual setting, these types of abuses simply do not occur. For families who have experienced a variety of bullying in the past, this relative safety is one of the greatest assets of virtual education.

Faculty and staff morale is high. Regardless of staff shortages, long workdays, and large caseloads, faculty and staff seemed genuinely happy to be a part of AVS. They described close relationships with students and families, good working relationships with colleagues, and support by school leadership as factors in their satisfaction with their employer. When asked what AVS does best to support students with disabilities, every single faculty and staff participant who is not a special education teacher said, "hire great special education teachers." Faculty and staff participants consistently talked about their respect for their colleagues, and for their sense of being a part of a team with a common goal.

Summary

The purpose of this study was to discover and describe the implementation of IDEA and special education programming at AVS, a virtual public school in the southeastern United States. General student enrollment, special education enrollment, and demographic data for faculty and staff participants was described. A description of the organization of the special

education department including leadership structures was developed with and verified by such participants.

Models of the inclusive and self-contained programs available to students with disabilities at AVS were developed using data collected from parent, faculty and staff participants. The inclusive program was found to be based on general education curricula designed and distributed by K12, Inc., the most prolific competitor in the virtual school market. Students in this program received instruction through a variety of modalities including live Class Connect Sessions with their grade level teachers, boxed

curricular materials distributed by K12, and lesson modules in the OLS. Special education supports in the inclusive program were found to be standardized and limited to a maximum of three hours of special education instruction per week. These instructional supports include special education instruction in general education math and English classes once per week, and thirty minutes of small group special education instruction once per week in both English and math. Additional resources available to students in the inclusive program were also found. These included a variety of live taught and web-based resources that may or may not be available to both general education and special education students.

The self-contained program was found to be completely separate from any general education programming. It did not use the OLS or any K12 curricula, but rather was based on alternative functional and life skills curricula. These curricula are the Unique Learning System, which provides for instruction in skills associated with the state's alternative standardized assessment, and Conover Online, which offers life-skills instruction. Two teachers and thirty-two students are in the self-contained program. The majority of students in this program are identified as having moderate to severe Intellectual Disabilities.

Several aspects of various special education processes that were found to be unique due to the virtual nature and organizational structure of AVS. Special education intake, Child Find, evaluation, IEP development, IEP meetings and LRE determination were all found to have characteristics unique to AVS.

Several themes were identified in interview data collected from participants. These themes related to programming and support options available to students with disabilities at AVS, the roles of parents in the academic experiences of their children with IEPs, challenges and benefits of the virtual environment, and the general satisfaction of parents, faculty and staff at AVS.

Chapter Five

Discussion

Overview of the Study

Virtual schools are a rapidly expanding alternative to traditional brick-and-mortar schools (Franklin, Burdette, East & Mellard, 2015; Tindle, East & Mellard, 2015; Ferdig, Cavanaugh, Dipietro, Black & Dawson, 2009; U.S. Department of Education, 2010; Center on Online Learning and Students with Disabilities, 2012; Rose & Blomeyer, 2007; Rice, East & Mellard, 2015) and are often especially appealing to the families of students with disabilities (PR Newswire, 2015; Smith, Ortiz, Rice & Mellard, 2017; Beck, Egalite & Maranto, 2014; Beck, Maranto & Lo, 2014). There is, however, some research that suggests that the Individuals with Disabilities Education Act (IDEA) is not being upheld with fidelity in such schools. Questions about compliance have been raised regarding aspects of parent participation (Franklin, Burdette, East & Mellard, 2015; Smith, et al., 2017; COLSD, 2016; Lin, 2009), the appropriateness of available programming for diversely-abled students (Rice, et al., 2017; Lazarus, Thompson & Thurlow, 2006; Carnahan & Fulton, 2013; Basham, et al., 2015), Child Find and evaluative processes (Rhim & Kowal, 2008; Burdette, Greer & Woods, 2013; Deshler, East, Rose & Greer, 2012; Basham et al., 2015; Center on Online Learning and Students with Disabilities, 2016; Swenson & Ryder,2016; Rice & Carter, 2015), and the provision of the Least Restrictive Environment (Deshler, East, Rose & Greer, 2012; Rhim & Kowal, 2008; Rice, et a., 2015). The purpose of this study was to discover and describe the implementation of IDEA and special education programming at a virtual public k-12 school. A series of interviews were conducted with stakeholders at one such school in the southeastern region of the United States in order to collect this data. Interview data was corroborated with document

review when necessary and available.

Roles of Teachers at AVS

This study found teachers at AVS to be performing roles not dissimilar to those described by Coy (2014), Rice and Carter (2016), and Crouse, Rice and Mellard (2017) with one important distinction: teachers at AVS are designing at least some of the lessons that are delivered to students. Like the professionals that participated in the aforementioned studies, teachers at AVS are communicating with families, and providing technical support and case management services. But unlike these studies, classroom teachers are designing lessons that link the K12, Inc. curricula to their state standards and delivering these self-created lessons in live Class Connect Sessions. Because the K12, Inc. curriculum is based on national Common Core Standards, schools housed in states in which public education is aligned to those standards do not need to further align instruction. Virtual schools in these nationally standardized states can deliver the K12 curriculum as it is "packaged," without the need for further alignment. AVS, because it relies on state, rather than national, standards, needs a "middle man" to align these two different sets of standards. This aspect of the roles of teachers at AVS is, therefore, more similar to the roles they may have played in brick-and-mortar schools as compared to their colleagues in other virtual schools.

Faculty and staff members, who were not without criticism of special education in the virtual environment, all reported being satisfied with their employment. This is in agreement with the 2014 study conducted by Beck and Maranto that described teachers who felt they shared a professional mindset and trusting relationships with their colleagues. Unlike other studies (Hawkins, Barbour & Graham, 2012; Rice, Dawley, Gassell & Florez, 2008), the current study showed strong bonds and relationships between teachers and families.

Participants in the current study expressed that they valued the stronger relationships they have with their students in the virtual environment than they had in traditional brick-and-mortar schools. This is likely due to the hiring practices utilized by administrators at AVS, which focus on developing a staff that is comfortable with a "customer service" and communication-forward approach to education. They value employees who take a proactive approach to school-home communication and seek to solve challenges families may experience.

While teachers at AVS are experienced, educated and dedicated educators for students with disabilities, their roles in the academic experience of these students is somewhat limited by the structure of the virtual school environment. Teachers' direct interactions with students with disabilities are limited to three hours per week of general education instruction and small group remediation per subject area, and a maximum of three hours per week in some combination of push-in and pull-out small group special education instruction. Teachers in the virtual environment aren't available to support students more than these generically prescribed hours due to the curriculum's reliance on the OLS and other independent learning components, and due to large special education caseloads.

All special education faculty participants expressed concern for the efficacy of this model of instruction, saying that there simply aren't the structures or resources available to support students to the level they were supported in brick-and-mortar schools. Students in brick-and-mortar schools spend considerably more time engaged in direct learning with a teacher than do students in virtual schools. Much of the literature about the pedagogy of special education in virtual schools argues that students with disabilities learn best when provided with opportunities for direct, face-to-face instruction (Lin, 2009; Greer, Rowland & Smith, 2012; Coy, 2014; Rice & Carter, 2015; Franklin, Burdette, East & Mellard, 2015; Morgan, 2015). If

this is true, then by removing the possibility for equal time engaged in such instruction with trained educators, students with disabilities in virtual schools are put at a disadvantage as compared to their peers in brick-and-mortar schools.

Roles of Parents at AVS

According to the current study, parents and other Learning Coaches are expected to play a tremendous role in the academic experiences of their students with special needs at AVS. The description of the roles played by these LCs was also consistent with existing literature that describes LCs as the primary teachers in the lives of students enrolled in virtual special education (Lin, 2009; Bernstein, 2014; Basham et al., 2015; Ortiz, et al., 2017). The current study provided a more in-depth description of the roles parents and other Learning Coaches play in the daily school routines of their students with disabilities than previous research. Whereas previous studies described the amount of time that parents and other LCs may spend with their students in academic activities, or even asked those adults to assign a descriptive name to that title, they did not investigate in-depth, the daily tasks and routines contributed by LCs to the academic careers of their students.

Parents and other LCs at AVS are taking over the roles played by teachers, para-educators, and other support staff in traditional brick-and-mortar schools. Virtual schools are only able to claim a holistic educational experience because of the supports and services being provided by parents and other non-staff adults. While the Individuals with Disabilities Education Act advocates for and mandates parental involvement, the intention of the law was not for schools to replace highly qualified teachers with parents. Parents were meant to be team members and advocates for their children, not teachers or other school staff.

Previous research (Black, 2009) has shown an unclear relationship between parental

support and student achievement in virtual schools. This study showed that students whose

parents provided *encouragement, modeling and instructional reinforcement* had higher

academic achievement than their classmates whose parents did not provide such supports. This

study also showed that students whose parents provide direct *instruction* had lower achievement

than their classmates whose parents did not provide instruction. This study found results

similar to those of the pilot study discussed in chapter four of this dissertation, participants of

the current study expressed parental involvement and instruction as paramount to student

success. Because the relationship between parent provision of instruction and student

achievement in virtual schools is unclear, virtual schools should not, perhaps, rely on parents

and other family members to provide these services.

Flexibility and Personalization

Opportunities for flexibility are very prevalent for students and their Learning Coaches

in their ability to tailor much of their daily schedule according to their individual needs. Other

studies (Beck, Egalite & Maranto, 2014; Rhim & Kowal, 2008; Ortiz, Rice, Smith & Mellard,

2017) found similar results. However, the opportunities to individualize the virtual learning

experience related to flexible pacing (Allday & Allday, 2011; Currie-Rubin & Smith, 2014;

Archambault et al., 2010; Rice, et al., 2015; Center on Online Learning and Students with

Disabilities, 2012), flexible placement within online curricula (Currie-Rubin & Smith, 2014),

personalization of curricula and instruction (Marsh, Carr-Chellman & Sockman, 2009; Hashey

& Stahl, 2014; Smith, 2017; Rice, East & Mellard, 2015; Rhim & Kowal, 2008; Center on

Online Learning and Students with Disabilities, 2012), and personalization of the learning

management system (Tindle, et al., 2015) is minimal or non-existent. Learning at AVS is much

more prescribed than previous understandings of virtual learning environments. This implies

that the one of the most effective "selling points" of virtual education, the opportunity for flexibility and personalization, is minimal related to curricula, but maximum related to families' schedules. It is imperative that virtual schools communicate these realities to families of enrolling students.

Implementation of the Components of IDEA in the Virtual Environment

   Free and Appropriate Public Education (FAPE). The current study found that there are two programs to support students with disabilities at AVS. This is in agreement with existing research that describes limited educational options for students with disabilities in virtual school environments, and which calls into question students' access to FAPE in these schools (Thurlow, 2006; Carnahan & Fulton, 2013; Basham, et al., 2015). Though AVS enrolls 243 students with eleven separate federally recognized classes of disability, they offer just two programs to support the public education of these diverse students: a full inclusive model, and a non-diploma alternative education model. All special education faculty and staff participants doubted the appropriateness of these two options for many of their enrolled students with disabilities.

   It is impossible to consider that the needs of all students, regardless of classification, nature or severity of disability can possibly be met within a dual-model spectrum of instructional services. This is especially true when one considers that one of these programming options is to fully include students with disabilities in general education programming with little-to-no special education instruction or support. One staff participant discussed a student who she described as a "classic slow learner," who was being denied access to a high school diploma because her level of need could not be met in the inclusive model. Even though the student did not need a life-skills program, the self-contained model was the

only program in which she could receive supports greater than those available in the inclusive model. This is a clear violation of the civil rights of this student: rather than providing access to an appropriate level of supports, AVS is limiting her academic prospects due to their purported lack of resources. In order to provide educational opportunities that are appropriate to all learners, AVS must increase options for levels of special education support.

If it can be reasoned that time is a resource and, therefore, a form of tuition (Lin, 2009), then students at AVS are being denied access to a free public education. AVS requires a parent or other adult to facilitate the daily academic activities of all students, including those with disabilities. The current study demonstrated, in agreement with existing research, that this commitment of time is increased for families of students with disabilities; the greater the need of the given student, the greater the time commitment required. This creates a conundrum inherent to this virtual school structure: families who cannot commit approximately six hours per day may find their students with disabilities to be less successful in the virtual school environment.

Even though these structures may call the implementation of FAPE into question, AVS has a unique model for the public education of students with moderate-to-profound cognitive disabilities. The current researcher could not find any existing research that discusses such a program in any other public virtual school. Parents of students in this model of instruction at AVS reported that students have greater educational benefit than they did in their previously attended brick-and-mortar schools. The alternative virtual curriculum at AVS seems to be in-line with the functional and academic needs of their children while allowing the flexibility necessary to manage therapies and medical appointments. Additionally, students in the self-contained model have increased social-emotional and physical safety by nature of their ability

to access school in their own homes. If the benefits of this model of support for students with moderate-to-profound needs can be documented in additional research, then AVS may be in a position to pioneer a new mode of education for students with such needs.

Appropriate Evaluation. Data regarding special education enrollment in existing literature as well as the current study may cast doubt on the veracity of evaluative processes at AVS. According to Carnahan and Fulton (2013) and Fernandez, et al. (2016), 13.99% and 24.6% of students, respectively, enrolled in virtual schools were reported to have an Emotional Disturbance. The current author found that just .47% of enrolled students at AVS were reported to have the same disability. Similar, though less pronounced, discrepancies were found when the rate of enrollment for students with Autism and Other Health Impairment cited in Carnahan and Fulton (2013) were compared to the current study. This may imply that the choice to enroll in a virtual school is a purely personal one, and not necessarily driven by any record of success with students with special needs or established body of best practices. But, depending on the timing of the evaluations of the students in AVS—whether they were they identified by AVS or by staff at a previous school—this could also call into question the veracity of the school's evaluative practices. If the school were assigning or avoiding special education classifications based on their ability to design and implement instruction and services, rather than on the evaluation data for each individual child, the school would be in violation of the basic principles of IDEA.

Individualized Education Plans. The design and implementation of Individual Education Plans also calls into question the school's adherence to FAPE requirements. IEPs are not meant to be written by one person, as is the case in the self-contained programming model at AVS. Rather, IEPs are meant to be drafted by a multidisciplinary team, including the parent or parent

surrogate and the student (when appropriate), in the IEP meeting. AVS does include related

service goals written by relevant service providers, but all other aspects of a student's IEP are

written by a special education teacher in the self-contained model. This is neither in accordance

with the spirit or the letter of the Individuals with Disabilities Education Act.

Similarly, the standardization of IEP goals according to grade level curricula in the

inclusive program leaves AVS in dubious FAPE standing. According to the law, IEP goals

should be "…designed to meet the child's needs that result from the…disability to enable the

child to be involved in and make progress in the general education curriculum," (Wright &

Wright, n.d.). That is, IEP goals should be individualized according to each student's impacted

areas of skill, present levels of academic and functional performance, and relative strengths and

needs. By basing IEP goals soley on grade-level curricular standards rather than individual

learning profiles, the "appropriateness" of learning goals in students' Individual Education

Plans is in question.

Least Restrictive Environment. Multiple staff and faculty participants discussed the

inappropriate placement of students in the self-contained program. They described students

who could be successful in the inclusive program given an increased level of support, and

lamented the lack of availability of those supports at AVS. This is a clear example of students

being denied access to the Least Restrictive Environment due to inadequate school

programming and structures, and a clear violation of the IDEA-protected civil rights of the

students in question. An LRE decision should not be a decision between allowing a student

access to a high school diploma or not allowing a student access to a high school diploma. In

order for LRE to be fully realized, additional programming options would need to be available.

Some discussion has evolved of the nature of LRE in virtual education. It is the opinion

of the current researcher that the child's home should not be described as the LRE in cases of virtual education. Unlike early intervention practices, where the home is considered the LRE (natural environment) and services are often directly delivered in the home of the child being served, the point of access of virtual education is not the child's home but the virtual classroom itself. The Least Restrictive Environment is defined by a student's access to the general education curriculum and to his/her non-disabled peers. Each of these is accessed via the virtual classroom, rather than the student's home. Even though that virtual classroom is most typically accessed via a personal computer that is located in the child's home, this computer could be located anywhere. The home is not the point of instruction. The virtual classroom is.

Parent Participation. Parent participation in special education processes is well documented at AVS. Parents are involved in IEP meetings and in placement decisions, however limited those options may be. Interestingly, this parent participation "allows" the violation of other tenants of IDEA at AVS. Even though there are inadequate placement options, limited access for some students to their LRE, a lack of individualization of IEP goals, questionable evaluation decisions, and insufficient special education instruction and supports, by signing a given IEP parents are agreeing to the terms of service outlined in that document. Some of these same issues occur in brick-and-mortar schools, but seemingly to a lesser extent. This point is not to criticize parents for allowing the dissolution of their children's civil rights. It is to suggest that AVS may not be fully explaining the realities of virtual learning or special education rights and responsibilities to parents of students with disabilities. Another possible implication is that parents are "desperate" for a different educational experience for their children and are willing to sacrifice some elements of their federally protected rights in order to gain placement options.

Procedural Safeguards. Not all procedural safeguards were relevant to the interview questions used by the current researcher. Therefore, their absence from collected data does not mean that they were not in place for students and families of students with disabilities at AVS. These include: 1) a parent's right to a complete explanation of all the procedural safeguards, 2) a parent's right to inspect and review the educational records of their child, 3) a parent's right to an independent educational evaluation for their child, and 4) formal and informal methods of dispute resolution.

Of the safeguards discussed in data collection, some were in place for students with disabilities and their families at AVS, while others were not. Parents are provided with prior written notice of all special education procedures, and participate in meetings, as is evident in the interview data discussed earlier in this dissertation. However, the only school administrator to participate in this study described IEP meetings as an opportunity to convince parents to agree to the supports and accommodations written into their children's IEPs. Another special education staff participant described IEP meetings as an opportunity for the school to disseminate the information contained in the IEP to the parent. Given these descriptions by AVS staff members, it would seem that parents are not always being grated their rights to give and deny consent, and to disagree with school-based decisions. Again, this phenomenon occurs in brick-and-mortar school and is an area of special education that needs improvement.

Limitations

Several limitations are present in this study. First, the study sought to discover and describe special education programming at only one virtual public charter school. Because the study focused on one school, the findings cannot and should not be generalized to any other school site.

116

Another design limitation was the fact that the primary means of data collection was conducted via a series of participant interviews. According to Creswell (2014), the veracity of interview data can be diminished for several reasons. Participants may provide information that has been filtered through their own views and perceptions, or influenced by the presence of the researcher. Further, interviews are, by their nature, not an observation of a naturally occurring phenomenon. Finally, "not all people are equally articulate or perceptive," (p. 191) and so interview data may not have been exactly representative of what the participant hoped to describe.

Other limitations are associated with the participant pool. First, the researcher only interviewed stakeholders who are currently associated with the school site. Because less satisfied parents and teachers may leave a given school, this may imply that all participants hold a positive bias toward the school site. Similarly, both parent participants expressed great satisfaction with special education programming at the school. When interviewing teachers and other staff, the researcher was told of parents who were significantly less satisfied than those who participated, but none of these less-happy parents were willing to be interviewed for this study. Finally, the current study does not include a special education administrator, only a general school administrator. A participant responsible for overseeing special education services could have confirmed or denied the implementation of special educations processes unbeknownst by other participants.

Study Implications

This study strongly implies that virtual schools need to closely consider how to best support and protect the rights of students with disabilities. A body of literature exists, including the current study, which calls into question the appropriateness of special education

programming and supports for all enrolled students with disabilities. If virtual schools such as AVS are going to continue to solicit federal funding sources, they must create additional opportunities for a greater variety of students to be successful within the virtual model.

One way in which virtual schools could begin to improve this reality is by examining the degree to which they can more efficiently and effectively use special education classroom teachers and decrease their reliance on parents and other Learning Coaches to facilitate the educational experiences of students with disabilities. Virtual schools are attracting and hiring experienced teachers who are passionate about helping students, but are not utilizing this resource to its fullest capacity. This may be due to the lack of established body of best practices for virtual education at large, let alone virtual special education. These teachers are aware of having a limited impact upon the educational outcomes of their students with disabilities, but expressed feeling unsure of how to be more impactful.

This study also suggests that not much is known about the different models of instruction in virtual schools. The fact that the realities of teaching and learning described in the present study could not be consistently predicted according to any set of existing research means that a basic picture of school structures, learning activities, and special education practices in virtual landscapes has not yet been drawn.

Suggestions for Further Research

This study highlights the importance of further research in several areas related to the implementation of the Individuals with Disabilities Education Act. These areas include compliance as it relates to parent participation, Least Restrictive Environment, FAPE, and the authorship and implementation of IEPs. Additional areas of future research should include the development of a body of best practices for virtual general and special education. A more

specific and reliable picture of students enrolled in virtual special education should also be developed.

Research regarding the use of parents and other non-teacher adults as "in-home educators" should be further explored. Existing research has questioned whether using parents in these roles inhibits the access of students to highly qualified teachers. Other research has argued that using parents in this way is akin to charging tuition, which would also place schools in non-compliance. Future research could more closely examine the specific roles played by parents and teachers, and assess whether the practical realities of these roles maintain or hinder special education compliance.

Paramount to the continued service of students with disabilities in virtual schools is a consensus definition of "Least Restrictive Environment." It is impossible to assess a school's adherence to IDEA if there is no singly understood definition of LRE. Future research should examine the point of access to instruction, and what impact the virtual environment has on the restrictiveness of that feature.

This study confirmed the need for additional research into best practices for virtual special education. Teacher participants expressed a frustration that the "newness" of virtual education often leaves them without a clear understanding of how to best support students with diverse needs. Future research should focus on the empirical evaluation of instructional strategies and techniques in virtual special education.

Additional research that describes students enrolled in special education in virtual schools should be conducted. Just as we have national enrollment data that describes students with disabilities in traditional brick-and-mortar schools, such data needs to be gathered to describe the student body in public virtual schools. Having such data on hand will allow policy

makers, school administrators, and educators to make more informed decisions about the types of programming that need to be funded and implemented in virtual schools.

The current researcher did not ask participants if the virtual nature of IEP meetings impacted participants' ability to contribute to conversation in these meetings. This would be an interesting point to explore further in the future research.

Conclusions

This study contributed to the emerging field of research regarding the implementation of special education instruction, programming and services in virtual school environments by discovering and describing programming at one such school. Results described the special education department housed at AVS, special education student enrollment data, levels of faculty and staff education and experience, and created a detailed picture of the roles played by parents and other Learning Coaches in the daily educational activities of their children with special needs.

Results showed that compliance around the implementation of FAPE and LRE are challenges for this virtual school. Factors such as increased and expanded parent participation; diminished roles of general and special education teachers; limited programming options; and the prescribed nature of goals, services and supports make compliance with the letter and spirit of special education law dubious at best. Special education teachers at AVS seemed to be in place as a means of compliance-fulfillment, rather than for actual instructional or intervention purposes. IEP goals, accommodations, modifications and services seem to be designed around the capacity of the school rather than the needs of individual students.
Regardless of any described shortcomings, AVS has had some successes in special education programming when compared to established research in related fields. Teachers and families of

students with disabilities describe feeling satisfied with AVS. They enjoy relationships with other educational stakeholders that they describe as closer and more meaningful than those experienced in brick-and-mortar schools. Parents described feeling satisfied with the social, emotional and physical safety of their children enrolled in AVS. AVS houses a self-contained, alternative educational program for students with moderate to profound cognitive disabilities that focuses on life, rather than advanced academic, skills. This program offering seems to be unique to AVS as there is no exiting research that describes any such alternative learning programs in virtual school environments.

To summarize, this study found several issues with special education compliance in one virtual public school. Some of the issues are related to the limited capacity of the school to offer a breadth of programming options for students with a variety of needs. Other issues centered around the nebulous understanding of compliance in virtual schools, including the participation of parents and the definition of Least Restrictive Environment. Still other issues arose from a lack of empirical data regarding best practices in the pedagogies of both general and special education. But the study also found some successes. These included a strong bond among school community members and specialized programming that may be unique to the site school. The current study has implications for policy makers, virtual school administrators and directors of virtual special education programs. Areas of future research should include more detailed examinations of areas of compliance in virtual public schools including the efficacy and legality of the roles played by parents in these schools, a development of best practices for both general and special education in virtual schools, and a broader and more complete description of special education enrollment in all public virtual schools.

References

Adams, J. M. (2015, June 18). Teachers claim virtual charter school company inflates enrollment. Retrieved June 12, 2017, from https://edsource.org/2015/teachers-claim- virtual-charter-school-company-inflates-enrollment/81732

Allday, C. M., & Allday, R. A. (2011). Effects of pacing options on final grades of students with disabilities in virtual high school. *The Quarterly Review Of Distance Education, 12*(4), 223-234.

Archambault, L., & Crippen, K. (2009). K-12 distance educators at work: Who's teaching online across the United States. Journal of Research on Technology in Education, 41(4), 363-391.

Archambault, L., Diamond, D., Coffey, M., Foures-Aalbu, D., Richardson, J., Zygouris-Coe, V.,

Brown, R., & Cavanaugh, C. (2010). *Research committee issues brief: An exploration of at-risk learners and online education* (Issue brief) (D. Schribner & M. Barbour, Eds.). Vienna, VA: International Association for K-12 Online Learning.

Barbour, M.K. (2009). Today's student and virtual schooling: The reality, the challenges, the process…. Journal of Distance Learning, 13(1), 5-25.

Barbour, M.K. (2014). *Review of "Virtual Schooling and Student Learning: Evidence from the Florida Virtual School."* Boulder, CO: National Education Policy Center. Retrieved August 4, 2017 from http://nepc.colorado.edu/thinktank/review-virtual-schooling-and-student-learning.

Barbour, M. K., Miron, G., & Huerta, L. (2017). *Virtual schools in the U.S.: Case studies of policy, performance, and research evidence*. Lansing, MI: Michigan Virtual University. Retrieved August 3, 2017 from http://media.mivu.org/institute/pdf/VSCase-17.pdf

Barth, P., Hull, J., & St. Andrie, R. (2012). Searching for the reality of virtual schools (Rep.).

Center for Public Education, National School Boards Association.

Basham, J. D., Smith, S. J., Greer, D. L., & Marino, M. T. (2013). The scaled arrival of K 12

online education: Emerging realities and implications for the future of education. *Journal

of Education, 193*(2), 51-59.

Basham, J.D., Stahl, S., Ortiz, K., Rice, M.F., & Smith, S. (2015). Equity matters: Digital &

online learning for students with disabilities. Lawrence, KS: Center on Online Learning

and Students with Disabilities.

Bausell, S. B. (2016). From the Editorial Board Virtual Charter Schools: Where Did All The

Children Go? The High School Journal, 99(2), 109-112. doi:10.1353/hsj.2016.0002

Beck, D., & Maranto, R. (2014). Empowering teachers? An exploratory study of personnel

practices in virtual charter schools. Journal of Open, Flexible and Distance Learning,

18(2), 59-82.

Beck, D., Egalite, A., & Maranto, R. (2014). Why they choose and how it goes: Comparing

special education and general education cyber student perceptions. Computers &

Education, 76, 70-79. doi:10.1016/j.compedu.2014.03.011

Bernstein, M. (2014). 'Whose Choice are We Talking About? The Exclusion of Students with

Disabilities from For-Profit Online Charter Schools' Richmond Journal of Law and the

Public Interest, XVI(Iii), 487-525. doi:10.2139/ssrn.2203589

Black, E. W. (2009). An evaluation of familial involvements' influence on student achievement in

K-12 virtual schooling (Doctoral dissertation, University of Florida).

Brady, K. P., Umpstead, R. R., & Eckes, S. E. (2010). Uncharted territory: the current legal

landscape of public cyber charter schools. Brigham Young University Education and Law

Journal, 191-273.

Burdette, P. J., & Greer, D. L. (2013). Online Education Parent Survey. Retrieved August 4, 2016,

from http://centerononlinelearning.org/oesp-description.

Burdette, P., Greer, D., & Woods, K. (2013). K-12 online learning and students with disabilities:

Perspectives from state special education directors. Journal of Asynchronous Learning

Networks, 17(3), 65-71.

Burgstahler, S. (2001). *Real connections: Making distance learning accessible to everyone*

(Rep.). Seattle, WA: DO-IT, University of Washington.

Calefati, J. (2017, January 11). K12 Inc.: California Virtual Academies' operator exploits charter,

charity laws for money, records show. Retrieved July 14, 2017, from

http://www.mercurynews.com/2016/04/17/k12-inc-california-virtual-academies-operator-

exploits-charter-charity-laws-for-money-records-show

Carnahan, C., & Fulton, L. (2013). Virtually forgotten: Special education students in cyber

schools. TechTrends, 57(4), 46-52.

Center for Applied Special Technology. (2015, May 11). About Universal Design for Learning.

Retrieved August 23, 2017, from http://www.cast.org/our-work/about-

udl.html#.WZ3jyRSPlV

Center on Online Learning and Students with Disabilities. (2012, July). *The foundation of online*

learning for students with disabilities (Publication). Retrieved February 1, 2016, from

Center on Online Learning and Students with Disabilities website:

http://centerononlinelearning.org/wp-content/uploads/Foundation_7_2012.pdf.Center on

Center on Online Learning and Students with Disabilities (2016). *Equity matters: Digital &*

online learning for students with disabilities. Lawrence, KS: Ortiz & Basham.

Chingos, M. M., & Schwerdt, G. (2014). *Virtual schooling and student learning: Evidence from the Florida Virtual School*. Cambridge, MA: Harvard Kennedy School. Retrieved August 4, 2017, from

https://sites.hks.harvard.edu/pepg/PDF/Papers/PEPG14_02FVS_Chingos_Schwerdt.pdf

Clark, T., PhD. (2001, October). Virtual schools: Trends and issues (Rep.). Retrieved December 1, 2015, from Distance learning resource network, a WestEd project website: https://www.wested.org/online_pubs/virtualschools.pdf

Conover Online. (2015). Education Conover Online. Retrieved January 29, 2018, from https://www.conovercompany.com/education/

Coy, K. (2014). Special Educators' Roles as Virtual Teachers. Teaching Exceptional Children, 46(5), 110-116. doi:10.1177/0040059914530100.

Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications.

Crouse, T. M., Rice, M. F., & Mellard, D. F. (2016). *"How did I survive?" Online Teachers' Describe Learning to Teach Students with Disabilities*. Lawrence, KS: Center on Online Instruction and Students with Disabilities, University of Kansas.

Currie-Rubin, R., & Smith, S. J. (2014). Understanding the Roles of Families in Virtual Learning. TEACHING Exceptional Children, 46(5), 117-126. doi:10.1177/0040059914530101

de la Varre, C., Irvin, M. J., Jordan, A. W., Hannum, W. H., & Farmer, T. W. (2014). Reasons for student dropout in an online course in a rural K—12 setting. Distance Education, 35(3), 324-344.

Deshler, D., East, B., Rose, D., & Greer, D. (2012, September). An open letter from Don Deshler, Bill East, and David Rose (Principal Investigators), Diana Greer (Project Director) [Letter]. Center on Online Learning and Students with Disabilities, Lawrence, KS.

David Hoppaugh v. K12, Inc., Ronald J. Packard, and Harry T. Hawks (United States District Court, Eastern District of Virginia, Alexandria Division June 22, 2012).

Dillon, E. (2011). Lessons for Online Learning. Education Next, 11(2), 50-57.

Ferdig, R. E., Cavanaugh, C., Dipietro, M., Black, E. W., & Dawson, K. (2009). Virtual schooling standards and best practices for teacher education. Journal of Technology and Teacher Education, 17(4), 203-226.

Fernandez, H., Ferdig, R. E., Thompson, L. A., Schottke, K., & Black, E. W. (2016). Students with Special Health Care Needs in K-12 Virtual Schools. *Educational Technology & Society, 19* (1), 67–75.

Franklin, T. O., Burdette, P., East, T., & Mellard, D. F. (2015). Parents' roles in their child's online learning experience: State education agency forum proceedings series (Rep. No. 2). Lawrence, KS: Center on online instruction and students with disabilities, University of Kansas. doi:http://centerononlinelearning.org/wp-content/uploads/SEA_Topic_2_Summary_updated_July_2015.pdf

Gedera, D. S. (2014). Students' experiences of learning in a virtual classroom. International Journal of Education and Development Using Information and Communication Technology, 10(4), 93-101.

Getting Organized in an Online School. (n.d.). Retrieved February 24, 2018, from http://lorislolz.org/2011/08/getting-organized-in-an-online-school-2/?utm_source=hootsuite&utm_medium=socialmedia

Gill, B., Walsh, L., Smither Wulsin, C., Matulewicz, H., Severn, V., Grau, E., Lee, A., Kerwin,

T. (2015). Inside online charter schools (Rep.). Cambridge, MA: Mathematica Policy
Research.

Gibson, L. (2013, August 13). A template for writing fieldnotes. Retrieved November 05, 2017,
from https://anthropod.net/2013/08/14/a-template-for-writing-fieldnotes/

Glass, G. V & Welner, K.G. (2011). Online K-12 Schooling in the U.S.: Uncertain Private
Ventures in Need of Public Regulation. Boulder, CO: National Education Policy Center.
Retrieved July 15, 2017 from http://nepc.colorado.edu/publication/online-k-12-schooling.

Greer, D., Rice, M., & Deshler, D. (2014). Applying principles of text complexity to online
learning environments. *Perspectives on Language and Literacy,* 9-16.

Greer, D., Rowland, A., & Smith, S. (2014). Critical Considerations for Teaching
Students With Disabilities in Online Environments. Teaching Exceptional Children, 46(5),
79-91. doi:10.1177/0040059914528105

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). *Collecting qualitative data a field manual for
applied research*. Los Angeles: Sage. http://dx.doi.org/10.4135/9781506374680

Harvey, D., Greer, D., Basham, J., & Hu, B. (2014). From the Student Perspective: Experiences of
Middle and High School Students in Online Learning. American Journal of Distance
Education, 28(1), 14-26.

Hashey, A., & Stahl, S. (2014). Making Online Learning Accessible for Students With
Disabilities. Teaching Exceptional Children, 46(5), 70-78.
doi:10.1177/0040059914528329

Hasler Waters, L. (2012). *Exploring the experiences of learning coaches in a cyber school: a
qualitative case study* (Unpublished doctoral dissertation). University of Hawaii at Mānoa.
doi:http://hdl.handle.net/10125/100883

Hasler-Waters, L., Barbour, M. K., & Menchaca, M. P. (2014). The Nature of Online Charter

    Schools: Evolution and Emerging Concerns. Educational Technology & Society, 17(4),

    379-389.

Hawkins, A., Barbour, M. K., & Graham, C. R. (2012). "Everybody is their own island": Teacher

    disconnection in a virtual school. The International Review of Research in Open and

    Distributed Learning, 13(2), 124. doi:10.19173/irrodl.v13i2.967

Harold, B. (2013, January 22). Ex-workers claim cyber-charter operator manipulated enrollment

    figures. Retrieved August 08, 2017, from http://thenotebook.org/articles/2013/01/22/ex-

workers-claim-cyber-charter-operator-manipulated-enrollment-figures

Iacono, J., Brown, A., & Holtham, C. (2009). Research methods – a case example of participant

    observation. *Electronic Journal of Business Research Methods*, 7(1), 39-46. Retrieved

    November 11, 2017, from file:///Users/sarahclifford/Downloads/ejbrm-volume7-

    issue1-article200%20(2).pdf.

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004)

    Jeffreys, D. (2017). Goalbook Empowers Team of Educators in Chula Vista Elem. School

    District | Success for Every Student. Retrieved February 04, 2018, from

    https://goalbookapp.com/goalbook-empowers-team-in-chula-vista/

Johnston, S. C., Greer, D., & Smith, S. J. (2014). Peer learning in virtual schools. *Journal of*

    Distance Education, 28(1), 1-31. Retrieved August 15, 2017, from

    http://www.ijede.ca/index.php/jde/article/view/853/1524.

K12, Inc. (2018). K-8 Sample Lessons & Online Curriculum. Retrieved January 28, 2018, from

    http://www.k12.com/virtual-school-offerings/free-online-public-schools/k-8-program-

    courses/sample-lessons.html

Keeler, C. G., & Horney, M. (2007). Online Course Designs: Are Special Needs Being Met?

American Journal of Distance Education, 21(2), 61-75. doi:10.1080/08923640701298985

Keeler, C. G., Richter, J., & Ditson, M. (2007). *What works in K-12 online learning* (C. Cavanaugh & R. L. Blomeyer, Eds.). Eugene, Or.: International Society for Technology in Education.

Layton, L. (2015, October 27). Stanford study shows that online charter school students are lagging. Retrieved August 01, 2017, from https://www.washingtonpost.com/local/education/stanford-study-shows-that-online-charter-school-students-are-lagging/2015/10/27/c42dc502-7cce-11e5-afce-2afd1d3eb896_story.html?utm_term=.89478c5ace98

Lazarus, S.S., Thompson, S.J., & Thurlow, M. L. (2006). How students access accommodations in assessment and instruction: Results of a survey of special education teachers. College Park, MD: The Institute for the Study of Exceptional Children and Youth, Educational Policy Reform Research Institute.

Lin, E. (2009). "Virtual" schools: Real discrimination. Seattle University Law Review, 32(1), 177-200.

Liu, F., Black, E., Algina, J., Cavanaugh, C., & Dawson, K. (2010). The validation of one involvement measurement in virtual schooling. Journal of Interactive Online Learning, 9(2), 105-132.

Marsh, R. M., Carr-Chellman, A. A., & Sockman, B. R. (2009). Why parents choose cyber charter schools. *TechTrends, 53*(4), 32-36.

Miron, G. & Urschel, J.L. (2012). Understanding and improving full-time virtual schools: A study of student characteristics, school finance, and school performance in school

operated by K12 Inc. Boulder, CO: National Education Policy Center. Retrieved July 15,

   2017 from http://nepc.colorado.edu/publication/understanding-improving-virtual.

Morgan, H. (2015). Online instruction and virtual schools for middle and high school students:

   Twenty-first-century fads or progressive teaching methods for todays

   pupils? The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 88(2),

   72-76. doi:10.1080/00098655.2015.1007909

Molnar, A., Miron, G., Gulosino, C., Shank, C., Davidson, C., Barbour, M.K., Huerta, L., Shafter,

   S.R., Rice, J.K., & Nitkin, D. (2017). *Virtual Schools Report 2017*. Boulder, CO: National

   Education Policy Center. Retrieved August 5, 2017 from

   http://nepc.colorado.edu/publication/virtual-schools- annual-2017

Oliver, K., Osborne, J., & Brady, K. (2009). What are secondary students' expectations for

   teachers in virtual school environments? Distance Education, 30(1), 23-45.

   doi:10.1080/01587910902845923

Ortiz, K., Rice, M., Smith, S., and Mellard, D. F. (2017). *Roles and Responsibilities of Parents of

   Online School Students with Disabilities*. Lawrence, KS: Center on Online Learning and

   Students with Disabilities, University of Kansas.

Pierce, D. (2017). Virtual charter schools aim to boost student engagement. *Transforming

   Education Through Technology Journal, 44*(2), 26-28. Retrieved August 2, 2017, from

   https://digital.1105media.com/THEJournal/2017/THE_1703/TJ_1703Q1.html#p=1.

PR Newswire Association LLC. (2009, August 21). Leading virtual school provider, Connections

   Academy, launches new private school. Retrieved July 15, 2017, from

   http://www.prweb.com/releases/virtual_school/private_school/prweb2776644.htm

PR Newswire Association LLC. (2015, June 17). Annual survey results reveal why k-12 students

   attend virtual public schools; indicate strong satisfaction. Retrieved August 01, 2017,

from http://www.multivu.com/players/English/7310553-connections-education-satisfaction-survey.

Prothero, A. (2016, September 28). Audit Finds Ohio Online Charter Inflated Attendance, School Could Owe Millions. Retrieved August 08, 2017, from http://blogs.edweek.org/edweek/charterschoice/2016/09/audit_finds_ohio_online_charter _inflated_attendance_school_could_owe_millions.html

Repetto, J., Cavanaugh, C., Wayer, N., & Liu, F. (2010). Virtual high schools: Improving outcomes for students with disabilities. The Quarterly Review of Distance Education, 11(2), 91-104. Retrieved December 3, 2015, from

http://eds.a.ebscohost.com.ezproxy.uno.edu/eds/pdfviewer/pdfviewer?vid=2&sid=1d72e 95b-1303-49db-8fb9-8640a639ec56@sessionmgr4005&hid=4213

Rhim, L. M., & Kowal, J. (2008). Demystifying special education in virtual charter schools. Retrieved December 1, 2015, from http://www.nasdse.org/Portals/0/Web copy of Rhim report Jan 2008.pdf

Rice. M. F., Carter, R.A. (2015). "When we talk about compliance, it's because we lived it" Online educators rules and supporting students with disabilities. Online Learning (19)5. 18 – 36.

Rice, M., & Carter, Jr., R. (2016). Online Teacher Work to Support Self-Regulation of Learning in Students with Disabilities at a Fully Online State Virtual School. *Online Learning, 20*(4). doi:http://dx.doi.org/10.24059/olj.v20i4.1054.

Rice, K., Dawley, L., Gasell, C., & Flores, C. (2008). Going virtual! Unique needs and challenges of k-12 online teachers (Going Virtual! Study Series, Rep. No. 2). Boise, ID: Boise State University, Department of Educational Technology.

Rice, M. F., East, T., & Mellard, D. F. (2015). IDEA principles in the online environment: free appropriate public education, least restrictive environment and due process issues: super intendant forum proceedings (Report No. 3). Lawrence, KS: Center on online instruction and students with disabilities, University of Kansas. Retrieved December 1, 2015, from Center on online instruction and students with disabilities, University of Kansas website: http://centerononlinelearning.org/wp-content/uploads/Superintendent_Topic_3_Summary_November2015.pdf

Ronsisvalle, T., & Watkins, R. (2005). Student success in online K-12 education. Quarterly Review of Distance Education, 6(2), 117.

Rose, R. M., & Blomeyer, R. L., PhD. (2007). Research committee issues brief: Access and equity and online classes and virtual schools (Rep.). Retrieved December 1, 2015, from North American Council for online learning website: http://www.inacol.org/wp-content/uploads/2015/02/iNACOL_AccessEquity_2007.pdf

Saultz, A., & Fusarelli, L. D. (2017). Online Schooling: A Cautionary Tale. Journal of School Choice, 11(1), 29-41. doi:10.1080/15582159.2016.1272928

Seidman, I. (2013). *Interviewing as qualitative research: a guide for researchers in education and the social sciences*. New York: Teachers College Press.

Serianni, B. A., & Coy, K. (2014). Doing the Math: Supporting Students With Disabilities in Online Courses. TEACHING Exceptional Children, 46(5), 102-109.

Singer, A. (2016). Homeschooling, virtual schools, and the erosion of the public/private binary in primary and secondary education. Journal of School Choice, 10(3), 297-319. doi:10.1080/15582159.2016.1202070

Smith, S. J. (2016). Invited in: Measuring UDL in online learning. Lawrence, KS: Center on

Online Learning and Students with Disabilities, University of Kansas.

Smith, S., & Basham, J. (2014). Designing Online Learning Opportunities for Students with

   Disabilities. Teaching Exceptional Children, 46(5), 127-137.

   doi:10.1177/0040059914530102

Smith, S., Ortiz, K., Rice, M., and Mellard, D. F. (2017). *Parents' Perceptions of Special*

   Education Service Delivery When their Children Move to Fully Online Learning.

Lawrence, KS: Center on Online Learning and Students with Disabilities, University of Kansas.

   Spitler, C., Repetto, J., & Cavanaugh, C. (n.d.). Investigation of a Special Education

   Program in a Public Cyber Charter School. American Journal of Distance Education,

   27(1), 4-15. doi:10.1080/08923647.2013.754182

State of California v. California Virtual Academies (Superior Court of California, County of Los

   Angeles May 2, 2012).

The Role of a Learning Coach. (2016). Retrieved September 03, 2016, from

   http://www.k12.com/k12-education/learning-coach.html

Tindle, K., East, T., & Mellard, D.F. (2015). Enrollment, progress, and achievement: Vendor

   forum proceedings series (Report No. 1). Lawrence, KS: Center on Online Instruction and

   Students with Disabilities, University of Kansas.

Toppin, I. N., & Toppin, S. M. (2015). Virtual schools: The changing landscape of K-12

   education in the U.S. Education and Information Technologies, 21(6), 1571-1581.

   doi:10.1007/s10639-015-9402-8

University of New Orleans IRB. (n.d.). Letter of Consent for Adults. Retrieved November 5,

   2017, from http://www.uno.edu/compliance/irb/documents/AdultConsent.pdf

U.S. Department of Education, Institute of Education Science, National Center for Education

    Statistics Table 1. Number of virtual schools, by school type, charter status, magnet status,

    shared-time status, and state: School year 2013–14. (2015, December). Retrieved March

    22, 2016, from http://nces.ed.gov/ccd/tables/201314_Virtual_Schools_table_1.asp

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development,

    Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review

    of Online Learning Studies, Washington, D.C., 2010.

U.S. Department of Education, Office of Special Education and Rehabilitative Services, Thirty-

    five Years of Progress in Educating Children With Disabilities Through IDEA,

    Washington, D.C., 2010.

Vasquez, E., & Straub, C. (2015). Online Writing Instruction for Children With Disabilities: A

    Review of the Empirical Literature. Reading & Writing Quarterly, 32(1), 81-100.

    Watts, L. (2012, August 13). Back to School ... Virtually. Retrieved January 28, 2018,

    from https://modernpioneermom.com/2012/08/13/back-to-school-virtually/

WebAIM. (2012). Evaluating Cognitive Web Accessibility. Retrieved April 3, 2016, from

    http://webaim.org/articles/evaluatingcognitive.

WebAIM. (2013a). Cognitive disabilities part 1: We still know too little, and we do even less.

    Retrieved April 3, 2016, from http://webaim.org/articles/cognitive/cognitive_too_little.

    WebAIM. (2013b). Cognitive disabilities part 2: Conceptualizing design considerations.

    Retrieved April 3, 2016, from http://webaim.org/articles/cognitive/conceptualize.

Welch, A. (2015). The role of primary students and parents in virtual schools. *Distance Learning,*

    12(2), 33-37.

Woodfine, B., Nunes, M. B., & Wright, D. (2008). Text-based synchronous e-learning and

dyslexia: Not necessarily the perfect match! Computers & Education, 50(3), 703-717.

doi:10.1016/j.compedu.2006.08.010

Woodworth, J. L., Raymond, M. E., Chirbas, K., Gonzalez, M., Negassi, Y., Snow, W., & Von

Donge, C. (2015). Online charter school study (Rep.). Retrieved August 1, 2017, from

http://credo.stanford.edu/pdfs/OnlineCharterStudyFinal2015.pdf

Wright, P. W., & Wright, P. D. (n.d.). SMART IEPs. Retrieved February 20, 2018, from

http://www.wrightslaw.com/bks/feta2/ch12.ieps.pdf

Wright, P. (2015, December 9). Early Intervention (Part C of IDEA) - Articles, Cases, Resources,

Info & Support from Wrightslaw. Retrieved September 18, 2016, from

http://www.wrightslaw.com/info/ei.index.htm

Wright, P. (2016). Questions and Answers on Least Restrictive Environment (LRE) Requirements

of the IDEA - Wrightslaw. Retrieved September 18, 2016, from

http://www.wrightslaw.com/info/lre.osers.memo.idea.htm

Wright, P. (2016). Wrightslaw - Topics - Learn About Free Appropriate Public Education

(FAPE). Retrieved May 16, 2016, from http://www.wrightslaw.com/info/fape.index.htm

Yell, M. L., & Drasgow, E. (2000). Litigating a Free Appropriate Public Education: The Lovaas

Hearings and Cases. The Journal of Special Education, 33(4), 205-214.

doi:10.1177/002246690003300403

Yell, M. L., Katsiyannis, A., & Hazelcorn, M. (2007). Reflections on the 25th anniversary of the

U.S. Supreme Court's decision in board of education V. Rowley. Focus on Exceptional

Children. Retrieved May 16, 2016.

Yesilada, Y., Brajnik, G., Vigo, M., & Harper, S. (2012). Understanding web accessibility and its

drivers, Proceedings of the International Cross-Disciplinary Conference on Web

Accessibility W4A. Aarhus, Denmark: ACM Press. DOI: 10.1145/2207016.2207027

Yin, R. K. (2014). Case study research design and methods (5th ed.). Thousand Oaks, Calif.: Sage.

Yudin, M., & Musgrove, M. (2015, November 16). Dear Colleague [Letter to special education administrators]. U.S. Department of Education, Office of Special Education and Rehabilitative Services, Washington, D.C.

Faculty Interview Protocol

Participant Name:_____

Date of Interview:_____

Participant Location:_____

Researcher Location:_____

Introductory Protocol
Researcher will initiate Google Voice Recording. To facilitate note taking, I am recording our conversation today using Google Voice. For your information, I am the only person who will have access to the recording, which will be deleted after it is transcribed. Your identity will be kept completely confidential. Just to remind you, I am a former AVS employee, and may use my own experiences with AVS to inform my research.

This interview will last approximately 60 minutes. During this time, I have several questions that I would like to cover. Specifically, I'm interested in learning about the ways in which faculty, staff, and parents are supporting students with disabilities and how the Individuals with Disabilities Education Act is being implemented in public virtual k-12 schools. You have been invited to speak with me today because you have been identified as someone who has a great deal of information to share about these processes in a virtual school. Through these interviews, I hope to identify methods and strategies for supporting students with disabilities.

Participant Background

1. What grades and subjects do you teach?

2. What is your highest degree received, and in what area of study?

3. What teaching certificates do you currently hold?

School and Class Structures

1. To start, can you describe a typical school day/week at AVS?

2. Are live class sessions the only way that curriculum is delivered to students?

3. What role do you, the teacher, play in a student's overall academic experience at AVS?

4. Can you describe the opportunities students and families have to take advantage of flexibility and personalization of learning at AVS?

Dissemination of Special Education Status

1. How are you informed that a student has and a disability and an IEP?

2. How do you learn about the accommodations and supports each student is meant to receive?

3. Approximately how many students with IEPs do you teach in each of your classes?

Provision of Accommodations and Modifications

1. How do you monitor the learning of students with disabilities, and how do you provide individualized support when needs arise?

2. How do you modify lesson activities to accommodate students' individual needs?

3. Are textbooks, lesson modules, assessments, and other instructional tools modified to accommodate students' individual needs? If so, how?

4. Approximately how much time, in hours, do you spend directly supporting students with disabilities each day or week? For example, how much time altogether do you spend on classroom teaching, providing extra help, modifying lessons, and anything else for students with disabilities?

5. Are processes in place to support students with disabilities who may not be making appropriate growth or progress? If so, what is done to support these students?

IEP Processes

1. Please describe your role in writing a student's IEP and the role of any others who participate.

2. Can you describe a typical IEP meeting at AVS?

3. How is a student's IEP progress monitored and tracked throughout the year?

Participant Impressions Survey

1. On a scale of one to five, one being "not at all," and five being "exceptionally well," and not thinking about yourself personally, how well do you think AVS does, on the whole, with **locating and identifying** students with disabilities?

2. On a scale of one to five, one being "not at all," and five being "exceptionally well," and not thinking about yourself personally, how well do you think AVS does, on the whole, with **teaching and supporting** students with disabilities?

Participant Comments

1. Is there anything you think AVS is doing well to provide special education programming?

2. Is there anything you think AVS could do to improve special education programming for its students with disabilities?

3. Is there anything you would like to share that I have not touched on? Anything you feel is important in order to understand special education programming at AVS?

Appendix B

Special Education Staff Interview Protocol Participant

Participant Name:_____

Date of Interview:_____

Participant Location:_____

Researcher Location:_____

Introductory Protocol
Researcher will initiate Google Voice Recording. To facilitate note taking, I am recording our conversation today using Google Voice. For your information, I am the only person who will have access to the recording, which will be deleted after it is transcribed. Your identity will be kept completely confidential. Just to remind you, I am a former AVS employee, and may use my own experiences with AVS to inform my research.

This interview will last approximately 60 minutes. During this time, I have several questions that I would like to cover. Specifically, I'm interested in learning about the ways in which faculty, staff, and parents are supporting students with disabilities and how the Individuals with Disabilities Education Act is being implemented in public virtual k-12 schools. You have been invited to speak with me today because you have been identified as someone who has a great deal of information to share about these processes in a virtual school. Through these interviews, I hope to identify methods and strategies for supporting students with disabilities.

Participant Background

1. What is your highest degree received, and in what area of study?

2. Can you describe your experience in education? For example, have you ever taught or worked in other positions in schools?

3. Can you describe your position/role with AVS?

School and Class Structures

1. To start, can you describe a typical school day/week at AVS?

2. Are live class sessions the only way that curriculum is delivered to students?

3. What role do classroom teachers play in a student's overall academic experience at AVS?

4. Can you describe the opportunities students and families have to take advantage of flexibility and personalization of learning at AVS?

Dissemination of Special Education Status

1. How are teachers informed that a student has and a disability and an IEP?

2. How do teachers learn about the accommodations and supports each student is meant to receive?

3. Approximately how many students with IEPs are enrolled in general education classes? Self-contained special education classes?

Provision of Accommodations and Modifications

1. Do teachers modify lesson activities to accommodate students' individual needs? If so, how?

2. Are textbooks, lesson modules, assessments, and other instructional tools modified to accommodate students' individual needs? If so, how?

3. Are processes in place to support students with disabilities who may not be making appropriate growth or progress? If so, what is done to support these students?

4. Can you describe the roles that parents and teachers are expected to play in the academic experience of students with disabilities?

5. How are parents informed of any expectations AVS may have of them?

Special Education Compliance

1. Can you describe the process of an IEP meeting at AVS? Who is involved? How do various team members contribute to an IEP?

2. Is IEP progress monitored and tracked throughout the year? If so, how?

3. Are there processes are in place to support students with disabilities who may not be making appropriate growth or progress? If so, what are they?

4. How are students with disabilities identified and evaluated at AVS?

5. How is a student's LRE placement determined? Can you describe the programming options available to students with special needs at AVS?

Participant Impressions Survey

1. On a scale of one to five, one being "not at all," and five being "exceptionally well," and not thinking about yourself personally, how well do you think AVS does, on the whole, with **locating and identifying** students with disabilities?

2. On a scale of one to five, one being "not at all," and five being "exceptionally well," and not

thinking about yourself personally, how well do you think AVS does, on the whole, with **teaching and supporting** students with disabilities?

Participant Comments

1. Is there anything you think AVS is doing well to provide special education programming?

2. Is there anything you think AVS could do to improve special education programming for its students with disabilities?

3. Is there anything you would like to share that I have not touched on? Anything you feel is important in order to understand special education programming at AVS?

Appendix C

Parent/Guardian Interview Protocol

Participant Name:_____

Date of Interview:_____

Participant Location:_____

Researcher Location:_____

Introductory Protocol

Researcher will initiate Google Voice Recording. To facilitate note taking, I am recording our conversation today using Google Voice. For your information, I am the only person who will have access to the recording, which will be deleted after it is transcribed. Your identity will be kept completely confidential. Just to remind you, I am a former AVS employee, and may use my own experiences with AVS to inform my research.

This interview will last approximately 60 minutes. During this time, I have several questions that I would like to cover. Specifically, I'm interested in learning about the ways in which faculty, staff, and parents are supporting students with disabilities and how the Individuals with Disabilities Education Act is being implemented in public virtual k-12 schools. You have been invited to speak with me today because you have been identified as someone who has a great deal of information to share about these processes in a virtual school. Through these interviews, I hope to identify methods and strategies for supporting students with disabilities.

Participant Background

1. How many children do you have who are enrolled in special education at LAVAC?

2. For each of your children enrolled in special education services at AVS, what is their current grade level and special education classification?

3. How long have they been attending AVS?

4. Where did you child/children attend school before enrolling in AVS?

School and Class Structures

1. To start, can you describe a typical school day for your child/children?

2. Are live class sessions the only way that curriculum is delivered to students?

3. Can you describe the role you play in your child's school day at AVS?

4. About how much time do you spend supporting your child in school activities each day?

5. Can you describe the role that different AVS faculty and staff play in supporting your child/children?

6. Can you describe the opportunities students and families have to take advantage of flexibility and personalization of learning at AVS?

Enrollment Process for Students in Special Education

1. Next, can you describe the enrollment process at AVS? For example, how was your child's special education status shared with AVS?

2. Did you have an opportunity to discuss your concerns with anyone at AVS before, during, or after enrollment?

3. Did your child have an existing IEP when he/she enrolled in AVS? If so, was there a process to ensure that your child's existing IEP was appropriate for the virtual school environment? What was the process?

Provision of Accommodations and Modifications

1. Can you describe how your child is supported in live class sessions?

2. Are class activities modified to accommodate your child's individual needs? If so, how?

3. Are textbooks, lesson modules, assessments, and other instructional tools modified to accommodate students' individual needs? If so, how?

4. Who is primarily responsible for meeting the needs of your child enrolled in special education?

5. Are processes in place to support students with disabilities who may not be making appropriate growth or progress? If so, what is done to support these students?

IEP Processes

1. Please describe your role in writing a student's IEP and the role of any others who participate.

2. Can you describe a typical IEP meeting at AVS?

3. How is a student's IEP progress monitored and tracked throughout the year?

Participant Impressions Survey

1. On a scale of one to five, one being "not at all," and five being "exceptionally well," and not thinking about yourself personally, how well do you think AVS does, on the whole, with **locating and identifying** students with disabilities?

2. On a scale of one to five, one being "not at all," and five being "exceptionally well," and not thinking about yourself personally, how well do you think AVS does, on the whole, with **teaching and supporting** students with disabilities?

Participant Comments

1. Is there anything you think AVS is doing well to provide special education programming?

2. Is there anything you think AVS could do to improve special education programming for its students with disabilities?

3. Is there anything you would like to share that I have not touched on? Anything you feel is important in order to understand special education programming at AVS?

Appendix D

Email to Request Faculty-Staff Participation

Subject: Request for participation in a research project

Hello,

I hope this email finds you well and enjoying a happy new year! You may remember me as a Special Education Teacher with LAVCA in the 2015-16 school year. I am currently a doctoral student and am conducting my final dissertation project. I am writing to ask you to be a part of this project about special education in virtual schools.

My goal is to describe the ways special education supports are being implemented in public virtual k-12 schools, specifically, the ways in which faculty, staff, and parents are supporting students with disabilities. I'm hoping you'll consider participating in a phone interview that will last about 60 minutes. This interview would be scheduled at your convenience outside of the school day, and will be recorded and transcribed. **Your participation is completely confidential. It will not be possible to identify you or your school in the study.**

My email address is scliffor@uno.edu, any my phone number is 504-383-3607, if you have questions or would like to learn more. <u>I am hoping to speak with general education teachers, special education teachers, special education staff, parents, and any other stakeholder that may care to participate</u>. Please feel free to share this letter with anyone you think would be interested in chatting with me.

Kindest regards,
Sarah Clifford
PhD Candidate, University of New Orleans

Email to Request Parent/Guardian Participation

Subject: Request for participation in a research project

Hello,

I hope this email finds you well and enjoying a happy new year! You may remember me as a Special Education Teacher with LAVCA in the 2015-16 school year. I am currently a PhD student and I am conducting my final research project that focuses on improving special education in virtual schools. I am writing to ask you to be a part of this project about special education in virtual schools.

I am collecting information about how special education is being implemented in public virtual schools, specifically, the ways in which faculty, staff, and parents are supporting students with disabilities. If you currently have a child in special education in a virtual school, I'm hoping you will participate in a phone interview that will last about 60 minutes. This interview would be scheduled at your convenience outside of the school day, and will be recorded and transcribed. **Your participation is completely confidential. It will not be possible to identify you, your child, or your school in the study.**
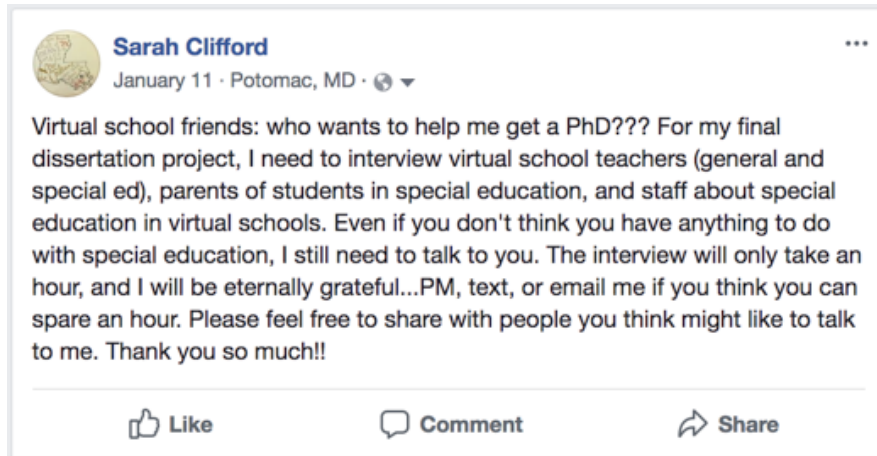
My email address is scliffor@uno.edu, and my phone number is 504-383-3607, if you have questions, would like to learn more, or would like to schedule an interview.

This project is not affiliated with your child's school in any way.

Kindest regards,
Sarah Clifford
PhD Candidate, University of New Orleans

Appendix F

Social Media Announcement

Sarah Clifford
January 11 · Potomac, MD · 🌐 ▾

Virtual school friends: who wants to help me get a PhD??? For my final dissertation project, I need to interview virtual school teachers (general and special ed), parents of students in special education, and staff about special education in virtual schools. Even if you don't think you have anything to do with special education, I still need to talk to you. The interview will only take an hour, and I will be eternally grateful...PM, text, or email me if you think you can spare an hour. Please feel free to share with people you think might like to talk to me. Thank you so much!!

👍 Like   💬 Comment   ↪ Share

Appendix G

IRB Approval Memo

University Committee for the Protection of Human Subjects in Research University of New Orleans

---

Campus Correspondence

Principal Investigator: Linda Flynn-Wilson, Ph.D. Co-Investigators:Sarah Clifford, M.Ed.

Date: January 4, 2018

Protocol Title: The Implementation of the Individuals with Disabilities
Education Act in a Virtual Public Charter School

IRB#:   12Dec17

The IRB has deemed that the research and procedures are compliant with the University of New Orleans and federal guidelines. The above referenced human subjects protocol has been reviewed and approved using expedited procedures (under 45 CFR 46.110(a) category (7).

Approval is only valid for one year from the approval date. Any changes to the procedures or protocols must be reviewed and approved by the IRB prior to implementation.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

I wish you much success with your research project. Sincerely,

Ann O'Hanlon, Chair
UNO Committee for the Protection of Human Subjects in Research

Vita

Sarah Elizabeth Clifford was born in Staten Island, New York. After spending two years attending the City University of New York, Sarah transferred to Tulane University where she earned a Bachelor of Arts in Theatre in 2001. Sarah went onto earn a Master of Science in Special Education from the City University of New York in 2007, and a Doctor of Philosophy from the University of New Orleans in 2018. Sarah has presented at regional and international conferences. Her research interests include the implementation of the Individuals with Disabilities Education Act and the experience of being a student in diverse educational models. Sarah currently works as a special education teacher for students with Emotional Disturbances, Learning Disabilities, Autism spectrum disorders and other disabilities in the Montgomery County Public School system. She is a member of the International Association for Special Education (IASE), the Council for Exceptional Children (CEC), the International Reading Association, and the Omicron Delta Kappa National Leadership Society.