VIRTUAL EDUCATION IN KANSAS: 1998-2014

By

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Abstract

K-12 virtual education is a growing trend in American education. Virtual education is defined as K-12 online learning experiences led by district-affiliated teachers as part of a structured public school learning program that occur across a distance between the teacher and student in either synchronous or asynchronous modes. Since the first virtual program began in Kansas in 1998, program offerings have spread at a swift rate and now eighty-five districts, approximately thirty percent of all Kansas districts, currently operate virtual programs. As districts in Kansas continue to adopt or consider adopting virtual education as an alternative or supplement to traditional instruction, there is a need to understand the influencing factors surrounding adoption of this educational innovation as well as the pros and cons of this model.

This case study exploration of virtual education in Kansas collected data from four sources. First, demographic data for districts utilizing virtual education were compiled from National Center for Education Statistics (NCES) and Kansas Department of Education (KSDE) to examine district-level characteristics, such as urbanicity, socioeconomic status, and region in the state. Second, Kansas superintendents were surveyed to explore their perceptions about the educational quality of virtual education and the adoption or non-adoption in their districts. Third, virtual education program directors across the state were also surveyed to examine their perceptions of this model, and fourth, six follow-up interviews were carried out with program directors to understand their beliefs about the strengths and weaknesses of K-12 virtual education in Kansas.

This study found that perceptions about the quality and merit of virtual education vary drastically by superintendents across the state of Kansas. Districts chose to adopt virtual

education to access the perceived benefits of the model and other districts refrain from adopting virtual education in order to avoid the noted limitations of this model. Isomorphic mimicry is an underlying motivating factor influencing some districts to adopt virtual education in order to be like other districts and join the proverbial bandwagon of this growing trend. The major finding of this study is that virtual education is not a one-size-fits-all educational alternative for the majority of students; program directors clearly articulated that this is not the way in which most students will be successful. Thus, this study contributes to the overall understanding of K-12 virtual education nationwide and specifically articulates, through the voices of district leaders and program directors, the perceived challenges, limitations, and benefits of this model for students and districts in Kansas.

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Chapter One

Introduction

"Imagine a child entering a quiet place at home where teachers and fellow students are present only on a computer screen. The child has access to lessons prepared by the most knowledgeable professionals in the world and can interact electronically with teachers and students anywhere, on any appropriate subject. This virtual classroom is already a reality. Parents who homeschool (or are seeking alternative school choice options) increasingly use electronic media and the Internet to access instructional materials. Students in remote areas of Canada and Australia, hundreds of miles from a school building, attend school by logging on to their computers. Technology allows high school students in rural Kansas to take a course online from "classrooms" anywhere in the world." (Stevenson, 2007, p. 5)

Learning from home always been a possibility, and from colonial times until the mid-1800s, home-based education was the norm in the United States (Gaither, 2008). With the advent of compulsory public schooling in America designed to educate students academically, socially, emotionally, and in preparation to act as future citizens, home-based learning forfeited its primacy and has been a peripheral endeavor ever since (Basham, 2001; Gaither, 2008). The broad expansion of digital technology (e.g., the personal computer, Internet communications, software, digital books) in the late 1990's and early 2000's contributed to the creation and promulgation of K-12 virtual education to offer, for the first time, public school learning available outside the typically-structured school day and school walls. Virtual education is distinctive from traditional public school education in that students have the opportunity to learn anytime and anywhere using digital tools, as opposed to the traditional brick and mortar

classroom with its locked in school day calendar and schedule (Blomeyer, 2002; Jones, 2002; Patrick, 2008).

Noted as the fastest growing alternative to traditional public schools (Glass & Welner, 2011; LaPlante, 2012), states and school districts have increasingly adopted this instructional model as a means of educating students in need of flexible learning environments. Virtual education requires changes in the methods of teaching, learning, assessment, funding, policy, and operation in ways that are vastly different from traditional public schools (Picciano & Seaman, 2007; Watson, Murin, Vashaw, Gemin, & Rapp, 2012; Wicks, 2010). This movement creates classrooms without walls, students without proximate classmates, and school days without prescribed schedules and class period bells. Moreover, virtual learning challenges the *grammar of schooling* (Tyack & Cuban, 1995) which is the generalized notion by policy makers, educators, and the general public of what schools, teachers, and learners should look like. This departure from traditional school norms creates a different context for learning in the 21ˢᵗ century with its own set of challenges, limitations, and potential benefits, and as this subset of public education has remained an underrepresented source of scholarly focus, further research into its appropriate use and student outcomes is needed (Molnar et al., 2014).

Virtual education models range from 100% online programs to blended programs that include both online and on-site classes. The most typical manifestation of K-12 virtual learning is in a blended format where students attend the traditional school for a portion of their school day and access online courses for the remainder (Glass & Welner, 2011). Students may choose to do so in order to access an elective or advanced placement course that is not available at their physical school location, to retake a course they previously failed, or to take a class that would not fit into their academic schedule in a face-to-face format. The minority of K-12 virtual

education, an estimated 275,000 students nationwide, occurs in a fully-online context in which the student conducts his or her education entirely online without physically attending class at a school (Glass & Welner, 2011; Tucker, 2007; Watson et al., 2012). Online teachers interact with their students primarily via email, written feedback on classroom papers and discussion boards, and via virtual classroom conferences or recorded lectures. Research on online learners suggests that success in the online learning venue is predicated on high levels of learner self-motivation and the engagement and ongoing support of parents or adults to ensure timely completion of assignments (Rice, 2006).

For this paper, virtual education is defined as K-12 online learning experiences implemented as part of a structured public school program that occur across a distance between the teacher and student either synchronously[1] or asynchronously with the learner (Berge & Clark, 2009; Wicks, 2010). Proponents of virtual education claim that it expands the range of courses available to students, offers courses to fill a teaching gap where highly certified teachers may not be available (e.g., insufficient enrollment to hire a full-time teacher), provides learning and scheduling flexibility, credit recovery for struggling learners, and addresses the technological communication and learning style preferences of today's student (Wicks, 2010). Wicks elaborates:

> After all, the young people of this "Millennial" generation grew up with the Internet and thrive in a multimedia, highly communicative environment. Learning online is natural to them—as much as retrieving and creating information on the Internet, blogging, communicating on cell phones, downloading files to iPods and instant messaging. Online learning and virtual schools are providing 21st century education and more opportunities for today's students. (Wicks, 2010, p. 4)

Along with benefits touted by supporters of this model, challenges are inherent in the structure and implementation. Research identifies learner isolation, issues of student retention, academic

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[1] Synchronous learning occurs between the teacher and learner simultaneously and in real-time, while asynchronous learning occurs without direct, real-time interaction between the teacher and learner.

quality, lack of socialization, and lack of student motivation as a few challenges faced by users of this educational model (Barbour & Reeves, 2009; Rice, 2006).

In spite of contradictory sentiments, K-12 virtual education appears to be gaining momentum as thirty-nine states have adopted new or updated policies to oversee this model since 2008 alone (Glass & Welner, 2011; Rice, 2006; Watson, 2008; Wicks, 2010). The rapid expansion of virtual education makes identifying an accurate headcount elusive (Greenway & Vanourek, 2006; LaPlante, 2012), but the International Association for K-12 Online Learning (iNACOL) estimates three million K-12 students currently are engaged in fully online and blended learning programs, accounting for roughly five percent of the public school population (Watson et al., 2012). The first entirely virtual K-12 school opened in 1997 in Florida, and public school virtual education sponsored by the governing educational board is available in forty-eight out of fifty states plus Washington, D.C.; fifty-five percent of school districts nationwide report having students enrolled in virtual education courses or programs (Queen & Lewis, 2011).

Kansas offers an active history of virtual education with Basehor-Linwood Unified School District[2] creating the state's first virtual school in 1998-99 under a charter from the Kansas Department of Education (KSDE). Serving sixty-three students its first year, Basehor Linwood Virtual School was among the first accredited public charter schools in the country to offer full-time K-12 online learning options (Kelley, 2008). The inception and growth of virtual education preceded policy in Kansas, prompting legislative action to govern these practices. The Kansas Virtual Education Act of 2008 provided statutory definitions and guidelines for this new educational model. School districts in Kansas are afforded the right to create district-run virtual programs with local Board of Education and KSDE approval, and all programs are overseen by

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[2] Basehor-Linwood (USD 458) is a rural district located approximately 10 miles west of Kansas City, Kansas.

KSDE. Kansas' virtual enrollment continues to grow, and currently ninety-three virtual schools and programs are in operation for the 2013-2014 school year (KSDE Website).

As a relatively recent educational innovation, virtual education programs have spread at a swift rate across the state of Kansas. A total of eighty-five districts[3], approximately thirty percent of all districts, currently operate virtual programs or schools during the 2013-2014 school year. Widespread and continually-expanding use of virtual education as an alternative to or in conjunction with traditional instruction suggests further study to understand the motivation of school districts to adopt virtual education. For this dissertation, I explored virtual education in Kansas in order to better understand and describe the experience(s) of adopters of this innovation, challenges and opportunities of current programs, and the diffusion of this educational innovation through the voices and insights of those directly involved: USD superintendents and virtual education program directors. The research questions guiding this study are:

1) To what extent do districts with virtual education programs share common characteristics (e.g., enrollment size, urbanicity, SES, region)?

2) What factor(s) influence Kansas districts to consider the adoption of a virtual education program or school?

3) What factor(s) influence a district's decision to adopt or reject a virtual education program or school?

4) What are the challenges, limitations, and perceived benefits of virtual education in Kansas?

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[3] Some districts in Kansas operate multiple virtual education programs, thus the discrepancy between the number of programs (93) and the number of sponsoring districts (85). For example, Lawrence Public Schools operates two different virtual education programs: Lawrence Virtual School (K-8) and Lawrence Virtual High School (9-12).

This study presents a picture of virtual education in Kansas including its history, prevalence in Kansas, perceptions by school district leaders and virtual education program directors about the quality of this educational model, and the benefits and limitations of virtual education perceived by these groups of educators. Chapter Two of this study provides the literature base concerning K-12 virtual education and the theoretical framework of this study. Chapter Three details the methodological process of collecting and analyzing data for this dissertation. Chapter Four presents findings and analysis, followed in Chapter Five by conclusions and implications of this study. Overall, this study contributes to what is known about K-12 virtual education nationwide and offers an understanding of the specific phenomenon of virtual learning in the state of Kansas to inform future policy and practice.

Chapter Two

Review of the Literature

This literature review is organized around six sections to provide a framework for understanding the development and spread of virtual education in Kansas. The first section is a discussion of institutional theory to describe motivations prompting organizations to undergo change. The second section describes the innovation adoption process, including the theory of diffusion and its relationship to the spread of innovation. The third section provides a brief historical overview of technology's role in education, specifically differentiating between the subfields of distance and virtual education. The fourth section provides an overview of K-12 virtual education nationwide, including structures, growth, and issues of funding and policy. The fifth section presents research on the challenges, limitations, and benefits of virtual education for schools and students, and the sixth section details the incidence of virtual education in Kansas against the backdrop of state-level legislation and educational policy.

Institutionalism

Observing similarities across organizations, institutional theory scholars posit that organizations grow and change over time to resemble one another more closely in an ever-present pursuit of legitimacy (Clemens & Cook, 1999; Meyer & Rowan, 1977). Legitimacy is a desired congruence between the social values of the organization and the norms of acceptable behavior established in the broader social context of which they are a part (Dowling & Pfeffer, 1975). Organizations operate within and utilize resources from broader social systems, and are thus determined to be legitimate to the extent that their activities are congruent with the goals of the superordinate system (Dowling & Pfeffer, 1975). In the case of public schools, these organizations face overt and covert pressures from external forces to adhere to an agreed upon

notion of what constitutes a school. The implicit code that reflects the social theory of schooling in America is termed the *grammar of schooling* by Tyack and Cuban (1995). The grammar of schooling involves the preconceived notions by the general public of what a school should look like, how the school day and year should be structured, what classes should be taught, and the manner in which teaching and learning should be constructed. The normative power of the grammar of schooling is a powerful force within education; reform efforts that are inconsistent with the grammar of schooling tend to fail while reforms that reinforce it are more likely to succeed (Tyack & Cuban, 1995).

Organizations within a specific field often experience pressures for homogenization (DiMaggio & Powell, 1983). Similarly, the concept of isomorphism, illustrating the pressures of conformity, is a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions (Hawley, 1968). Institutional isomorphic change promotes the survival and success of organizations and occurs in three forms: coercive, mimetic, and normative (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Coercive isomorphism stems from formal pressure exerted by external agencies and cultural expectations perpetuated by society compelling an organization to change in order to obtain or retain legitimacy within a field. Mimetic isomorphism occurs when uncertainty in a field encourages one organization to model itself after another more legitimate (i.e., effective, successful) organization. This standard response to uncertainty is a common contributing factor to the spread of innovation. Normative isomorphic change is associated with professionalization and standards of training, certification, employment, and performance determined by the collective profession and shaping the customary behavior within the field (DiMaggio & Powell, 1983; Meyer & Rowan, 1977).

Normative isomorphic change, whereby organizations change to model themselves after more legitimate organizations, can be expected to occur in the absence of evidence that said changes increase internal organizational efficiency (DiMaggio & Powell, 1983). Conforming organizations do not necessarily operate more efficiently or effectively than do divergent organizations resisting isomorphic pressures, yet they are perceived to be legitimate, and thus have a greater potential for sustaining existence (DiMaggio & Powell, 1983). Acquiescing organizations often respond to isomorphic pressure through ceremonial or ritualistic adoption of a legitimate practice or structure (Meyer & Rowan, 1977). While they are compelled to adopt prevailing practices and procedures of the day as institutionalized by society, organizations can buffer their formal structures from uncertainty and organizational change in the manner of loose coupling (Ingersoll, 2005; Meyer & Rowan, 1977).

Institutional change, therefore, may be a matter of ceremonial adoption of an innovation to achieve legitimacy, rather than adoption to transform or improve an organization and yield true change. Additionally, because legitimacy has been found to be determined by the values and norms of society, changing social values and norms compel ongoing institutional change efforts as organizations respond to the enduring pressure of organizational legitimation (Dowling & Pfeffer, 1975).

Adoption of Educational Innovation

One way in which educational organizations become "like" one another is through the adoption of innovations. Researchers generally define "innovation" as the development (i.e., generation) and/or use (i.e., adoption) of new ideas and behaviors (Amabile, 1996; Damanpour & Schneider, 2009; Zaltman, Duncan, & Holbek, 1973). Educational organizations generate innovations for their own use or for use in other organizations, and factors influencing

innovation adoption include cost, innovation complexity, innovation impact, and management

characteristics (Damanpour & Schneider, 2009). When faced with innovation, educational

organizations act strategically in ways that will preserve their organizational legitimacy and

continue to promote their specific goals. Furthermore, in educational organizations, innovation is

greatly influenced by institutionalized values, norms, and technical knowledge; innovations that

are successfully adopted require the support and endorsement of key agencies (i.e. state agencies,

industry counterparts, other school districts) in the institutionalized environment (Rowan, 1982).

According to Rowan (1982), educational organizations might be motivated to adopt a

new structure when it aids in obtaining legitimacy, provides a cost benefit to the organization,

and is less risky than the adoption of a novel structure. Educational organizations tend to have

high levels of uncertainty due to the ambiguous goals of the education field (Labaree, 1997), and

thus, educational innovations gain legitimacy via endorsements of other legitimate entities and

key agencies of stakeholder support rather than technical evidence, i.e., word of mouth (Rowan,

1982). The adoption of educational innovations communicates the current institutionalized

beliefs about what structures are most appropriate for learning within the highly isomorphic field

of education (Rowan, 1982).

The diffusion process of innovations is widely studied by political and social scientists

around a framework designed for understanding institutional change (Berry & Berry, 1999;

Mintrom & Vergari, 1998; Renzulli & Roscigno, 2005; Walker, 1969). According to Rogers

(1995), "diffusion is the process by which an innovation is communicated through certain

channels over time among the members of a social system," (1995, p. 5). Diffusion theory is

predicated on bounded rationality, whereby potential adopters are assumed to weigh the costs

and benefits of an innovation to make an optimal decision based on available information

(Redmond, 2003). Adopters of innovation are classified in one of five categories based on time

lag between introduction and adoption by an individual or organization: (a) innovators; (b) early

adopters; (c) early majority; (d) late majority; and (e) laggards, and as shown in Figure 2.1 the

prevalence of each category is generally distributed across a bell curve (Rogers, 1995).
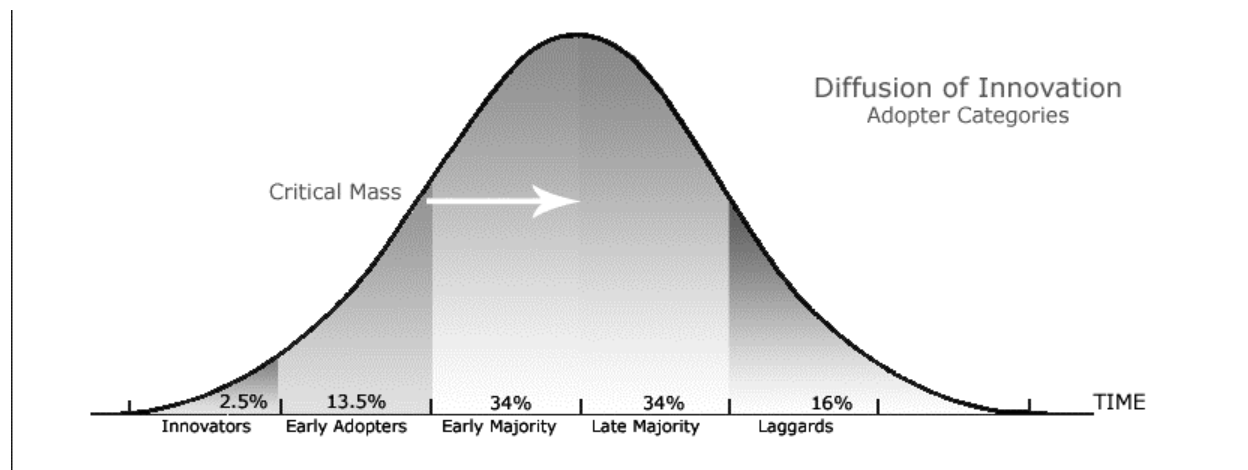
Figure 2.1 Diffusion theory distribution across category type *(Source:* Rogers, 1995)

As technology (e.g., calculators, computers, tablets) has propagated throughout society

over the past fifty years, educational organizations have made and continue to make decisions

about adopting educational innovations based on current institutional and societal factors. When

faced with an innovation, educational organizations respond based on the perceived legitimacy

of the innovation and the perceived benefits and risks of adoption vs. non-adoption (Redmond,

2003). Institutional change brought about by innovation, therefore, depends to a great degree on

the circumstances of the field, the newness of the innovation, diffusion of adoption (see Figure

2.1), and the perceived value added by innovation adoption. Given the institutionalized nature of

the field of education, those practices that complement the grammar of schooling are more likely

to succeed and endure, while those that contradict the grammar of schooling experience greater

risk of failure.

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Technology in K-12 Education

Throughout history, instructional technology has yielded countless educational innovations. From radio and motion pictures in the early 1900s to the advent of the computer in the mid-1970s, educators have long aspired to reform education and improve student learning through the use of various technological innovations (Hew & Brush, 2007). Tucker (2007) speculates that the Internet is the single greatest modern technology responsible for reshaping education. By the year 2002, Kleiner and Lewis (2003) reported that 99% of public schools in the United States had access to the Internet. Use of the Internet for instructional support, student research, and emerging online learning has altered the traditional boundaries of a classroom and expanded learning horizons for students. Some view educational technology as having unparalleled reform potential for K-12 contexts due to its transformational nature and its symbiotic existence with the progressing direction of society (Kerr, 1989; Tucker, 2007; Wicks, 2010). Most students in the 21st century do not think of technology as separate from their daily lives (Wicks, 2010), and instructional leaders increasingly espouse instructional technology as one tool to make learning meaningful and relevant to Millennial learners. While early distance education programs depended on the postal system for operation, recent technological innovations have reshaped this instructional delivery model and set in motion the trend at the focus of this research—virtual education.

Distance education.   Distance education evolved in the United States out of a need for flexibility in providing access to learning opportunities for those who were otherwise unable to participate in face-to-face sessions (Beldarrain, 2006). The first generation of distance education was in the form of correspondence courses, which were guided by a teacher asynchronously (Sumner, 2000). This method relied on the postal service for transfer of two-way communication, and critics intone that this method creates, "a very individualized mode of learning that tends to isolate and insulate students from group learning processes," (Sumner, 2000, p. 275) also lacking in timely feedback. The second generation of distance education integrated the use of print with broadcast media, cassettes, video tapes, DVDs, and eventually to some extent – computers (Sumner, 2000). The third and current generation of distance education (i.e., Internet-based learning) has reshaped distance learning with the advent of high-speed two-way synchronous communication and video conferencing. Learners and teachers simultaneously communicate and collaborate to an extent greater than previously possible, overcoming some of the inadequacies of earlier models of distance learning (Sumner, 2000). Distance education of all kinds is marked by a physical distance between the learner and the teacher. Virtual education, for the purpose of this study, is a subset of distance education that is managed by a public school district. Made possible by the Internet, virtual education offers both synchronous and asynchronous learning opportunities to extend the potential for communication and collaboration between teachers and students.

Two frequently-cited desirable traits of distance education are the flexibility offered to learners who would otherwise be unable to participate in a traditional school setting (i.e. due to illness, pregnancy, frequent travel due to parents' careers, incarceration, or the need to work full-time) and the integration of technology into the learning sphere. Increasingly, students in K-12

schools are known as "digital natives," meaning they have grown up immersed in digital technology and are both adept and interested in this mechanism for learning (Bennett, Maton, & Kervin, 2008). As technology reshapes society, schools frequently try to engage in concurrent adaptation to keep pace with the ensuing technology-driven transformation. Glenn (1999) states:

> As we move into a new era, our economic opportunities and perhaps our survival as a nation will depend on our ability to take a lead in the development and effective use of technology. Schools must play a central role in meeting this challenge. (p. 17)

Instructional technology continues to revolutionize society and schools, challenging old models of operation and instituting new forms. At the juncture of technology and education, virtual education has emerged as a prominent educational innovation increasingly adopted by districts hoping to meet needs of 21st century learners (Clark, 2003; Watson et al., 2012; Wicks, 2010).

Overview of K-12 Virtual Education

Virtual education takes many forms and is known by various titles (i.e., online learning, virtual learning, e-learning, distance education, cyber schools, and virtual charter schools). This model and its various forms differ dramatically from traditional school in structure, practices, and policy requirements, and there is great variability between virtual education forms as well (e.g. full-time online learning vs. blended learning vs. online component within a course at a traditional school). Given the multitude of definitions for virtual education, in this study, I define *virtual education* as: K-12 online learning experiences, led by district-affiliated teachers as part of a structured public school learning program that occur across a distance between the teacher and student in either synchronous or asynchronous modes (Berge & Clark, 2009; Wicks, 2010). Unless specified, virtual program and virtual school[4] will be used synonymously in this paper.

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[4] In the state of Kansas, there is differentiation between a virtual school and a virtual program from an organizational standpoint. A virtual school has its own unique building code and must adhere to the same accreditation procedures as a brick-and-mortar school. A virtual program is operated as a subset of a brick-and-mortar school and is not a stand-alone unit.

Virtual learning occurs in both full-time and blended formats; full-time virtual learners enroll in all courses online with no in-person interaction, while blended learning is defined as:

> A formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace, and at least in part at a supervised brick-and-mortar location away from home. (Staker, 2012, p. 3)

While this definition points to the dual-structure of blended learning that is both online and face-to-face in nature, blended learning is not to be confused with a traditional school course in which students access the Internet or engage in online learning activities; blended learning occurs when a student's school schedule is comprised of some combination of traditional school courses and online courses.

Fully-online K-12 virtual education is a decidedly North American trend (Cavanaugh et al., 2006). In a survey of the Ministries of Education in thirty countries, Powell and Patrick (2006) found that online learning in other countries is relegated to online curricular support for students or several online distance education programs, but comprehensive K-12 virtual *schools* in which students can enroll as fully-online learners are found only in the United States and Canada. Two of the first American virtual schools were created in 1997—Virtual High School (VHS) and Florida Virtual School (FLVS) — (Barbour & Reeves, 2009), both of which were originally funded by federal and state grants (Hoxby & Murarka, 2006; Kozma et al., 1998). From these simple beginnings, the growth of K-12 virtual education has been widespread and appears to be gaining prominence nationwide (Watson, Murin, Vashaw, Gemin, & Rapp, 2010; Wicks, 2010).

Virtual education nationwide. Enrollment in fully online or blended virtual education programs is difficult to track as record-keeping varies by state. Triangulating data from multiple

sources, the International Association for K-12 Online Learning (iNACOL) estimates that there were between two and three million online learners in 2011-2012 (Watson et al., 2012). Of the estimated two to three million online learners, the vast majority engaged in blending learning, leaving approximately 275,000 (less than ten percent) full-time K-12 online students nationwide (Glass & Welner, 2011; Tucker, 2007; Watson et al., 2012).

While virtual education at the K-12 level continues to spread nationwide, its governance and policies vary widely by state. A recent National Center for Education Statistics (NCES) survey indicates that fifty-five percent of surveyed districts had students engaged in some form of virtual education (Queen & Lewis, 2011), and according to Watson (2012), forty-eight out of fifty states and Washington, D.C. offered some form of state or district-supported virtual education at the K-12 level. With no national policies in place, states differ on how they structure and govern K-12 virtual education. The most commonly utilized classification of virtual education is depicted in Table 2.1 and comes from Watson, Winograd, and Kalmon (2004). Classification is based on the geographic reach of the program and the level of student enrollment (Barbour & Reeves, 2009).

Table 2.1

Five Categories of Virtual School Governance

Type	Description
Statewide supplemental program	Students take individual courses but are enrolled in a physical school or cyber school within the state. These programs are authorized by the state and overseen by state education governing agencies.
District-level supplemental program	Are typically operated by autonomous districts and are typically not tracked by state agencies
Single-district cyber schools	Provide an alternative to the traditional face-to-face school environment and are offered by individual districts for students within their districts
Multi-district cyber schools	Are operated within individual school districts but enroll students from other districts within the state. This represents the largest growth sector in K-12 online learning.
Cyber charters	Are chartered within a single district but can draw students from across the state. In many cases they are connected in some way to commercial curriculum providers.

source*:* Watson et al., 2004

Based on the definitions in Table 2.1, statewide supplemental programs are offered in

twenty-eight states (Watson et al., 2012), and examples include Illinois Virtual School, Missouri

Virtual Instruction Program, and Florida Virtual School. While Kansas does not have a state-run

virtual school, the Kansas legislature and KSDE instead allow each school district's Board of

Education the right to establish and govern virtual education programs. Kansas virtual education

programs include the four remaining classifications in Table 2.1: district-level programs, school-

level programs, multi-district schools, and cyber charters (KSDE Website). All four are governed

at the district level with ultimate oversight by KSDE and the Kansas State Board of Education.

Funding of K-12 virtual education. As virtual education programs continue to expand,

two important aspects of virtual education funding include: 1) how states fund virtual programs

and schools, and 2) whether the state funding for virtual school students is at a level comparable

to a traditional school setting (Berge & Clark, 2009). Virtual education is funded differently in

each state as determined by state-level policies and typically depends on the virtual education

structures utilized within the state (i.e. state-run or district-run programs). Berge and Clark

(2009) identify five primary options utilized by states to fund virtual programs: (a) state

appropriation; (b) a funding formula tied to full-time equivalent (FTE) enrollment; (c) course

fees; (d) no state role; or (e) a combination of the above. A set amount of state appropriation is

commonly designated to state-run virtual schools, resulting in an enrollment cap of the number

of students who can enroll. Some states (such as Kansas) utilize a funding formula to determine

per pupil funding for virtual school students. Some virtual programs may charge course fees to

students who wish to enroll. Finally, according to Berge and Clark's description of funding

options, states may decide to take no role in funding virtual programs, or they may utilize a

combination of the other four types.

Virtual education funding is frequently analyzed and compared to traditional schools due

to the perceived cost efficiency of this model. The cost effectiveness of virtual education

programs in comparison to traditional schools is widely discussed in the literature (Barbour,

2012; Carr-Chellman & Marsh, 2009; Clarke, Hurlburt, & Wines, 2007; Miron & Urschel, 2012;

Roblyer, 2008). A common perception is that virtual schools operate at a lower cost than

traditional schools because of the limited physical resources (i.e. facilities) necessary to operate

in a virtual setting. However, research on virtual education expenditures and funding finds much

variety between states. Examining virtual school funding in nineteen states, Thedy (2010) found

that the funding formula for virtual programs and schools were generally the same as traditional

schools. In contrast, Barth, Hull, and St. Andrie (2012) reviewed funding policies by state and

found that virtual schools were receiving between seventy and one hundred percent of what a

traditional school receives in funding. In at least one state (Kansas), virtual education students

are currently funded at 105 percent base state aid per pupil. The additional .05 weighting from the state is a provision for additional technology costs of the virtual program (KSDE Website).

Several studies have explored the cost effectiveness of virtual education in comparison to traditional brick-and-mortar schools. In 2012, Battaglino estimated the annual per pupil cost in three instructional settings: 1) virtual schools: $6400, 2) blended learning: $8900, and 3) traditional public schools: $10,000. In contrast, Anderson (2006) found that virtual schools had similar costs and should be allocated the same level of funding as traditional schools (Anderson, 2006). However, this study also acknowledged that the calculations did not factor in costs such as transportation and capital costs faced by traditional schools (Barbour, 2012; Miron & Urschel, 2012). If these service costs are included, virtual schools presumably would be more financially efficient at educating students than traditional schools, according to researchers Barbour (2012) and Miron et al. (2012). One variable in a virtual program's cost would be the level of interaction between instructors and students; maintaining a high student-to-teacher ratio with minimal interaction between student and teacher may lower costs to the program by requiring fewer human resources, but an inherent concern would be the quality of online instruction bought by this cost savings. Based on the literature, wide variance in state funding practices makes identifying the funding needs and cost effectiveness of virtual education challenging in the continually-changing landscape of each state and variability between virtual program structures.

Policy issues of K-12 virtual education. Each state's participation (e.g., funding) and oversight of virtual education varies immensely. Some states maintain policies that explicitly promote the use of online learning, while others have crafted policies overtly prohibiting full-time virtual schooling (Glass & Welner, 2011). For example, the sixteen member states of the

Southern Regional Education Board[5] are considered to be innovators in virtual education, spearheading policy initiatives and online teaching and learning standards that are modeled by other states (Berge & Clark, 2009). In most states, virtual education programs are severely hampered when forced to operate under the same education laws enacted for the traditional public school setting. Wicks (2010) asserts:

> Few policymakers anticipated that any time, any place learning was possible when most education laws were authored over the past 50 years. The issues [facing virtual education] largely center on determining when existing educational policies are appropriate for this new model of learning and when new policies should be created. (p. 6)

Due to the differences between virtual education and traditional brick-and-mortar education, a number of commentators suggest that virtual education necessitates policies different from traditional schools in areas such as funding, enrollment boundaries, recruitment, advertising, partnering with for-profit companies, teacher certification, Special Education, and athletics and school activity participation (Moore & Kearsley, 2011; Rice, 2006; Wicks, 2010). Researchers from NCREL[6] (Watson, Winograd, & Kalmon, 2004) concluded online learning is rarely understood by policy makers, resulting in the application of policies governing traditional schools to virtual education programs in an incongruous fashion. The researchers urge state legislators to "develop appropriate mechanisms to provide a framework of sustainability and value that will enable online education to flourish and to meet the diverse needs of students," (Watson et al., 2004).

K-12 Virtual Education: Challenges, Limitations, and Potential Benefits

       Challenges and limitations of virtual education. Berge and Clark (2005) identified five challenges faced by virtual schools: (1) high start-up costs, (2) access and equity issues, (3)

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[5] SREB is composed of sixteen member states and is headquartered in Atlanta, GA. Founded in 1948, the mission of SREB is to improve public education at every level, pre-K through Ph.D.

[6] North Central Regional Educational Laboratory

approval or accreditation, (4) student readiness, and (5) retention issues. The high start-up costs and issues of approval and accreditation are administrative in nature and require initial funding and support from the governing agency (e.g., state, local district) as well as compliance with state statutory guidelines for establishing a virtual school (i.e. application, documentation, program plan). Initial costs facing a virtual program may include teacher professional development, creating or purchasing an online course management system, course development, and if the program is not going to operate in an existing structure owned by the district, there would potentially be initial infrastructure costs to lease a building and purchase office equipment (Barbour, 2012).

Secondly, student access and equity are perhaps the fundamental challenge of virtual education, not easily rectified by completing an application or purchasing software. Known as the "digital divide," the disparity in availability of computers and Internet access among students typically falls along racial and socioeconomic lines, making virtual education incompatible with efforts to provide equal learning opportunities to all students. A 2006 report from the National Center for Education Statistics states:

> There is a 'digital divide'…Computer and Internet use are divided along demographic and socioeconomic lines. Use of both technologies is higher among Whites than among Blacks and Hispanics. Students living with more highly educated parents are more likely to use these technologies than those living with less well educated parents…Disability status, metropolitan status, and family/household type are associated with the digital divide…Schools help bridge the digital divide (because) many disadvantaged students use the Internet only at school. (DeBell & Chapman, 2006, p. iv.)

Many virtual education programs attempt to address the digital divide by loaning computers and printers to students or providing a place for students to work on-site. However, the digital divide is likely to persist and is a significant impediment to the dispersion (or expansion) of virtual

education programs, suggesting a need for awareness and minimization of this obstacle (Wicks, 2010).

Issues of student readiness and retention are common to virtual education programs. Students in most virtual programs and schools are required to take state and district assessments, holding the program or school accountable for its student achievement. Even with this level of accountability, attrition rates are typically higher in virtual programs than traditional schools. Clark, Lewis, Oyer, and Schreiber (2002) found that the Illinois Virtual High School (IVHS) had a completion rate of only fifty-three percent in its first year and eighty percent the second. Analyzing FLVS, Bigbie and McCarroll (2000) found that between twenty-five percent and fifty percent of students had dropped out of their FLVS courses from 1999-2000. Many virtual education programs have open enrollment across district boundaries, and students often have the opportunity to enroll in courses they have previously failed in a credit recovery format. Researchers (LaPlante, 2012; Rice, 2006) affirm that virtual education students may be enrolling in these programs after failing to be successful in traditional schools, and so the deficiency of student success is not strictly indicative of programmatic failure in the virtual setting. Concerning the educational quality of virtual education, Rice (2006) writes: "One thing we do know is that the effectiveness of distance education appears to have more to do with who is teaching, who is learning, and how that learning is accomplished, and less to do with the medium," (p. 440). Given that the high incidence of virtual education students dropping out is problematic, students at risk of dropping out should be identified and supported by the programs and schools.

Another noted challenge of virtual education is that the computer-based format best serves motivated and talented students who possess the initiative and independence necessary to

learn without a teacher physically present (Tucker, 2007). Students who are enrolled in virtual learning formats must possess high levels of self-motivation, be independent learners, demonstrate high learner autonomy, and display a great degree of learner responsibility in order to be successful online learners (Fjortoft, 1995; Morris, Finnegan, & Wu, 2005; Rice, 2006). The medium and structure of online learning can also lead to learner isolation and detachment; Weiner (2003) examined student motivation, attitudes towards learning, and strengths and weakness of Web-based learning and concluded: "The research findings confirmed that a high degree of student-teacher interaction, including feedback and summaries to the students, are a necessity in the virtual classroom, otherwise students feel ignored, lonely and lost in their courses" (p. 49). Online learners require supports and targeted interactions with teachers and peers to overcome feelings of isolation and to support motivation, engagement, and continued satisfactory participation.

Potential benefits of virtual education. The potential benefits of virtual education identified in the literature include: expanding educational access, flexibility and convenience, educational choice, and administrative efficiency (Barbour & Reeves, 2009; Wicks, 2010). While equality of educational access is a significant limitation (i.e., digital divide), virtual education can paradoxically broaden access of learning opportunities in unparalleled ways. For students living in small communities or rural locations with minimal course selection, virtual education "is not simply an attractive alternative to face-to-face instruction but increasingly is becoming a lifeline to basic quality education," (Picciano & Seaman, 2007). Virtual education can broaden access to courses and can help overcome resource deficits faced in rural schools due to student and teacher shortages.

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In addition, virtual education provides flexible learning to students who would not otherwise be able to attend traditional schools, such as those hospitalized, homebound, incarcerated, traveling due to parental careers, pregnancy, or who are employed (Barbour & Reeves, 2009). The ability to participate in a full-time online school or take part in blended learning opportunities on a part-time basis means that virtual education provides customization to student needs unparalleled in traditional school settings. K-12 virtual education offers another school choice option in America in addition to public, private, charter, and homeschool options.

The final potential benefit of virtual education programs is administrative efficiency. The format of virtual learning diminishes administrative and teacher time spent on student discipline, provides flexibility of scheduling for students and teachers, and can allow schools to cope with a lack of physical space to accommodate growing student enrollment (Keeler, 2003). The online course management system, much like online gradebooks increasingly utilized in brick-and-mortar settings, can also streamline parent communication with teachers, administrator oversight of course progress, and provide immediate access to students' current grade information; additionally, as many of the daily assignments are completed online and immediately auto-graded by the computer, teacher time and effort is freed up to focus on longer assignments and projects (Barbour & Reeves, 2009; Vail, 2001).

In summary, various challenges, limitations, and benefits both hinder and promote virtual education as a growing trend within public education. Equitable access to virtual education is a perpetuating constraint of this model because of its dependency on technology access and devices. Additionally, research on K-12 virtual education suggests higher than normal drop-out rates, alluding to issues of readiness and retention for virtual learners. In low-population areas with little to no school choice alternatives, virtual education can be a lifeline to high quality

instruction. The challenges of virtual education necessitate attention and improvement efforts, while the benefits continue to compel districts and states nationwide to consider adoption of this innovative educational model.

Overview of Virtual Education in Kansas

Kansas first implemented virtual education in 1998 with the opening of Basehor-Linwood Virtual Charter School (BLVS), which enrolled sixty-three students in its first year. Operating under a Basehor-Linwood School District (BLSD) charter, BLVS was one of the first fully-operational, fully-online K-12 virtual schools in the nation (Kelley, 2008). According to the current director of the BLVS, the impetus for creating BLVS was to make use of available technology within the district and tap into the expertise and creativity of teachers. The number of students enrolled in BLVS grew threefold during the next school year, and by 2000, school leaders were working with three other districts in the state to offer comparable programs (R. Weiner, 2000).

Growth of virtual education programs and schools developed rapidly in the state of Kansas over the subsequent ten years. By 2009, Kansas offered the largest number of virtual education programs in the nation (Watson, Gremin, Ryan, & Wicks, 2009). Figures 2.2 and 2.3 depict the growth of virtual education programs and affiliated student enrollment in the state of Kansas from 1998-2014.
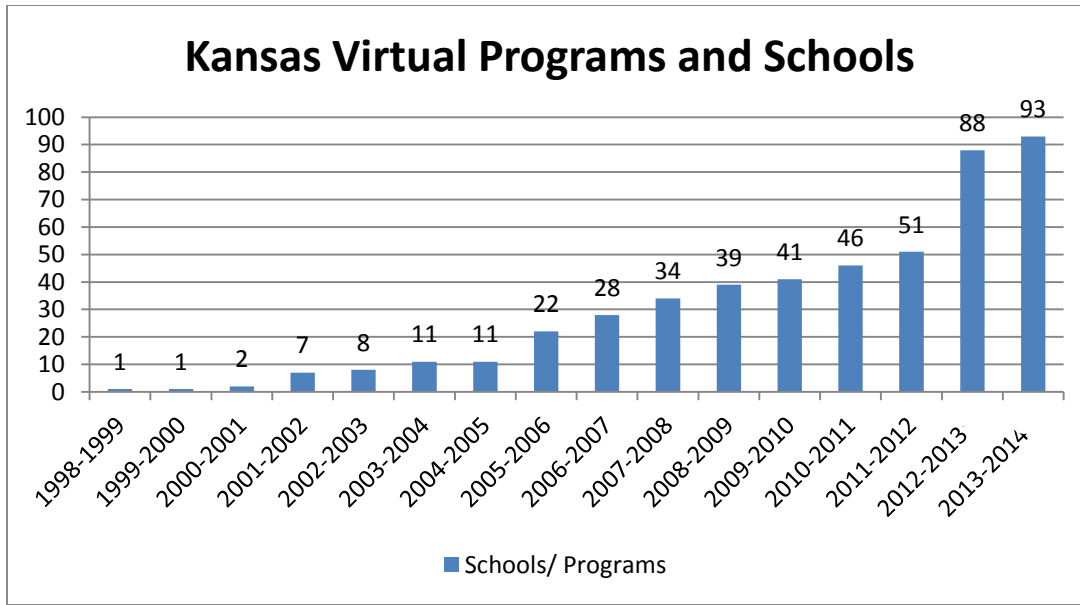
Figure 2.2 Kansas virtual programs/schools 1998-2014 (source: LaPlante, 2012 & Watson, 2010)
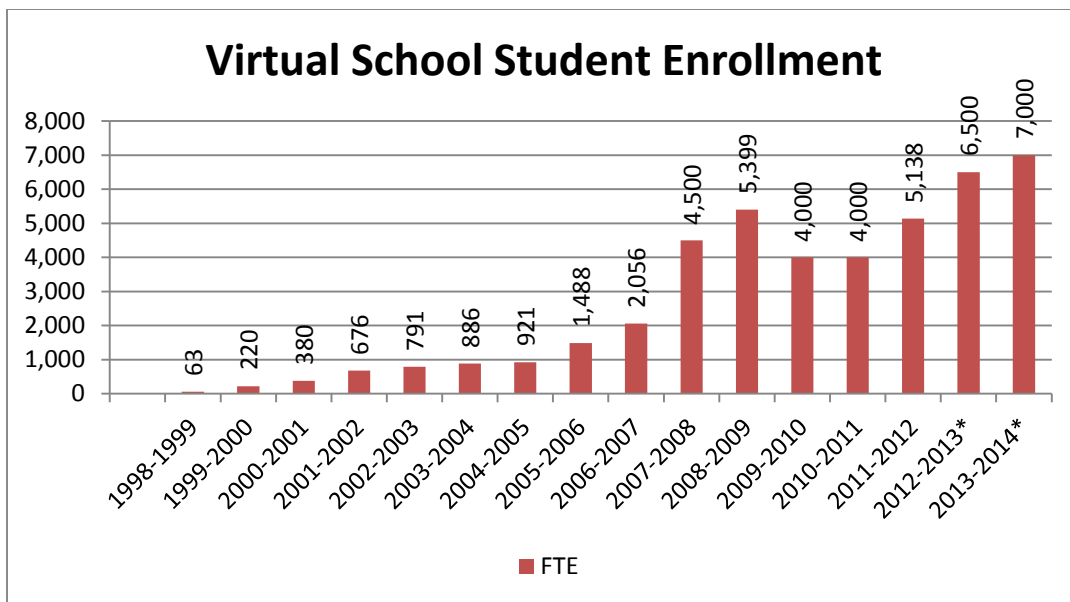
Figure 2.3 Virtual school student enrollments 1998-2014 (source: LaPlante, 2012 & Watson, 2010)
* Estimated enrollments

Figure 2.4 illustrates the location of the eighty-five public school districts operating a virtual

program or school in the state of Kansas in the 2013-2014 school year.
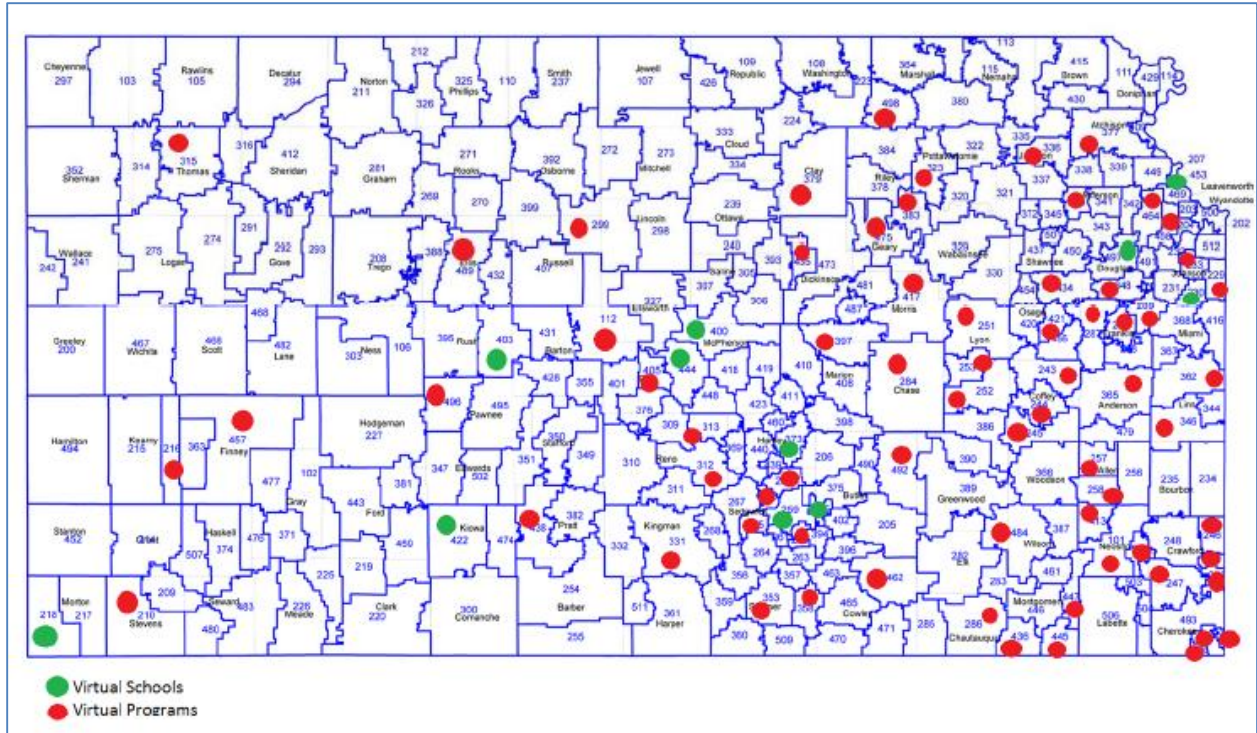
Figure 2.4. Location of virtual programs in Kansas, 2013-2014 (source: KSDE Website)

Kansas State Department of Education (KSDE) currently identifies ninety-three virtual

programs or schools in operation for 2013-2014 school year depicted by Figure 2.4. The ninety-

three programs or schools are sponsored by eighty-five different districts across the state and

constitute approximately one percent of public school students enrolled in Kansas (Prosser,

2011). Four types of educational services are offered by virtual programs and schools in Kansas:

1) General Education, 2) Credit Recovery[7], 3) Advanced Courses, and 4) GED/Diploma

Completion (KSDE Website). Virtual programs and schools in Kansas can choose to offer open

enrollment to all Kansas residents, or to operate within the enrollment boundaries of the

sponsoring district. Of the ninety-three current virtual programs and schools, forty-eight of them

accept students from across the state (KSDE Website).

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[7] Credit Recovery describes an educational program that gives high school students the opportunity to retake a course(s) that was previously failed through alternative means in order to earn academic credit and pursue a high school diploma.

Kansas was an early adopter of virtual education, and its innovative practices preceded legislative and administrative policy during the early years of this movement. Draft guidelines to operate an internet-based school released by KSDE in 2000 list ten brief tenets of developing online courses, enrolling students, and counting students for funding purposes (see Appendix A). As enrollment in virtual education programs and schools grew, Kansas legislators' attention was drawn to this growing subset of public education. In 2007, the Kansas Legislature commissioned a Legislative Post Audit to be conducted on virtual education in Kansas to address the following questions: (1) How prevalent are virtual schools in Kansas, what do they cost, and how have their students performed? (2) Do the laws and regulations that govern virtual schools in Kansas provide sufficient oversight, and how do they compare to those adopted by other states? (Legislative Post Audit, 2007)

The findings of the Legislative Post Audit were released on April 17, 2007. The report stated that policies established to govern virtual education in Kansas were not being sufficiently enforced. The KSDE division responsible for overseeing virtual education was disorganized, records were missing, and many of the on-site visits outlined by policy had not been conducted. Further, a glaring error of practice was noted for the virtual school in Mullinville school district as it had a practice of "sharing" its virtual school students with surrounding districts to share per pupil funds[8](Legislative Post Audit, 2007).

The Kansas State Legislature convened in 2008, and members of both the House and the Senate Education Committees, noting the need for improved policies and oversight of virtual

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[8] Most students enrolled in the Mullinville virtual school should have been counted for funding purposes in that district because that's where they attended. However, Mullinville school district "gave" 130 of its virtual students to three nearby districts to count as their students for funding purposes— Comanche County, Haviland, and Pawnee Heights. The three receiving districts received full State aid for those students and kept what was left after paying a fee to the service center that runs the virtual school for Mullinville (Legislative Post Audit, 2007).

education, formed subcommittees to review the issue (Wenger, 2009). Both subcommittees proposed legislation regarding virtual education, and SB 669 was adopted and became known as the Virtual School Act of 2008. Governor Kathleen Sebelius signed the bill into law on May 13, 2008 (Votes, 2013). The Virtual School Act granted supervision and regulation authority of virtual education to the Kansas State Department of Education, established per pupil funding at 105 percent of BSAPP (base state aid per pupil) amount, ordered the creation of a Virtual School Fund in each district for financial transactions of the virtual program, created a Virtual School Advisory Council, and required school districts to provide adequate training to virtual education teachers (Wenger, 2009).

Virtual school practices in Kansas were analyzed again two years later. At the request of the Kansas Board of Education, the Kansas Department of Education spearheaded a second in-depth review of virtual education policies and practices in 2009 (Kansas Department of Education, 2010). The findings were presented at the April 13, 2010 KSBE meeting and addressed topics including various delivery methods of virtual education programs nationwide, types of programs in Kansas, academic progress of virtual education students in comparison to traditional school peers, how virtual programs meet KSBE goals, and current monitoring and accountability measures over virtual education (Kansas Department of Education, 2010). Overall, the supervisory mechanisms enacted by KSDE and the Virtual School Advisory Council were found to have brought virtual education policy and practice into alignment in the state in the years since the Legislative Post Audit first identified the need (Kansas Department of Education, 2010). Virtual schools and programs are held to the policies and procedures enacted from the 2008 Virtual School Act, and are audited annually by KSDE for compliance and quality purposes.

Research Questions

Chapter Two presented the theoretical framework supporting this study's exploration into virtual education practices in Kansas. Current research on virtual education at the K-12 level explores historical development, models of delivery, comparisons with traditional schools, funding, and policy needs and constraints. There is little research concerning the factors motivating the adoption of virtual education and the perceived benefits districts hope to accrue from its use. For this dissertation, I explore the current status of virtual education in Kansas in order to understand the purposeful decisions by districts to adopt or not adopt this educational model. Taking into account district characteristics (e.g., enrollment size, urbanicity, SES, and region in the state) as well as exploring the voices of non-adopters, I explore the motivation of districts to offer virtual education practices and the ensuing beliefs about the models' challenges, limitations, and benefits.

The research questions guiding this study are:

1) To what extent do districts with virtual education programs share common characteristics (e.g., enrollment size, urbanicity, SES, region)?

2) What factor(s) influence Kansas districts to consider the adoption of a virtual education program or school?

3) What factor(s) influence a district's decision to adopt or reject a virtual education program or school?

4) What are the reported benefits, challenges, and limitations of virtual education in Kansas?

<center>**Chapter Three**</center>

<center>**Methodology**</center>

Research Design and Rationale

The purpose of this study is to explore virtual education in Kansas, the factors

contributing to a district's decision to adopt or not adopt this educational model, and the

challenges, limitations, and benefits according to Kansas district and program leaders. A case

study method was utilized in order to investigate and describe the adoption and expansion of

virtual education in Kansas. Yin (2009) defines the case study method as "an empirical inquiry

that investigates a contemporary phenomenon (the "case") in depth and within its real-world

context, especially when the boundaries between the phenomenon and context may not be clearly

evident," (p. 16). Case studies concentrate on a single phenomenon (the case), with the

researcher aiming to uncover the interaction of significant factors characteristic of the

phenomenon; according to Merriam (2009), the case study has proven particularly useful for

studying educational innovations, evaluating programs, and informing policy. Based on these

methodological descriptions, the case study format is appropriately suited to this study of virtual

education in Kansas. Virtual education in Kansas is a *bounded entity* occurring in a

contemporary context which can be *explored in depth* to *understand this innovation* and *evaluate*

its strengths and limitations through the perceptions of district and program leaders.

Data Collection

One of the key features of the case study format is data collection from multiple sources

to convey a rich and thorough exploration of a phenomenon through the use of interviews,

surveys, field observations and/or document content analysis (Merriam, 2009). For this

dissertation, I collected data from four sources in an effort to triangulate data and improve

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internal validity: a) administrative data about district demographics b) survey of all Kansas superintendents, c) survey of all virtual education program directors in Kansas, and d) interviews of purposefully selected program directors (Creswell, 2009; Merriam, 2009).

Administrative data. Administrative data were collected from NCES Common Core of Data and merged with socioeconomic district data from Kansas Department of Education website to address research question #1:

1) *To what extent do districts with virtual education programs share common characteristics (e.g. enrollment size, urbanicity, SES, region)?*

I created custom reports for all school districts in Kansas depicting enrollment numbers, urban locale, and socioeconomic status denoted by free and reduced lunch rates, and exported them to Microsoft Excel. The data was sorted and disaggregated to identify trends of current virtual education programs in Kansas.

Survey of superintendents and program directors. The goal of the survey instruments is to address the second, third, and fourth research questions of this study:

(2) *What factor(s) influence Kansas districts to consider the adoption of a virtual education program or school?*

(3) *What factor(s) influence a district's decision to adopt or not adopt a virtual education program or school?*

(4) *What are the reported benefits, challenges and limitations of virtual education in Kansas?*

I developed the interactive survey instruments using Qualtrics, a web-based tool for creating and distributing surveys (see Appendices B and C). In order to distribute the survey instruments, I compiled the email addresses of all Kansas superintendents (n=285) from the 2013-2014 Directory of Superintendents published by State Board of Education (Kansas State Board of Education, 2013), as well as a list of email addresses for current virtual education

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program directors (n=91) from the KSDE website using the 2013-2014 approved program list. Prior to sending the survey link to the participating groups, I sent an introductory email describing the purpose and nature of my study. All email communication and survey instruments were approved by the dissertation proposal committee and KU's Human Subjects Committee of Lawrence (see Appendices E and F). Table 3.1 details the content of each survey instrument sent to superintendents and virtual program directors.

Table 3.1

Data Collection Content and Sources

	Superintendents	Program Directors
Survey data collection (universal sampling)		
1. USD number	X	X
2. Current status of virtual education in district	X	
3. Factors leading to adoption/non-adoption of virtual education	X	X
4. Factors leading to consideration of virtual education	X	
5. Perceived benefits of virtual education	X	X
6. Stakeholders involved in decision-making process	X	
7. Year of adoption of virtual education program		X
8. Challenges of operating virtual education program		X
9. Board support for virtual education		X
		Program Directors
Interview data collection (purposeful sampling)		
1. Program demographics		X
2. Program origins (stakeholders, research, motivating factors to adopt virtual education)		X
3. Student details (ELL, SPED, recruitment, socialization, re-enrollment percentage)		X
4. Challenges and benefits of virtual education		X

The emails were distributed to the two groups of survey participants requesting responses within a two-week window. Seven days into the window, I sent a reminder email to all

participants in order to request their participation. The minimum goal participation rate was set at forty percent of each population, based on the meta-analysis performed by Cook et al (2000). They found that researchers could anticipate between twenty and thirty percent participation in electronic surveys with no-follow up contact. Follow-up email reminders could be expected, at best, to double the response rates. My goal participation rate was thus set between forty and fifty percent of both groups, and since this threshold was reached within the two-week time period, no further follow-up contact was pursued.

Survey data analysis. Once the surveys were completed, I began the initial analysis of data utilizing Qualtrics reporting capabilities and Microsoft Excel. Based on the USD number of participants, I compiled and analyzed descriptive data about survey response rates, participation, distribution by urbanicity (e.g., city, suburb, town, rural), and responses to Likert scale questions. Open-ended responses were compiled and coded for themes following the protocol outlined below.

Phase One. Essay responses were analyzed and themes were identified that describe general patterns in the data. The use of color coding assisted in identifying generalizable themes, and comments were inserted by the researcher in the working Excel document.

Phase Two. Taking the identified categories from the essay responses of the survey, a table was created with the categories down the left side and example quotations filling the rows. Quotations from the survey were inserted next to each category as evidence and context for each participant.

Phrase Three. After categories and passages were compiled illustrating initial themes, I proceeded through several rounds of revisions to organize, combine, edit, and synthesize categories. The goal was to condense the number of categories without losing accuracy.

Program director interviews. The data gathered from surveys were analyzed in conjunction with the data gathered through follow-up interviews. Brannen (2005) supports the use of survey tools to amass extensive data, contextualize interview study, and help identify samples for follow-up interview study. From the pool of virtual education program director survey respondents, purposeful sampling was used to identify six participants to interview. Purposeful selection of interview participants aligns with Merriam's (2009) words: "In qualitative research, a single case or small, nonrandom, purposeful sample is selected precisely because the researcher wishes to understand the particular in depth, not to find out what is generally true of the many," (p. 224).

Interview participants were selected to represent city, suburban, town, rural, and a service center virtual program to represent a cross-section of program types across the state. Program director participants were contacted by email with a request for a follow-up interview. Each was given the choice of conducting the interview over the phone, via Adobe Connect, or in-person when location was conducive to one-day travel. Five requested a phone interview in order to accommodate tight schedules, and one interview was conducted in person. I informed program directors that I would not use their names or the names of their districts in my analysis, only referencing their district in terms of geography, relative size, age of program, or other anonymous language. The interview format was semi-structured, utilizing an HSCL-approved Interview Guide (Appendix D) to facilitate the conversation. The interviews were each audio recorded using the Smart Audio iPad app and then analyzed using the five phases outlined below. The average interview length was 21 minutes. The six interviews were held from February 11 through February 25. Interview participants (referred to by the category of the

urban-centric locale from NCES to maintain anonymity) are described in Table 3.2 followed by a

brief description of each program.

Table 3.2

Interview Participants' District and Program Details

Interview Participant	District Enrollment Category	SES	Year VE Program Opened	VE Enrollment	Services Offered *
City VS	10,000+	78%	2000	300	GE, CR, AC
Suburb VS	1,725-10,000	46%	2009	50	GE, CR, AC
Town 1 VS	1,725-10,000	61%	2006	105	GE
Town 2 VS	1,725-10,000	20%	1998	250	GE, CR
Rural VS	<1,000	57%	2012	11	GE, CR
SC	n/a	n/a	2012	40 partner districts	GE, CR, AC

* GE = General Education, CR = Credit Recovery, AC = Advanced Courses

City VS

City VS operates in one of the largest districts in Kansas. The director is in his second

year of leadership of the program. The program offers K-12th grade virtual learning

opportunities, utilizing a partnership with Apex for the online high school courses and Connexus

Learning for K-8th grade materials. City VS served approximately 219 students for the 2013-

2014 school year.

Suburb VS

Suburb VS operates in a suburban district in south central Kansas. The virtual program

services K-12th grade students through partnerships with Aventa and K-12, Inc. Operating in a

suburban locale near a military base with a recent influx of English Language Learner (ELL)

students, Suburb VS has approximately fifty students enrolled.

Town1 VS

Town1 VS has been in operation for eight years. Originally offering K-12th grades, after three years the high school portion was dissolved and the school now is solely K-8th grade. The school enrolls approximately 105 students, the majority residing within a sixty mile radius of the school, although enrollment is open to all students in the state.

Town2 VS

Town2 VS is one of the first virtual programs in the state of Kansas. Town2 VS offers K-12th grade services and develops their own curriculum within the district; the district has made the purposeful decision to only hire teachers who work full-time in district schools to operate the virtual component. Teachers teach a grade level or content area in district schools during the day, and are paid a stipend to oversee virtual learners outside the work day. Town2 VS has approximately 250 students in school year 2013-2014.

Rural VS

Rural VS operates a K-12th grade virtual program, although it currently only has students in the 7th-12th grades. A small program designed to primarily address the needs of in-district students seeking alternative school options, this program operates by a partnership with Greenbush-Southeast Kansas Education Center. Rural VS has three full-time virtual learners, two part-time, and approximately twelve students enrolled in a credit recovery capacity.

Service Center

The Service Center program provides the virtual learning platform, courses, and teachers for over forty partner districts in Kansas. The districts count the students towards their enrollment, receives funding from the state, then pays a fee that is less than the BSAPP (Base State Aid Per Pupil) amount to the service center. While some of the districts do not currently have students enrolled, they have entered into this service center partnership in the event that

students wish to pursue a virtual learning environment. In only its second year, the director of the Service Center views the primary function of her program to assist districts who would not otherwise be able to offer stand-alone virtual programs.

Interview data analysis. The following four steps were used in analyzing data gathered from interviewing the six virtual program director participants.

Phase One. Interviews were transcribed using Microsoft Word to allow future sorting and categorization. In addition, self-transcription allowed the researcher to not only transcribe the audio recordings but to listen to the words and tone of the conversation and add appropriate notes to the final transcription.

Phase Two. Each interview was analyzed independently and categories were identified capturing general themes in the data. The use of color coding assisted in identifying common themes. In order to perform member checks, the transcribed and highlighted themes documented were sent to each interview participant to check for accuracy and include any addendums Merriam (2009). Also known as respondent validity, this method ensures accurate initial analysis and identification of themes by asking the interview participant if the analysis captures their perspectives (Merriam, 2009). None of the six participants offered any changes to the proposed themes, and analysis continued.

Phase Three. Using the identified categories from the interviews, I created a table with the categories down the left side and the interviewee's descriptor code along the top. Direct quotations or paraphrases of content were inserted next to each category to provide evidence of each in the words of participants.

Phrase Four. After categories and passages have been compiled illustrating initial themes, several rounds of revisions ensued with the goal being to combine, edit, and synthesize

categories. The goal was to condense the number of categories without losing accuracy or the context of the participant's statement(s).

Final synthesis of data. The final analysis provided in Chapter Four includes the merging and synthesis of data from all four sources: superintendent survey, program director survey, program director interviews, and administrative data from the NCES Common Core Data set. In this final phase of analysis, I merged data from all sources and analyzed for patterns and themes. This synthesis answered each of the four research questions to explore and understand virtual education in Kansas, the factors contributing to a district's decision to adopt or not adopt this educational model, and the challenges, limitations, and benefits according to Kansas district and program leaders.

Chapter Four

Findings and Data Analysis

This study sought to identify factors and influences that motivated the adoption or non-adoption of virtual education by KS school districts. It explores the processes by which Kansas school districts considered and adopted virtual education from 1998-2014, and describes the perceived challenges, limitations, and benefits of virtual education as reported by superintendents and virtual education program directors. This qualitative study was carried out as an embedded, single-case design, which is one of four basic types of case study design described by Yin (2009). Utilizing Kansas as the unit of analysis allowed me to explore various perspectives from multiple school districts within the single case, with data collection including administrative demographic data about districts in Kansas, surveys of superintendents and virtual education program directors, and interviews with six program directors. The bounded case for analysis was comprised of public school districts in the state of Kansas with the intent to study and understand the decision-making process and subsequent use of virtual education for K-12 students.

The purpose of this study was to explore the overarching question: "What motivates district decision makers in Kansas to adopt virtual education?" In this chapter, I present the study's findings based on the collected data. The chapter begins with a descriptive analysis of survey and interview participants and rates of completion, followed by an analysis of survey results and interview data to address each of the four research questions.

Descriptive Survey Data

Data were collected from multiple sources in an attempt to triangulate data and improve validity. Merriam (2009) describes internal validity as the congruence between research findings

and reality, and while a qualitative study can never holistically capture an objective "truth" or "reality," credibility is enhanced through efforts to triangulate information across multiple sources. Four different types of first-hand data were collected for this study: survey of Kansas superintendents, survey of Virtual Education program directors, local district demographic data from National Center for Education Statistics (NCES) and Kansas Department of Education (KSDE), and interviews with six program directors.

Survey participants (Kansas superintendents [n= 285[9]] and virtual education program directors [n=91[10]]) were sent an email containing the electronic link to their respective Qualtrics survey instrument on January 30, 2014. One week later, with response rates of eighty-three superintendents (twenty-nine percent) and twenty program directors (twenty-two percent), a second email was sent requesting participation of both sample groups. At the end of the two week time frame, 117 superintendents (forty-one percent) and forty-three program directors (forty-seven percent) had responded to the request in some form. Superintendents participating in the survey have served in that role for an average of five and a half years. The virtual education program directors surveyed have served in that role for an average of six school years. The stated participation goal detailed in Chapter Three was forty percent of each population, and the forty-one percent and forty-seven percent response rates met this threshold. Detailed response rate information is found in Table 4.1.

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[9] There are currently 286 school districts in the state of Kansas. Two districts (USD 325 and USD 326) share the same superintendent, thus the sample size n=285.
[10] There are 93 virtual education programs active for the 2013-2014 school year. In two instances, one director oversees two programs, thus the sample size n=91.

Table 4.1

Survey Response Rates

Type of Response	Superintendents		Program Directors	
	Number	Percent	Number	Percent
Completed survey	114	40%	41	45%
Emailed response	3	1%	2	2%
Totals	117	41%	43	47%

Note: One superintendent opted out of the survey.

Sample representativeness. In order to holistically understand Kansas districts, it is important to determine if superintendent and program director survey participants were representative of their respective statewide populations. Data shown in Table 4.2 were disaggregated according to three factors to explore the sample's representation: (1) urbanicity, (2) district enrollment, and (3) SES. The "% difference" column presents a general picture of the overall representativeness of data compiled from the sample of superintendents compared to the whole population. Below is a brief description of the process of acquiring and disaggregating data by the urbanicity, district enrollment, and SES of the two data sources.

Urbanicity, district enrollment, and SES. For the purpose of this study, urbanicity of a district is defined as "the agency's location relative to a populous area" (NCES, 2010). There are four primary urban-centric locale codes assigned by NCES Common Core of Data Set, and each is further divided into three subcategories. For the purposes of this analysis, the four main categories were utilized: (1) City, (2) Suburb, (3) Town, and (4) Rural. Using the example of Augustine-Shaw (2001), whose earlier study of virtual education in Kansas based enrollment disaggregation on classifications utilized by Kansas Association of School Boards (KASB), I divided districts into four categories based on enrollment size: (1) <1,000, (2) 1,000-1,724, (3) 1,725-10,000, and (4) 10,000+. Utilizing NCES Common Core of Data, I built a custom report detailing the urban locale and enrollment numbers of all 286 Kansas districts. Free and reduced

lunch percentages served as a proxy for SES determination of Kansas school districts, and a

report conveying these rates was built using the Comparative Performance and Fiscal System

from the KSDE website.

Table 4.2

Representativeness of Sample Districts – Superintendent and Program Directors

	Superintendent Sample vs. Population			Director Sample vs. Population		
	% Sample Districts	**% KS Districts**	**% Difference**	**% Sample VE Programs**	**% Population VE Programs**	**% Difference**
Urbanicity						
City	2%	2%	0	5%	5%	0
Suburb	3%	3%	0	5%	4%	1%
Town	25%	22%	3%	28%	29%	-1%
Rural	70%	72%	-2%	55%	53%	2%
Service Center[11]	*n/a*	*n/a*	*n/a*	7%	9%	-2%
Enrollment						
<1,000	62%	79%	-17%	46%	45%	1%
1,000-1,724	12%	10%	2%	12%	19%	-7%
1,725-10,000	27%	18%	9%	27%	23%	4%
10,000+	2%	2%	0	7%	4%	3%
Service Center	*n/a*	*n/a*	*n/a*	7%	9%	-2%
SES						
<= 20%	4%	3%	1%	12%	7%	5%
21%-40%	26%	23%	3%	23%	24%	-1%
41%-60%	45%	49%	-4%	40%	41%	-1%
61%-80%	24%	24%	0	19%	19%	0
>=81%	1%	1%	0	0	0	0
Service Center	*n/a*	*n/a*	*n/a*	7%	9%	-2%

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[11] Eight of the virtual education programs are operated by "service centers." They were excluded from the demographic analyses and placed in their own category because enrollment numbers and SES data are not available due to their unique governance and classification.

Table 4.2 illustrates the majority of differences in comparing the superintendent sample to the entire population were less than four percent and the vast majority of differences in comparing the program director sample to the entire population were less than two percent; based on these results, I am confident that the superintendent and program director samples are indeed representative of the overall population.

Descriptive Interview Data

Using data from the survey, I assessed the responses in order to identify six potential subjects for follow-up interviews. I selected interview participants representing each of the urbanicity categories in order to describe an overall perspective of virtual education from all types of districts. I then contacted the six potential subjects via email using the document approved by the University of Kansas HSCL department (Appendix G). Five of the six requests were accepted, but the sixth request went unanswered. Rather than attempting other means of contact, I chose to drop the sixth subject since this district represented a small city demographic, and I had already scheduled an interview with a different city virtual program director. Instead, I chose to interview a director of a Service Center to offer a different perspective. With the interviews schedule, I continued my data collection via five telephone interviews and one in-person interview with purposefully-selected participants representing one city, one suburb, two towns, one rural district, and one service center provider.

Research Question #1: Demographic Data

Administrative data were collected from NCES Common Core of Data and merged with socioeconomic district data from KSDE to address research question #1:

1) *To what extent do districts with virtual education programs share common*

   characteristics (e.g. enrollment size, urbanicity, SES, region)?

In this section, I describe data from districts currently operating virtual education programs, disaggregating the results by enrollment size, urbanicity, SES, and region.

Enrollment size. Figure 4.1 shows the number of district virtual programs using four categories based on enrollment.
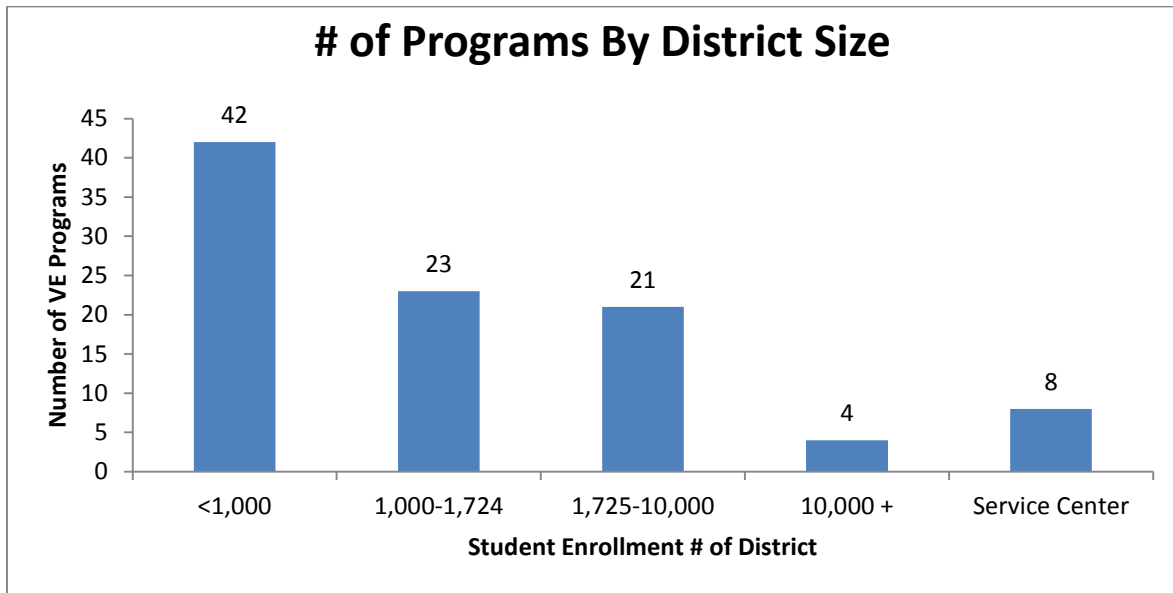

Figure 4.1 VE programs across enrollment categories

Districts with enrollment less than 1,000 students offer the largest number of virtual education programs while districts with greater than 10,000 students offer the fewest. From another perspective, districts with enrollment less than 1,000 sponsor the greatest percentage of virtual education programs in Kansas (forty-five percent) while large districts with enrollment over 10,000 represent the least representation sponsoring only four percent of programs. Mid-size districts from 1,000 to 1,724 represent twenty-five percent (n=23) of the virtual education marketplace, while moderately-sized districts in the 1,725 to 10,000 range proffer twenty-three percent (n=21) of all Kansas virtual education programs. Eight virtual education programs in

Kansas are offered in conjunction with a service center[12], representing nine percent of total programs.

Urbanicity. Table 4.3 shows the distribution of virtual education programs by district urbanicity to explore what types of districts take part in the virtual education model in Kansas.

Table 4.3

Distribution of Virtual Education (VE) Programs in Kansas

Urbanicity	Districts	Total Enrollment	% of state enrollment	# of VE programs	% of VE programs
City Total	6	120,584	24%	5	5%
Suburb Total	9	85,398	18%	4	4%
Town Total	64	140,542	30%	27	29%
Rural Total	207	135,677	28%	49	53%
Service Center	n/a	n/a	n/a	8	9%
State Totals	286	482,201	100%	93	100%

The six districts in Kansas classified as "City" constitute twenty-four percent of the overall student enrollment in the state, yet City districts sponsor only five percent of the state's virtual education programs. Rural districts make up the vast majority of the Kansas educational landscape; seventy-two percent of all Kansas districts are classified as "Rural" by NCES urban-centric locale traits, and the majority of virtual education programs (fifty-three percent) are operated by rural districts, and rural districts sponsor the highest number of virtual education programs (n=49). This aligns to the research on the benefits of virtual education by Picciano and Seaman (2007) who suggest that, for students living in small communities or rural locations with minimal course selection, virtual education "is not simply an attractive alternative to face-to-face

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[12] Educational service centers in Kansas operate as cooperatives for member school districts, providing cost-effective access to educational, administrative, and technology services.

instruction but increasingly is becoming a lifeline to basic quality education," (2007, p. 6).

Virtual education can broaden access to course selection, help overcome resource deficits, and

address teacher shortages feasibly faced by some of Kansas' 206 rural districts.

Figure 4.2 shows the distribution of districts across locale-types compared to the
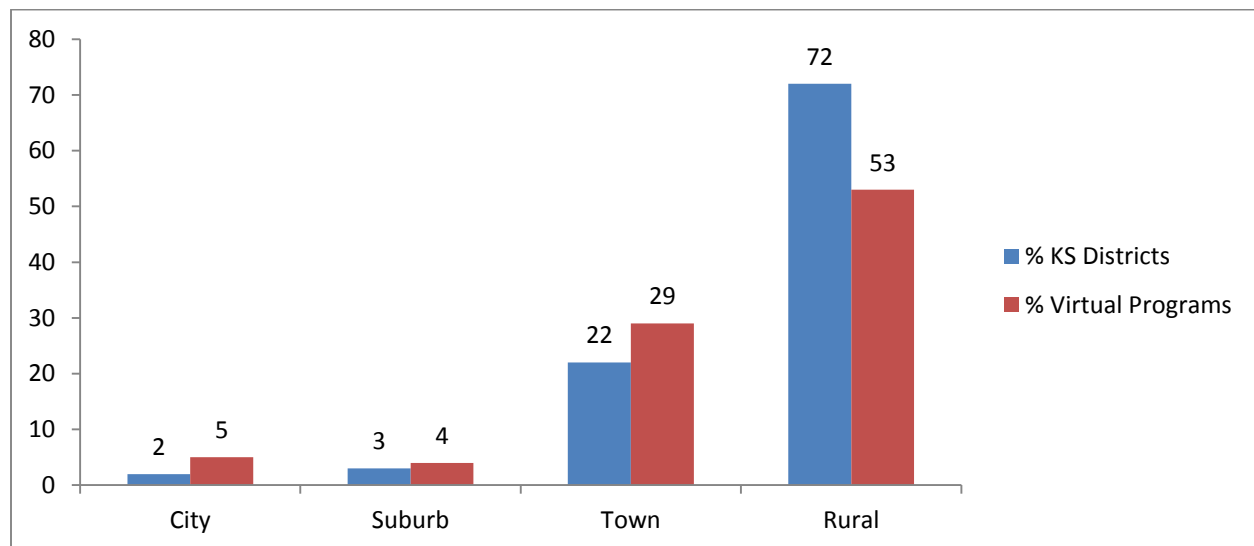
distribution of virtual programs in each category.

Figure 4.2 Locations of students in Kansas vs. location of virtual schools

(9% of virtual schools are operated by service centers independent of a district and are exempted from totals)

Just over half of the virtual programs offered in Kansas are operated by rural school

districts. While seventy-two percent of all Kansas districts are classified as rural, this

representation comprises both the highest participation and the greatest discrepancy in

proportionality. City districts in Kansas comprise two percent of all districts, and yet they

sponsor five percent of all virtual programs. Thus, rural districts sponsor the most virtual

programs, but are underrepresented in proportion to their total number of districts statewide, and

city districts sponsor the fewest virtual programs but are overrepresented compared to the total

number of city districts statewide. It is important to recall that over half of Kansas virtual

education programs offer statewide enrollment to students outside of their attendance boundaries.

A virtual program offered by a rural district does not necessarily indicate that all of its students are rural residents. Thus, while city and suburban districts sponsor fewer total programs in number, their students can potentially enroll in one of the forty-eight programs that offer statewide enrollment. Conceivably, rural districts' decision to sponsor the majority of virtual education in the state of Kansas denotes their response to factors within their districts voiced by their stakeholders and students that make this model desirable. Those factors leading to adoption will be explored in the analysis of data relating to research question number two.

Socioeconomic status (SES). I next explored SES data of districts sponsoring virtual education programs. Table 4.4 displays SES data of participating districts divided into quintiles for analysis of participation.

Table 4.4

Virtual Education (VE) Programs Disaggregated by SES

SES Category	# of Districts in KS	# VE Programs	% of Whole Within Category	% of all VE programs in KS
<=20%	10	6	60%	7%
21-40%	66	22	33%	24%
41-60%	141	38	27%	41%
61-80%	67	17	25%	19%
81%+	2	0	0	0%

Note. Service Centers in Kansas sponsor 9% of total programs

SES percentages denote the percent of district students that qualify for the Federal Free and Reduced Lunch program. The greatest overall involvement in virtual education programs by SES category (41 percent) is in districts in the 41-60% range. This category is comprised of the most districts statewide as 141 out of 286 Kansas districts are in this SEs range. In the two districts in Kansas that have above 81 percent free and reduced status, there are no virtual education programs offered. In summary, virtual education is an initiative offered most by districts

representing moderate SES rates of 41-60% and least by districts with the highest degree of need

denoted by SES levels.

Regional traits. I then explored Kansas virtual education programs by region. To

identify the regions of Kansas, I utilized the "Kansas Education Employment Board" region

classifications generated and maintained by the Kansas Department of Education. This service

divides the state of Kansas into eight regions for employment searches: (1) Northwest, (2)

Northcentral, (3) Northeast, (4) KC Metro, (5) Southeast, (6) Southcentral, (7) Wichita Metro,

and (8) Southwest. Service center locations are not represented on the map, but the physical

location of each was included in the regional data totals below in Table 4.5. Based on the

regional map, I identify the number of districts in each category, although interpreting district

boundary lines and inclusion into specific regions did require approximating district locations.

Table 4.5

Location of Virtual Education Programs in Kansas by Region

Region	# of Programs 2013-2014	# of Districts	% of Districts with VE	% of Total Offerings
Northwest	1	19	5%	1%
Northcentral	6	41	15%	6%
Northeast	24	63	38%	26%
KC Metro	6	15	40%	6%
Southeast	24	41	59%	26%
Southcentral	21	62	34%	24%
Wichita Metro	6	9	66%	6%
Southwest	5	36	14%	5%

Figure 4.3 illustrates the eight regions of Kansas and the location of virtual schools and programs.
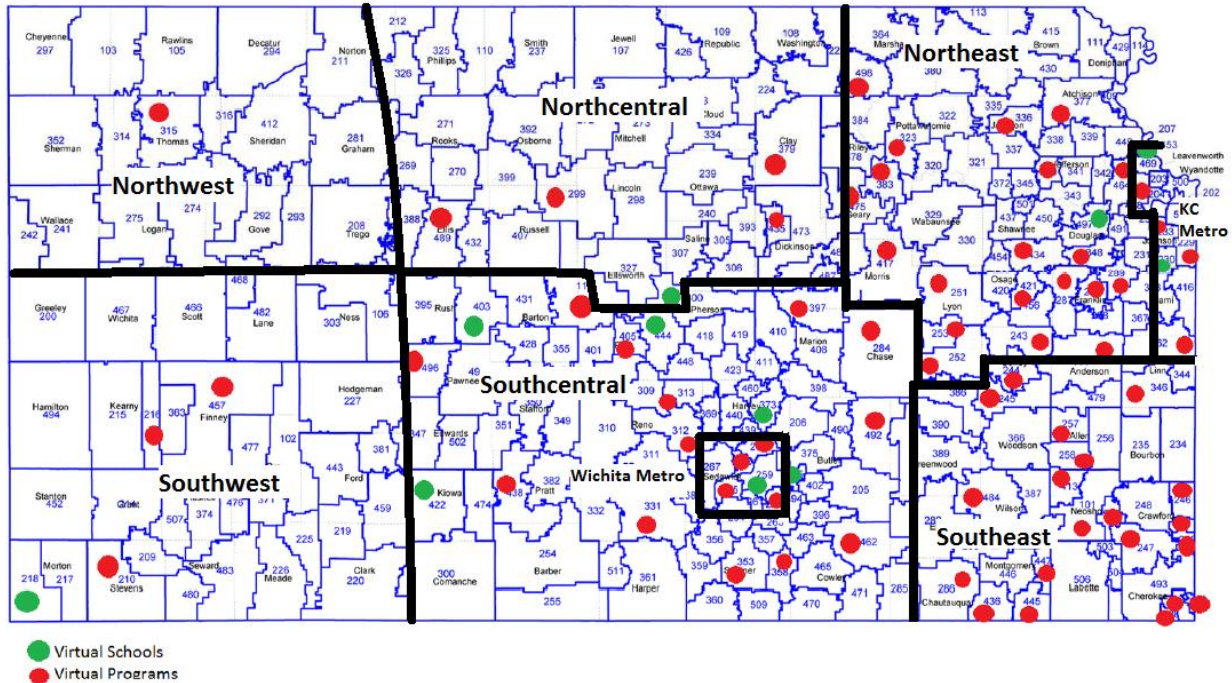

Figure 4.3 Location of virtual programs in Kansas 2013-2014 by region (*Map source*: KSDE website)

Analyzing virtual education program offerings by region, one notes the highest concentrations of program offerings in the Northeast and Southeast regions of the state, followed closely by the Southcentral region. The regions least involved in virtual education program offerings are the Northwest and Southwest regions. The Northwest region has both the smallest number of programs (n=1) and smallest percentage of districts involved in virtual education (n=5%) within any of the eight categories. Two regions with high density of student populations are the Kansas City Metro and the Wichita Metro. These regions each offer six virtual education programs, each constituting six percent of the total program offerings statewide. Sixty-six percent of districts located in the Wichita Metro sponsor a virtual program, making for the highest percentage of representation in any category. For the state of Kansas, there is a

concentration of virtual education programs offered by districts in the Eastern and Southcentral regions. From an innovation diffusion perspective, there is a higher concentration of virtual education programs in the regions surrounding the first program and spreading south-west (Basehor-Linwood located on the southwestern border of the KC Metro region).

Evidence of diffusion. Analyzing the year that virtual education was adopted in districts across Kansas contributes to the understanding of diffusion and the spread of this educational innovation. Rogers (1995) describes of adopters of innovations according to five categories, whose members conceivably share similar characteristics. I divided the eighty-five districts who are currently utilizing virtual education into the five categories identified by diffusion theory by applying normal distribution ratios: (1) innovators, (2) early adopters, (3) early majority, (4) late majority, and (5) laggards. Figures 4.4 - 4.8 illustrate the spread of virtual education across the state of Kansas. Service center programs were not included in this analysis due to the ambiguity of services offered by each and unknown years in which each began. This diffusion analysis applies only to the eighty-five Kansas districts (thirty percent) that have adopted virtual education to explore how it has spread among adopters over time; the majority of Kansas districts (seventy percent) are non-adopters and are thus excluded from the diffusion analysis.
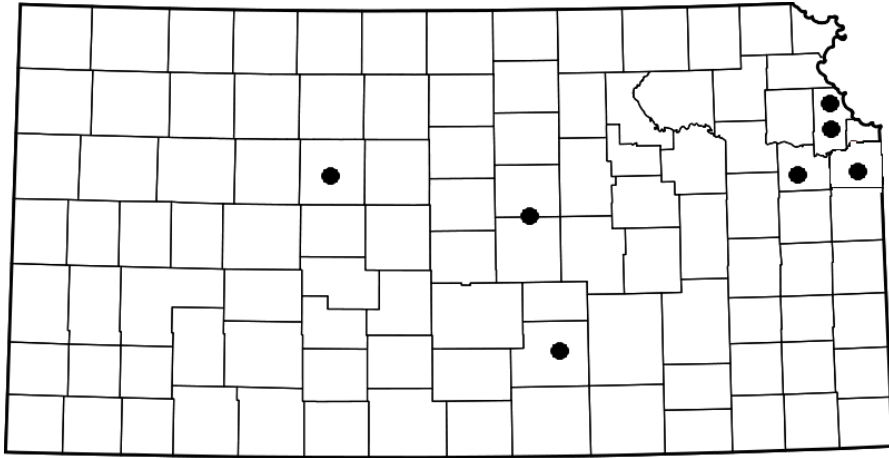
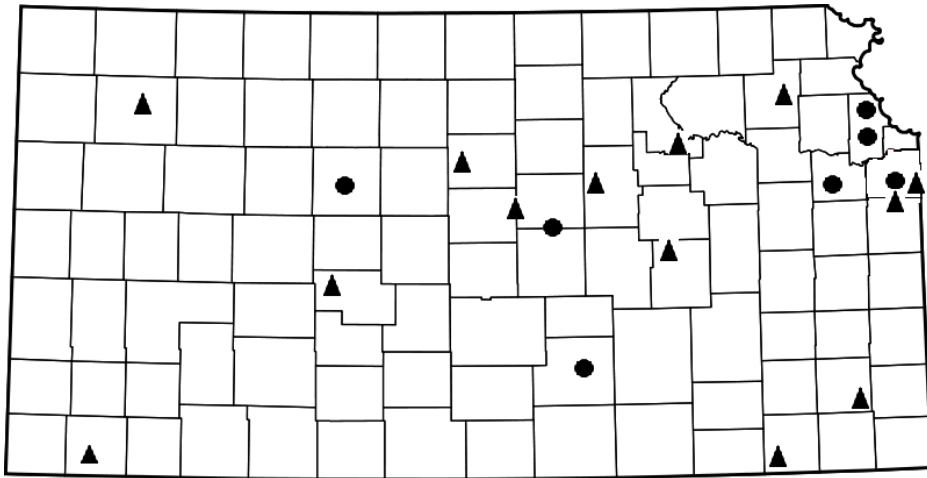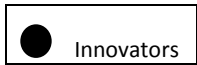*Figure 4.4* Virtual education innovators (n=7) – Adoptions from 1998-2006

| ● Innovators |

Figure 4.5 Virtual education early adopters (n=13) – Adoptions from 2006-2008

| ● Innovators | ▲ Early Adopters |
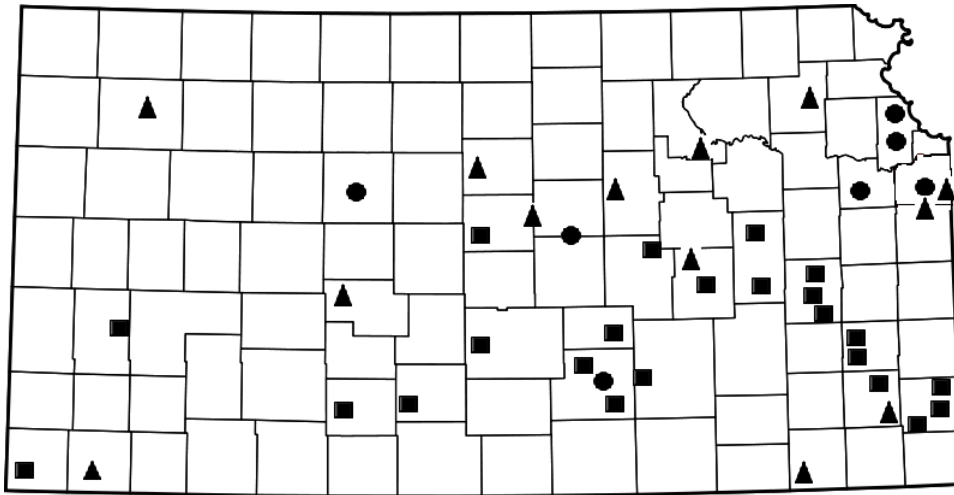
Figure 4.6 Virtual education early majority (n=23) – Adoptions from 2009-2012

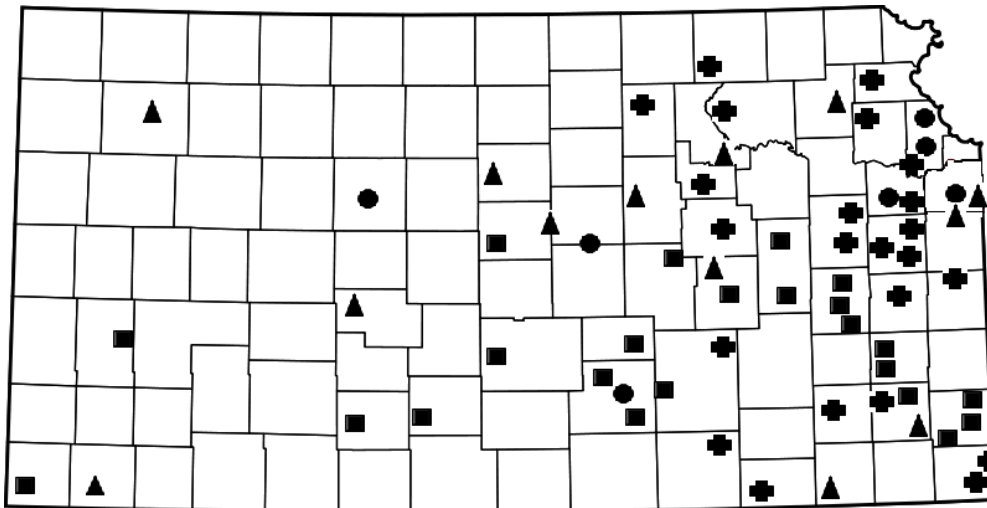| ● Innovators	▲ Early Adopters	■ Early Majority
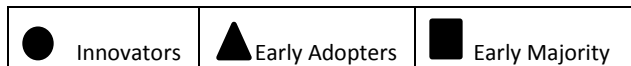
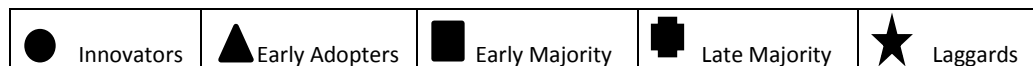*Figure 4.7* Virtual education late majority (n=23) – Adoptions 2012

● Innovators	▲ Early Adopters	■ Early Majority	✚ Late Majority
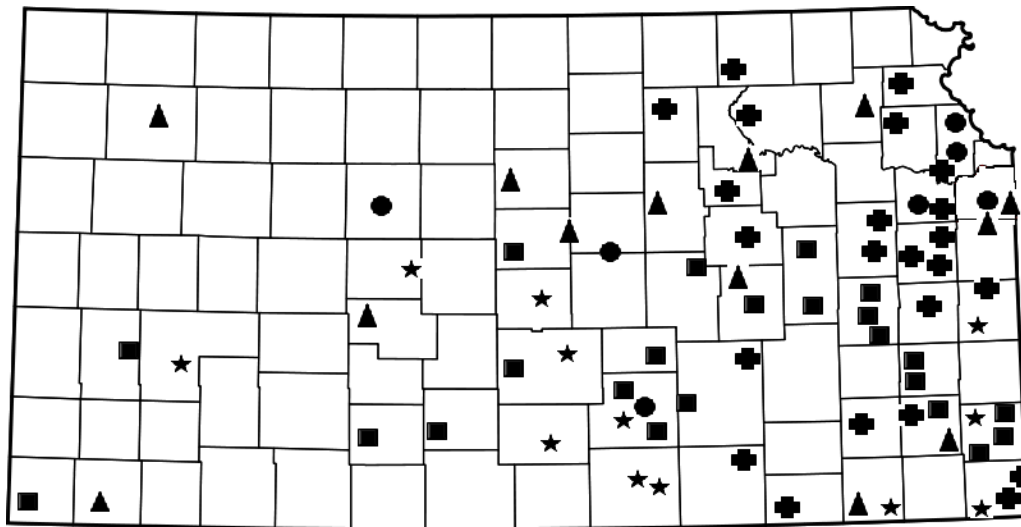
Figure 4.8 Virtual education laggards (n=12) – Adoptions from 2012-2013

● Innovators	▲ Early Adopters	■ Early Majority	✚ Late Majority	★ Laggards

Discussion of diffusion. The spread of virtual education across the state of Kansas

contributes to the understanding of this educational model, its use in K-12 education statewide,

and the perceived benefits districts anticipate from its adoption. As this innovative educational

practice spread across the state over the past sixteen years, the previous figures suggest pockets

of adoption impacted by proximity to operational programs. This time-lapsed analysis also

contributes to understanding the regional traits of virtual education in Kansas, illustrating high

concentration of virtual education programs in the Northeast, Southeast, and Southcentral

regions. Further, as described by institutional theory, organizations within a specific field often

experience pressures for homogenization (DiMaggio & Powell, 1983). The concept of

isomorphism, illustrating the pressures of conformity, is a constraining process that forces one

unit in a population to resemble other units that face the same set of environmental conditions

(Hawley, 1968). Conceivably, as time passed and school district leaders in Kansas have

witnessed the sustained spread of virtual education from afar across the state and up close by

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neighboring districts, there is pressure to conform and adopt some form of this educational model themselves, but still the majority of Kansas districts (seventy percent) have not adopted virtual education. While still comprising the minority of districts, adopters of virtual education may have experienced isomorphic influence and external pressure to consider or adopt K-12 virtual education as this model has grown in use statewide.

Summary of research question #1: district demographic data. Analyzing patterns of operating virtual education programs in Kansas, most programs are operated by rural districts, in districts with enrollment between 500-1,000 students, in districts with SES rates between 41-60%, and in the Northeast, Southeast, or Southcentral regions of the state. While city locales, districts with more than 10,000 students, SES rates higher than 81%, and districts located in the Southwest or Northwest regions of the state adopt virtual education with less frequency, these same four traits are minimally representative of districts in Kansas as a whole. Thus, the *typical* Kansas district that adopts virtual education might be defined as a quintessential Kansas district altogether: rural, fewer than 1,000 students, moderate SES rates of 41-60%, and located in the comparatively more-densely populated regions of the state. There is evidence to suggest isomorphism contributing to the spread of virtual education based on diffusion analysis and the congregation of dense pockets of virtual education in several regions across the state. This analysis is beneficial for establishing the typical context in which virtual education programs currently operate in Kansas as well as contributing to the understanding of the rise and spread of this instructional delivery model.

Comparing Traditional Schools to Virtual Schools

After establishing the current context of virtual education in Kansas, my analysis then focused on the perceptions, opinions, and beliefs by survey participants about the educational

quality provided by virtual education in Kansas. As this study seeks to explore the decision to adopt or not adopt virtual education, one important consideration is virtual education's perceived effectiveness in meeting various educational goals. Superintendents and program director surveys included a question comparing traditional schools to virtual schools on commonly-noted goals of education. Figure 4.9 below presents the survey question exploring the relative strength of traditional school and virtual school posed to superintendents and program directors.

Please indicate your perception of the strength of Traditional Schools and Virtual Schools in achieving these commonly-stated educational goals. (1 = low, 5 = high)

	Traditional School					Virtual School				
	1	2	3	4	5	1	2	3	4	5
Promoting civic responsibility	○	○	○	○	○	○	○	○	○	○
Socialization for children	○	○	○	○	○	○	○	○	○	○
Extracurricular participation	○	○	○	○	○	○	○	○	○	○
Teacher/student relationships	○	○	○	○	○	○	○	○	○	○
High-quality academic preparation	○	○	○	○	○	○	○	○	○	○
Successful preparation for future role as citizens	○	○	○	○	○	○	○	○	○	○

Figure 4.9 Survey question exploring the perceptions of the relative strength of traditional vs. virtual education

Table 4.6 represents the 112 superintendents and thirty program director responses noting the differences in scores for each model on the six educational goals. On the question's scale of 1-5, one is defined as "low" and five is defined as "high" in terms of effectiveness in achieving educational goals.

Table 4.6

Comparing Traditional Schools to Virtual Education

Goals of Education	Superintendents			Directors		
	Traditional	Virtual	Difference	Traditional	Virtual	Difference
Extracurricular participation	4.8 (.48)	1.7 (.91)	3.1	4.7 (.61)	2.2 (1.1)	2.5
Socialization	4.7 (.56)	1.7 (.81)	3	4.7 (.55)	2 (1.1)	2.7
Teacher/student relationships	4.5 (.61)	2.5 (1.1)	3	4.3 (.65)	3.1 (1.4)	1.2
High-quality academic preparations	4.3 (.57)	3.3 (.99)	1	4.2 (.61)	3.5 (1.1)	.7
Promoting civic responsibility	4.3 (.61)	2.2 (1.1)	2.1	4 (.69)	2.7 (1.2)	1.3
Preparation for future role as citizens	4.3 (.59)	2.7 (1.01)	1.6	4.3 (.65)	3.1 (1.3)	1.2
Average Strength	4.5 (.57)	2.35 (.99)	2.3	4.4 (.63)	2.8 (1.2)	1.6

Note: Number in parentheses is the standard deviation calculated by Qualtrics analysis tool.

Both superintendents and virtual program directors rated traditional schools higher than virtual schools at accomplishing these educational goals both on average and on each of the six measures. The average scores by each of the sampled populations rating the effectiveness of traditional schools were separated by only one tenth of a point (4.5 and 4.4). On this scale of 1-5 where five is defined as "high," average scores of 4.5 and 4.4 denote strong belief in the educational merits of the traditional school format. Superintendents rated virtual schools at 2.35 on a 1-5 scale at accomplishing educational goals, while program directors rated virtual education half a point higher on average with a score of 2.8. Average scores below three on a scale of 1-5 depict a perceived low level of effectiveness of virtual education at achieving commonly-stated goals of education. The average difference between traditional school scores

and virtual education scores for superintendents was 2.3, while the average difference expressed by program directors was 1.6. Furthermore, there was a higher standard deviation for both superintendent and program director responses in responding to the strengths of virtual education. This shows that there was broader range of responses and distribution of perceptions in the area of virtual education, while standard deviation in reference to traditional schools was nearly half that of the standard deviation for virtual education. This denotes greater consensus in the strengths of traditional schools at meeting educational goals.

The gap between traditional school effectiveness and virtual school effectiveness is smaller for program directors, who overall gave virtual schools higher marks on each goal, but still well-below the ratings for traditional school. In fact, the highest rating for virtual education by any group was a 3.5, which is over half a point lower than the lowest perceived value by either group for traditional school; at its best, virtual education, according to sampled populations, falls well short of the effectiveness of traditional schools in meeting the educational, social, emotional, and civic goals of education. Figure 4.10 further depicts the discrepancies in scores between traditional and virtual education, as well as between the samples of superintendents and program directors. Superintendents and virtual education program directors clearly perceive traditional schools to be more effective at achieving common educational goals.
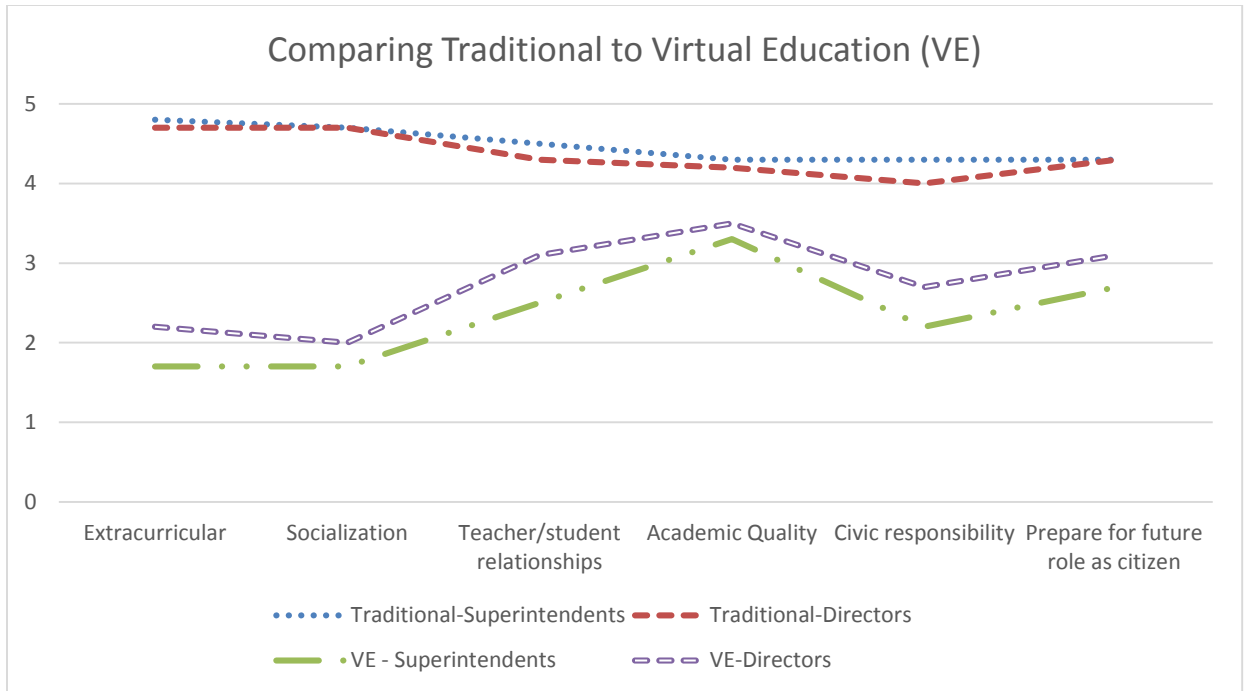
Figure 4.10 Comparing traditional to VE on educational goals– superintendents and program directors

In order to further examine superintendent perceptions in-depth, I disaggregated the superintendent average response data by the self-identified current status of virtual education in the district. The goal was to understand if superintendents who have adopted virtual education feel more strongly about its educational quality than those that have refrained from adopting. Table 4.7 further disaggregates the superintendent data according to the current status of virtual education in their districts.

Table 4.7

Average Strength of Traditional and Virtual Education According to VE Status- Superintendents

Status of VE	Traditional Schools	Virtual Education	Difference
Currently offer virtual education	4.4	2.5	1.9
Considering virtual education	4.6	2.2	2.4
Offered VE in the past, but not currently	4.8	1.9	2.9
Not offering or considering VE	4.7	2.2	2.5

Superintendents in districts who currently offer virtual education rated it the highest among the four categories of adoption status with 2.5 out of 5 towards achieving educational goals. Superintendents of districts who had formerly utilized virtual education but have since stopped this practice rated the strength of virtual education at a 1.9, representing the greatest difference between traditional and virtual education in the opinions of superintendents and program directors alike.

Summary of traditional school vs. virtual education. As clearly shown by the data, the perception by superintendents and program directors about the effectiveness of traditional schools and virtual education differed markedly. Superintendents whose districts currently offer virtual education rate it higher than districts without it. Further, program directors rate virtual education at 2.8 out of 5 overall in reaching stated goals, which is higher than the average score on any rating by the superintendents. This suggests that those closest to this model perceive its benefits to a greater degree than those further up in administration or those not utilizing it at all. Furthermore, superintendents who have previously offered virtual education but have ceased for any number of reasons give it the lowest average total of 1.9, indicating discontent and dissatisfaction. Scores on this measure indicate that virtual education, at its highest rating of 3.5, was a half-a-point *lower* than the lowest measure of traditional school strength, according to survey participants. Virtual education is viewed by Kansas administrators as falling well below the capacity of traditional schools in meeting commonly stated goals of education, and yet each year for the past sixteen years, more districts adopt this educational model.

Adoption of an educational innovation is not limited to the perceived effectiveness of the innovation. The various competing goals of education create a high level of uncertainty within the education field (Labaree, 1997). In the context of uncertainty, educational innovations gain

legitimacy via endorsements of other legitimate entities (i.e., word of mouth) and key agencies of stakeholder support rather than technical evidence (Rowan, 1982). Indeed, myriad considerations may also play a part in the decision to adopt or not adopt virtual education. This analysis of the perceived educational merit of virtual education compared to the standard educational model helps provide the context of further analysis and suggests that effectiveness and quality are not strictly the basis for deciding to adopt virtual education.

Research Question #2: Factors Motivating Consideration

In this section, I focus on events or motivating factors that may prompt a district leader to consider adopting virtual education. Eighty-five districts in Kansas currently offer virtual education, leaving seventy percent of districts out of the virtual education market. To survey that majority and identify future intent, if any, research question #2 asks:

2) *What factor(s) influence Kansas districts to consider the adoption of a virtual education program or school?*

Superintendents were asked to self-identify the status of virtual education in their district. Figure 4.11 presents the breakdown of responses for virtual education status.

Status of VE - Superintendent Survey

- Offering (64%)
- Considering (10%)
- Formerly offered (3%)
- Not considering (23%)
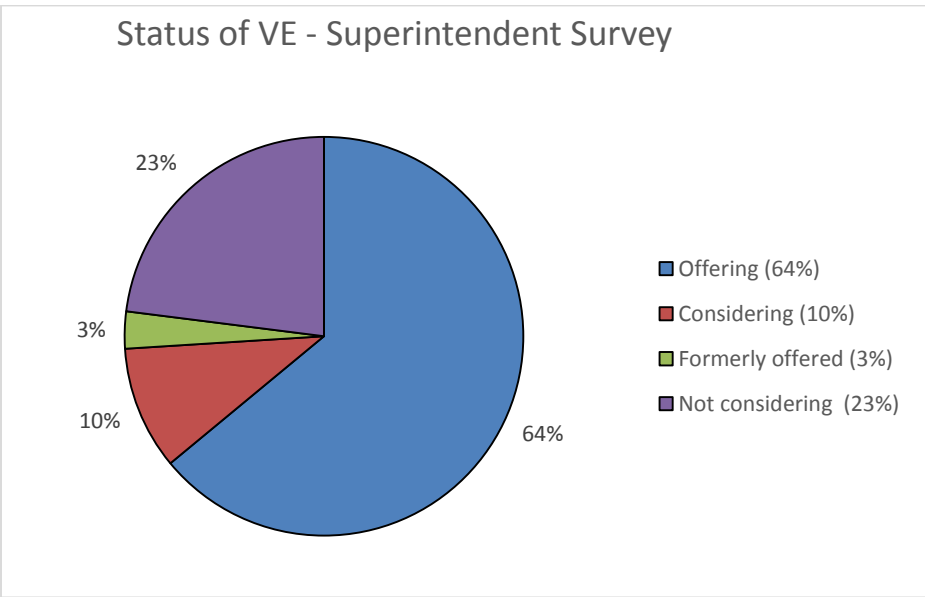
Figure 4.11 Status of virtual education-- superintendents

Sixty-four percent (n=72) of surveyed superintendents lead a district that currently offers some form of virtual education, and ten percent (n=11) of surveyed districts are considering some form of virtual education for the future. Superintendents who responded "Considering" on this survey question were then asked to rate on a scale of 0-10 the strength of seven factors contributing to the district's current process of considering the adoption of virtual education. Table 4.8 represents the strength of contributing factors according to the eleven superintendents considering virtual education.

Table 4.8

Factors Leading to Consideration

Factors Motivating Consideration of Adopting Virtual Education	*Average Value*
Virtual education is an innovative practice that will benefit our district's students	5.8
Administrators drove the initiative	5.8
Other districts had successful virtual education programs	5.6
Potential to increase district enrollment	4.9
Target homeschool students to increase enrollment	4.8
Teachers drove the initiative	1.5
Board of Education drove the initiative	1.2

Summary of research question #2: factors motivating consideration. The most important factors communicated by superintendents that are currently prompting the consideration of virtual education are: "Virtual education is an innovative practice that will benefit our district's students," and "Administrators drove the initiative." There was also strong indication of influence from the practices of other districts as superintendents rated the factor, "Other districts had successful virtual education programs" as the third highest contributing element leading to consideration of adoption with an average score of 5.6 on a ten-point scale. The least-noted influences were when the Board of Education or teacher interest were driving the initiative. Within the field of education, there is a typical amount of isomorphic pressure for institutions and organizations to become like one another through mimicry. Superintendents collectively viewed virtual education as an innovative practice and depicted moderate evidence to suggest that its use by other districts influenced their decision to pursue its adoption; this supports the idea of institutional isomorphism contributing to the diffusion and spread of virtual education in Kansas.

Non-Adoption of Virtual Education

A district's decision not to adopt virtual education can contribute to the understanding of this educational model and its use statewide. For every district that currently utilizes virtual education in the state of Kansas (n=85), there are two other districts that do not offer virtual education (n=201). When faced with an innovation, (educational) organizations respond based on the perceived legitimacy of the innovation and the perceived benefits and risks of adoption vs. non-adoption (Redmond, 2003). The voice of non-adopters of virtual education is included in this study to provide a counter to the cited benefits of this model. These district leaders have conceivably weighed the pros and the cons of virtual education for their district, and opted out of this growing educational innovation. Of the 114 superintendents responding to the survey, twenty-six (23 percent) noted that their district is not offering or considering virtual education as a future endeavor. This group was asked to articulate the three primary reasons their district had refrained from adopting virtual education, and their short answer responses were coded for themes then organized into general categories. Three broad categories emerged that explain the active decision of superintendents to not adopt virtual education: (1) Educational Limitations, (2) Financial Limitations, and (3) Alignment Limitations. Table 4.9 below shows the categories and themes with response frequency.

Table 4.9

Categories of Non-Adoption

Themes	Frequency of Response
Educational Limitations	
Educational quality is less than traditional school	9
Lacks important socialization	3
Financial Limitations	
High start-up cost	5
Market is saturated with programs	6
Virtual education makes money more important than quality	3
Lack of staff	4
Alignment Limitations	
Does not align with district goals	3
Not identified as a need	8

Educational limitations. Within the category of educational limitations, district superintendents described their perception of lower educational quality and the lack of important socialization opportunities as the primary reasons they have not adopted and are not considering future adoption of virtual education. Educational quality concerns voiced by district superintendents included a common thread that virtual education compromises what happens in traditional schools and could lure students away from the traditional structure. One superintendent explained, "[Virtual education] compromises current traditional education programs. Students have left our district to enter online programs, only to return significantly behind their peers in credits earned." One rural superintendent stated, "Virtual education doesn't provide the best overall education. [I'm] not convinced that virtual education provides or meets the standards students need." After researching virtual education in the past, one superintendent said: "Our district discovered that virtual education was not as engaging and challenging as what was being offered in the classroom. Our traditional students perform better than those utilizing a virtual curriculum."

The second educational quality limitation identified by non-adopters was the lack of important socialization for virtual education students. Superintendents were concerned with the lack of social interaction with other students, as well as the minimal student/teacher interactions. A small, rural district superintendent's response of the top three reasons his district is not adopting virtual education focused on the lack of social development in virtual settings: "social development, importance of learning tolerance, and learning collaboration," which he believes are hampered in the virtual learning environment.

Financial limitations. The most emphatic theme from non-adopter responses was the financial limitations of this model. This theme encompassed four separate categories which were noted by eighteen total superintendent responses. While there was some commonality between these themes, four emerged as separate and distinct with evidence for each and include: (1) high start-up costs (2) market is saturated with programs, (3) virtual education makes money more important than educational quality, and (4) lack of staff and funds to hire needed staff.

Noted as one of the limitations of virtual education by Berge and Clark (2005), high start-up costs can be cost prohibitive for districts, preventing them from adopting virtual education. This point was affirmed on the survey responses as technology costs, including the online platform and/or course development costs, were a noted concern of superintendents. One rural district superintendent stated, "We do not have the funding available to purchase the necessary technology equipment and classroom space in our building to deliver online courses." The single word, "Funding" was noted on one response, and one response used the words "Budget/technology" to explain the lack of financial solvency needed to explore this option.

The second financial limitation heard from superintendents was that the market is already saturated with virtual education programs. The title for this theme came directly from the words

of one superintendent: "The market is saturated with virtual programs and the cost to start would

outweigh the benefit." One rural superintendent agreed: "There are also plenty of virtual schools

available and we have no desire to start one of our own to compete with them." With "so many

competitors already established," superintendents vocalized the availability of other venues if a

student is interested in virtual learning. Indeed, one rural district feels "surrounded by virtual

education opportunities," so there is no perceived benefit to joining in by offering yet another

program when the market is saturated.

Three Kansas superintendents emphatically opposed virtual education on the basis that

this model makes money more important than educational quality. One wrote:

> Current forms of online learning do not equate to an effective instructor in the classroom,
> in my opinion. It is a race to the bottom driven by FTE and dollars. Instead of districts
> trying to lure each other's students away with free laptops, I think all virtual education in
> Kansas should be run through KSDE with each district getting a portion of the FTE. This
> would insure everyone plays by the rules and it would cut the cost of virtual education.

A rural superintendent's response concurs: "Virtual school participation has been driven more by

funding needs than a comprehensive and supported education of a student. TOO many students

arrive back at their home campuses without completing a virtual program." The superintendent

of a mid-size Kansas district (c. 3,500 students) agreed:

> Most of the districts (that) are providing virtual education are doing so, at least in part, to
> generate revenue and the service to students is mediocre, in my opinion. Our basic
> mission is still to provide quality education to students in our district. Some of our
> students are not well served in a traditional setting and have a need for computerized
> curriculum which we can provide in a blended or alternative setting, but not in a
> wholesale virtual environment. We aren't desperate enough to chase the money and
> won't do it until we can do it well.

The responses of these three non-adopting superintendents depict a strong opinion about the

market-based mentality of virtual education, which they claim is working to increase revenue at

the expense of educational quality.

The fourth financial limitation voiced by non-adopting superintendents is the lack of staff to accommodate a virtual education program. Three of the four superintendents whose responses portrayed this theme operate in small (less than 500 student enrollment) districts in Kansas. One wrote, "We feel we already offer what is necessary and we are not a large enough district for the staff required [to operate a virtual program]." Likewise, the other small rural school districts stated their staff was too small and would not have time for the additional duties and the demand of creating a virtual program. For these small, rural districts, the creation of a virtual program was not feasible given the availability of their human and financial resources.

Alignment limitations. Reading the responses of district superintendents, I identified two separate alignment limitations that occurred when there was either a mismatch between virtual education and stated district goals or when stakeholders had not identified virtual education as a need. One reply simply remarked, "Does not meet our stated goals." A second response from a rural district superintendent concurred: "does not align with District Strategic Plan." A third superintendent elaborated, "This is not a part of our district mission and/or goals at this point in time." The seeming disconnect between district goals and the practice of virtual education is an important factor in understanding the non-adoption segment of public school districts in Kansas.

The second alignment limitation was that virtual education was not a need vocalized by district patrons or stakeholders. One superintendent stated succinctly, "we are a small district and we serve our students well. There really isn't any need for providing virtual education locally." A second superintendent communicated that virtual education is "not requested by patrons, (we) have not had many students leave to participate in another program, and it has not been identified as a goal." Indeed, the lack of demand from district patrons and stakeholders was vocalized by

eight superintendents out of twenty-six, conveying incongruity between the benefits of virtual

education and the stated requisites of a district's population.

Summary of non-adoption of virtual education. Surveyed Kansas superintendents

choose to not adopt virtual education for a variety of reasons comprising three broad categories:

quality, financial, and alignment limitations. Some object to the educational shortcomings of this

model in comparison to traditional schools, while others take exception to the market-driven

approach to public education whereby they perceive funding dollars become more important than

a quality education for students. The final objection against virtual education adoption occurs

when the district goals do not align with this model and when patrons and stakeholders do not

express a need for its use. Later in this chapter, an examination of the benefits, challenges, and

limitations of virtual education will produce some overlap in the stated objections to virtual

education by non-adopters described here and challenges vocalized by its adopters.

Research Question #3: Factors Motivating Adoption

A main focus of this research study was to explore the adoption of virtual education as an

educational innovation within the state of Kansas. This section specifically addresses Research

Question #3:

3) *What factor(s) influence a district's decision to adopt or not adopt a virtual education*

   program or school?

Since first enacted in Kansas sixteen years ago, eighty-five different districts allocate

financial resources to support a total of ninety-three virtual programs across the state. What

about virtual education drew the attention, support, and investment of eighty-five different

districts in Kansas? What were these districts hoping to accomplish by its implementation?

Director and superintendent surveys contained an open-ended question asking for input about the

factors contributing to virtual education adoption. The thirty responses from program directors and seventy-two superintendent responses were coded for themes. The themes were combined into categories that capture the essence of meaning without diluting the opinions of participants. This resulted in three categories of factors leading to adoption: Educational Benefit, Financial Benefit, and Alignment to Stakeholder Needs. There is overlap between some categories and responses from participants, so every effort was made to identify the essence or primary factor of adoption when assigning responses to categories.

Educational benefits. A resounding voice in the exploration of factors leading to the adoption of virtual education was the desire by districts to tap into the potential expanded course offerings and benefits to learners needing flexibility and convenience. Key among this benefit was to create an outreach and alternative diploma completion path for adult learners and students in need of credit recovery. The superintendent of a small rural district stated: "Our small virtual school project is in conjunction with a diploma completion program that is offered in the district. The majority of our students are non-traditional and did not graduate with their cohort group." For another Kansas district, "our primary focus is on recapturing dropouts, providing credit recovery scenarios, and to offer advanced classes for acceleration." Still another rural district encountered a two-fold benefit from offering virtual education:

> For us it serves two main purposes. One, it provides students, both locally and throughout the state, the opportunity to get a high school diploma in a non-traditional format. Every time we graduate a student, it means there is one less person out there who will struggle without a high school diploma. For some, this is the only means possible due to circumstance. Secondly, it allows us to employ more people. In a rural setting, jobs mean people and families. The additional jobs bring additional income to the community, the county, and ultimately the school district.

Virtual program directors offered an additional dimension to the educational benefits sought by adoption of virtual learning opportunities that was not discussed by superintendents:

the ability to utilize an innovative educational tool to meet learners' needs. One director

explained how her district already operated an alternative component, and the "virtual

component was added as that trend in education grew and the ability to deliver classes online

became a reality." Incorporating resources in an innovative manner and drawing on the strengths

of people in the district drove the founding of one of the very first virtual programs in Kansas.

Their director explained the factors of adoption for her district:

> We had staff and administrators who were very interested in finding unique and different ways to utilize the technology we had adopted in the district. In 1998 there was no other virtual school in the state of Kansas, so there was no path, proven or otherwise, on what to do. The right mix of people came together in our district and decided to create a virtual school. We wanted to reach out to the many families homeschooling and needing an alternative education in Kansas and give them an online connection to our curriculum, resources and staff in our district.

Another early pioneer shared insights about adopting the new model of virtual education

unrelated to what was happening in other districts:

> Our district has a history of researching, investigating and adopting progressive educational practices. As the second authorized virtual charter school in the state of Kansas, the motivating factor to adopt a virtual education piece in our district was not contingent on the success in other schools. It was adopted to provide a unique pathway to an education for students who were not being successful in the brick and mortar setting.

According to those surveyed, adopting virtual education offered an opportunity for involved

districts to expand their educational offerings to the benefit of their students.

Financial benefits. Many responses from superintendents and program directors cited

the financial benefits of adopting virtual education. Superintendents spoke candidly about the

pressures to get into the "business" of virtual education due to market competition. Against the

backdrop of decreased public school funding in Kansas over the past decade, districts are

feasibly enticed by the ability to increase enrollment via a virtual education program. One

superintendent described the importance of the financial component of virtual education: "We

were concerned about the loss of revenue due to private online schools' predatory practices. We feel we must compete in order to protect ourselves financially." A small rural district concurs: "We are a small rural district looking for ways to increase enrollment and to prevent students from leaving our district to attend other virtual schools. The saying, "if you can't beat them, join them" comes to mind." Another district also sought out virtual education options as part of a service center model in response to pressures from competing districts: "We have other aggressive virtual schools that are taking our students or potential students and it is lost funding. We are not currently able of independently operating our own virtual school and are part of the Greenbush Educational Service Center consortium."

This sentiment was echoed by several program directors. Said one: "We adopted (virtual education) so students had other options. We also had concerns about other districts who had companies running their virtual schools who were not serving the best interests of students residing in our district." Joining the business of virtual education appears to be an offensive technique to recruit new students to increase enrollment, but also a defensive mechanism to maintain students within the district and fend off encroaching virtual schools with statewide enrollment capabilities.

Districts surveyed are not only losing enrollment to other districts' virtual programs, they are also experiencing declining enrollment due to increasing numbers of families turning to homeschooling. Nationwide this growing trend is estimated to include between one and two million students in grades K-12 (Basham, 2001). While there is potential overlap between the homeschool population and those seeking virtual school options, Kansas families may homeschool[13] on their own independent of a virtual school. Some homeschoolers do choose to

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[13] Homeschoolers in Kansas operate as unaccredited private schools and must comply with the registration requirements of KSDE (KSDE Website).

enroll in virtual schools and some do not. Nine superintendents and nine program directors

mentioned the desire to recruit homeschoolers to their virtual programs. In an interview with

City VS, the program director said: "It was the brainchild of an assistant superintendent who was

purely focused on reclaiming homeschool families. They (district administration) wanted to

reclaim those FTEs. So that was the nexus behind things." A second program director voiced

consensus: "There is a high population of homeschooled students in the area, and the district

hoped to provide those parents with a quality alternative and challenging curriculum." Creating a

virtual education program can garner financial benefits for a district in three ways expressed by

superintendents and program directors: prevent in-district students from leaving to attend another

virtual program, recruit out-of-district students to the virtual program, and attract the growing

population of homeschoolers to a virtual learning setting.

Alignment to stakeholder needs. A final impetus for adopting a virtual program came

when it could align to and support the needs of stakeholders, namely the district and individual

students. For one district, the superintendent described the driving force behind a virtual program

initiative:

> (The goals of) increasing access to technology and moving toward an optimum digital
> learning environment became a strategic initiative for the district two years ago. The
> Board of Education is currently focused on providing a variety of options for learners to
> aid in improving student engagement and the district's graduation rate. We see virtual
> education as one avenue to get there.

Virtual education aligned to the strategic plan of several surveyed districts to meet technology

and innovative goals in a way customized to meet individual learner needs. One superintendent

of a district in a town locale stated: "Virtual school was initially studied and ultimately adopted

to give students more choices in terms of courses, delivery of coursework, and to meet the needs

of students who need an alternative method of learning." Three specific populations of students

mentioned by superintendent responses were English Language Learners (ELL), students with

special education needs, and students with health issues. For a district in Southeast Kansas,

virtual education began as an alternative program and now has a wider reach:

> We started virtual education for our alternative school. This is for students who are in danger of dropping out. This has helped many who would probably never have graduated to get a high school diploma. We also use this for students who have special needs such as pregnancy or a medical condition.

The educational benefits of flexibility and accelerating or slowing down the learning process

based on learner needs were described by both superintendents and program directors in this

category that I have termed "Alignment to Stakeholder Needs," which affirms research on the

benefits of virtual education in customizing the learning environment for student needs (Barbour

& Reeves, 2009; Berge & Clark, 2005)

Summary of research question #3: factors motivating adoption. Each district's path to

adopting virtual education is specific and unique to its context, priorities, values, and patrons.

Nonetheless, of the seventy-eight Superintendents and thirty program director responses, patterns

and commonalities emerge to explain the decision to adopt virtual education. Seeking to adopt an

innovation is clearly composed of an effort to obtain its perceived benefits; districts sought to

adopt virtual education to access the practical uses and hoped-for benefits in the areas of

education, finances, and stakeholder need. There is evidence of isomorphic pressures to be like

other educational organizations via adoption of a virtual program as the practice spread and

'competitors' for student enrollment emerged. The next section on reported benefits, challenges,

and limitations of virtual education coincides with the previous two sections to point to an

important finding: non-adopters of virtual education seek to avoid the noted challenges and

limitations of the model while adopters look at the same reality and opt to focus on the intended

benefits of the model in the adoption of virtual education.

Research Question #4: Benefits, Challenges, and Limitations of Virtual Education

The fourth and final research question of this study was an attempt to identify Kansas

virtual school directors' perceptions of the pros and cons of virtual education.

4) *What are the reported benefits, challenges, and limitations of virtual education in*

Kansas?

A major focus of each director interview consisted of exploring, in the experience unique to each

program, the benefits, challenges, and limitations of virtual education. As much of this data was

collected in a conversational manner via interviews, I chose to infuse this section with an

emphasis on the words of the participants in order to focus on meaning and understanding, as is a

hallmark of qualitative research (2009).

Program director interview participants were purposefully selected to represent a cross-

section of location types across the state. All participants chose to carry out the interview via a

phone call, except for one (Town1 VS), which was carried out in person. I realized immediately

that scheduling an interview over the phone was convenient for the participant and allowed

minimal imposition in their busy work schedules, but it made for challenges to the researcher in

not being able to read facial expressions, interpret body language, or carry out a truly personal

conversation. I recognize that the optimal setting for an interview would be face-to-face to give

every effort towards building a rapport with the interview participant in a trusting environment.

Program directors voluntarily participated in follow-up interviews, and not surprisingly,

were positive about their jobs and willing to help my research by their participation. Two

different interviews concluded with the participant asking for me to share my finished

dissertation with them, as they were interested in my findings. The six directors share a combined total of thirty-one years of experience operating their current virtual programs; one has led her program for fourteen years, one for eight years, one for three years, and three directors are in their second year of leading virtual programs. The depth of responses to interview questions varied drastically, with the longest interview lasting fifty-one minutes and the shortest lasting only seventeen minutes.

A focus of the interviews was to explore the benefits, challenges, and limitations of each program from the vantage point of their leaders. After transcribing interviews, coding for themes, and organizing themes by categories, two strong patterns of benefits emerged and four categories of challenges and limitations were voiced by directors. Beginning with an exploration of the benefits of virtual education as perceived by select program directors in Kansas, Table 4.10 depicts the reported benefits organized into two broad categories.

Table 4.10

Reported Benefits of Virtual Education – Program Directors

Categories of Benefits	City VS	Suburb VS	Town 1 VS	Town 2 VS	Rural VS	SC
Educational Benefits						
Convenience and flexibility for learners	X	X		X		
Expanded course offerings (i.e. rural)		X			X	X
Credit Recovery				X	X	
Students can accelerate and earn additional credits				X		
Creating partnerships with parents			X	X		
Administrative Efficiency						X
Alignment to Stakeholder Needs						
Meet diverse student needs	X	X	X	X	X	
Offer school choice option to students	X			X		

The most commonly-noted benefits reported by directors were centered on ways in which the flexibility and range of educational offerings made possible by virtual education benefited students; even the two benefits categorized as "Alignment to Stakeholder Needs" (*meets needs of students with diverse needs* and *offer school choice option to students*) maintain a student-centric perspective by addressing the needs of learners. Following are the words and experiences of directors explaining the benefits of virtual education to Kansas students by those charged with its daily administration and leadership.

Benefits of K-12 virtual education. The program director of Town2 VS passionately stated her opinion about the primary benefit of virtual education: flexibility to the learner.

> (Virtual education) can be fantastic for those who really take advantage of it…I think one of the benefits is the flexibility. We still offer a huge amount of flexibility. You know, it's the 'anytime, anyplace learning' and I think for some families, that is a godsend. It's exactly what they need. That can go with a family dealing with medical issues, one who travels a lot due to dad's business, military…there's just a great deal of flexibility. It could be, and I have a lot of these now, for adults who are trying to earn their diploma for

bettering their family. It truly is where they can work a full-time job, still pay bills for their family, still take care of their children, and then try to squeeze this in.

Similarly, the director of the Suburban virtual program described the flexibility and convenience of an adjustable schedule:

> We've had a couple of cases where the kid has been ill and being able to work at their own speed has been able to get caught up. We've had some parents who have been deployed and their kids have not been able to cope well with that, so that allows them the ability, when things are going ok to work, much like when they are ill.

Virtual education allows customization to student or family needs in ways unparalleled in traditional schools. Barbour & Reeves (2009) detail this customization as a benefit to many students with diverse needs who would otherwise be unable to attend traditional schools, such as those hospitalized, homebound, incarcerated, traveling due to parental careers, pregnant, or who are employed. Each director interview articulated one or more instances of virtual education reaching a particular or general circumstance to offer expanded and flexible educational opportunities to students. The director of City VS explained the ability to address specific learners' needs.

> Benefits: I think at the extreme end of things, those kids with health conditions that I can support. Some of those other pieces that…I have a kid that is a semi-pro hockey player. He is from a smaller school district, outlying school district. And they were not supporting him missing school at all. His mom just happens to work for our district. We got him in here, and he's thriving with both: taking upper level courses and playing a lot of hockey.

Town1 VS and Rural VS explained how sometimes the traditional school structure falls short of meeting learners' needs, such as the student that just does not fit in at school or a student not feeling appropriately challenged. In those instances, the customization and alternative environment of a virtual program can give the student a new opportunity at success.

For the Suburb VS situated nearby a military fort, their district serves students with a wide range of learning backgrounds and experiences. Their English Language Learners (ELL)

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population grows by fifty to seventy-five students each year, and the military base brings students from all over the world with varying educational preparation into the district. In addressing this broad range of educational needs, the district benefits from virtual education: "So basically what we wanted to do was see what we could do allowing kids to do a various number of things since they are basically coming from all different kinds of school backgrounds, from none to very sophisticated depending on where they are at." Virtual education expanded this district's ability to provide appropriate education to students based on diverse learner needs and circumstances necessitating flexibility.

An additional educational benefit noted by directors was expanded course offerings. Many districts, particularly in rural locales, are facing exigent financial situations and shortages. Virtual education can broaden access to course selection and help overcome resource deficits faced in rural schools due to teacher shortages (Picciano & Seaman, 2007). Virtual programs in both the suburban district and rural Kansas district expressed this beneficial component of virtual education. Suburb VS Director stated:

> I think it also gives, for our students, an opportunity to take classes that wouldn't normally be offered, we wouldn't be able to offer or have a certified teacher that's able to teach that class. In terms of allowing them to take that particular class…We just want to give kids the biggest variety of opportunities.

Likewise, Rural VS said, "We sit in a very rural area, and we weren't necessarily able to offer as many courses in our on-site buildings to kids that we wanted them to have." Virtual education, via a partnership with a service center in the state, has brought expanded course offerings to students in this rural district and surrounding communities. The director of the service center provider offered an additional perspective as she described the structure used by some of her partner schools, rural and small in size, to incorporate blended learning opportunities out of necessity.

And we've got a couple of small districts whose students actually do it on campus during an hour that they would normally take the class, but they can't offer the class. (The school) can't afford to have teachers for everything, so the student for 3rd hour may be in a computer lab and they have someone proctoring, and they are taking the class through us. Then the go on about their regular day in the traditional setting. So we just try to accommodate in any way we can.

Virtual education broadens public school options for students and adult learners who are missing required course credits for graduation. Termed "credit recovery," virtual schools in Kansas may choose to offer courses in this format to assist with diploma completion efforts for learners in a setting different than a traditional school. Both Town2 VS and Rural VS voiced this as a strong benefit of their programs. For Town2 VS, non-traditional adult learners are able to work through courses one or two at a time. This is an option that would not otherwise be available in a traditional high school setting, and they appreciate the flexibility of scheduling it allows. The director notes how the ability to create a flexible learning environment for adult learners looking to pursue credit recovery creates a "situation where you have kids (and adults) that don't have to be boxed into how they pursue this." Credit recovery via an online delivery format has reached and benefited students of the Rural VS, as well. One of the primary aims of establishing Rural VS three years ago was as stated: "We also had some students who were struggling with credit recovery, were struggling to fulfill all of the credit requirements, so it was just really time for us to make some offers different from traditional education" to target this growing demographic. For Rural VS, some credit recovery learners operate fully online from home via the Edgenuity website, while others seeking to earn credits who enroll past the September 20 funding deadline are able to attend the local high school and access the virtual program's curriculum using on-site licenses for the Edgenuity learning system. Again, the flexibility of the virtual education format allows for broadened means and various modes of accessing courses for students seeking credit recovery.

The fourth educational benefit was the ability for learners to accelerate their pace and earn additional credits. Another derivative of the flexibility and convenience of virtual education, students on the high end of the academic spectrum are also provided access to online courses which can speed up their high school timeline. For Town2 VS, the director spoke passionately about the role of virtual education in providing academic acceleration to select high school students.

> I have, every year, a handful of juniors who graduate because they have reached the set graduation requirements, and they've done it through hard work and sweat and just rolled up their sleeves and worked really hard at it. For those kids, it that's what their goal was and they want to get onto college or community college, they are thrilled that they can get to it a year or half a year early. And I love being able to offer that as, you know, an option for kids outside the district and inside the district as well…So it creates an out-of-the-box approach that you just weren't seeing prior to (*virtual education*).

The structure of virtual education is such that parents, ideally, take a more active role in administering instruction or facilitating online learning, depending to some degree on the program structures. Creating positive partnerships and building strong relationships with parents as true partners in their child's education was very rewarding to the director of Town1 VS:

> Truly our belief is that parents are their best teachers, so teaming with parents and making sure that we get, we're supplementing parents where they find holes in their own abilities, so just that teamwork. And seeing students improve and be successful…and then just seeing parents stake a real interest in their child's education, and seeing that relationship between the child and parent grow.

One benefit heard from virtual program directors was voiced solely by the service center provider. The structure of partnering with a service center allows smaller districts to offer another school choice option to their students by benefiting from the administrative efficiency of the service center partnership. She explained:

> What we do, our goal as a service center is to provide any help and assistance to schools. And so what we've done is partner with these districts if they want to have a virtual program. We don't call it a virtual school because it's not a stand-alone school. It is a program within their district. The districts are not out (*costs*), it's not necessarily a money

making things for them, they are just trying to keep students in their districts. A lot of them have lost students to the businesses that have come into Kansas and different things, homeschooling and things like these. They still want to provide for their students, so this is another program that if it is fitting for a student, they can use. They are only dealing with students in their district… We provide the teachers for those classes. We have highly-qualified teachers for all the courses we offer. We hire them, we pay them per course per student and we also do the evaluation piece for them and the professional development piece. So that's what we do for the district, and they pay us a fee for that. The fee is less than the FTE that they get. So they stand to make a little bit of money, and it's cheaper than them trying to open their own program.

The Service Center currently has forty district partners across the state; not all of them currently have students enrolled, but they went through the process of forming the partnership and applying to KSDE in order to be prepared for when a student needs a virtual learning format. The largest partner program has about twenty students, a few programs currently serve ten-fifteen students, and some have less than ten students enrolled at any particular time. Administrative efficiency, a benefit cited by Barbour and Reeves (2009), greatly benefits the small rural districts of Kansas who alone, could not offer virtual courses.

The final vocalized benefit of virtual education from program directors was the ability to offer a school choice option to students locally and statewide. Within the increasingly diversified field of education where options include public, private, charter, religious, and now virtual schools, parents and students are afforded more choice than ever before. The director of City VS described virtual education as an *opportunity* for learners along the school choice spectrum.

> It provides an alternative for families, and it gives a second or third alternative within our district for families. If you are struggling with your child being successful in the traditional setting, this is an opportunity. I share with families: it is an opportunity and just that. If you are not successful at it, we need to be able to agree that we're not successful and move forward.

A great benefit for the director of Town2 VS comes by providing choices to families based on individual needs. She said, "It's everyone thinking differently about individual kids and what individual kids need, that really I think gives us the ability to meet needs better both in the

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district and out of the district." Customization and an individualized approach to education based on learner needs are appealing aspects of virtual education.

   Summary of benefits. Program directors were asked via interviews to identify the benefits of their virtual education programs, and they spoke with passion and conviction about the ways in which virtual education has impacted the trajectory of some of their students' futures. The themes that emerged were educational in nature and illustrated how virtual education has supported stakeholder needs in various ways. Without fail, each program director cited specific instances of their program helping students recover lost credits, overcome personal or health issues, expand the range of course offerings, provide an accelerated path to graduation, bestow educational choice, or offer unparalleled flexibility to learners to customize the course of their education. Virtual education appears to be sought after by students or parents in need of flexible learning, but the emphasis was clearly on satisfying the need for flexibility with little mention of high academic standards, learning outcomes, or rigor.

   Challenges and limitations of K-12 virtual education. Because of the nature of a program director's work and expansive knowledge of program details, I felt it best to illicit their perceptions about the challenges and limitations of virtual education. Surveys of program directors included an open-ended question asking for directors to share the top three challenges they face within their program. Twenty-eight directors completed this question with responses ranging from one short sentence to some responses that were four or more sentences in length. Challenges of virtual education were also a topic of discussion in each of the six interviews. Interestingly, the list of challenges vastly outnumbered the reported benefits by the same interview participants. Over fifteen individual themes emerged after coding, and I then organized

them into four broad categories. The categories of challenges and limitations are: (1) Educational

Challenges, (2) Patron Challenges, (3) State Challenges, and (4) Model Limitations.

Educational challenges. Program directors identified the following educational

challenges of the virtual education model: communication, building relationships despite lack of

personal contact, isolation, staffing, and ensuring student progress and attendance.

Communication was voiced as a challenge by two directors due to the structure of virtual

learning and the distance between teachers and students. One specified, "communication with

students over such a wide area (we are a state-wide program)" and the second stated it is difficult

to have timely communication with both students and parents. Closely linked to communication

challenges, five directors mentioned the difficulty of building relationships between student and

teacher due to lack of personal interaction. Referred to by one director as "lack of personal

interaction and face-to-face communication," this sentiment was strongly shared by the director

of the service center:

> Well, to me, it's difficult in virtual because you don't have as much one on one time with
> students. I'm a firm believer that the relationships between students and teachers in a
> regular setting are what get (*sic*) a lot of them through. I'm probably a perfect example of
> that. I mean, you can have those relationships in the virtual setting, but it's not the same
> as when you see the person. So that's a challenge, trying to figure out how to build those
> virtually.

Virtual programs work to overcome the nature of the distance learning model by utilizing social

media for communication and planning various socialization opportunities for students who live

nearby the school's location. The director of City VS explained his program's attempts at

socialization:

> We build in workshop opportunities where it's an opportunity to come in and learn more
> about…one coming up is Black History Month and we have the history museum coming
> to campus. We have writing workshops, we have a music club that meets on Fridays, and
> we have a chess club that is beginning. We do have some field trips along the way in the
> school year. On Fridays, one of our teacher-led initiatives is called Dragon Time, it's a

cohort-based just some activities on Friday afternoons. So freshmen and sophomores meet on one Friday, next Friday is juniors and seniors. It's an opportunity for them to come in, well-planned, well-organized, but we find that all of those pieces are very lightly attended. My teachers starve for students to be around. They believe the kids want these opportunities. But I'm finding, just by sitting back and supporting my staff to plan those activities, we just don't have the attendance to warrant trying to do some bigger-scale things. My staff would like to do a prom but I'm not going to throw a prom for 12 kids.

Despite the efforts to provide socialization and build strong teacher-student relationships via the internet, the lack of personal interactions can compound and result in student isolation.

Student isolation was a common thread running through two director interviews that gave these educators serious concerns about their virtual learners. Town VS2 director said:

I think some of the drawbacks are that isolating, that place of isolation that you get to. And if you're not somebody that reaches out and advocates for yourself very well, and you tend to go to that isolating place anyway, this can be very damaging. I deal with students on a regular basis that I am very concerned about. You know, they think in the beginning that this is going to be so great and they have great excitement for what they are doing, they find pretty quickly that the isolation of it just takes them to a different place mentally and psychologically, and I think it can be tough. …But that's a tough thing about not having a teacher in front of kids on a daily basis. Some kids can handle that really well, and they move through coursework very easily because they are advocating when they need to advocate, reaching out for help when they need it, reach out for tutoring when they need it. Other kids just allow it to pile up and it becomes the mountain out the molehill thing, and then they find themselves in a hole and they don't know how to get out of it…It's just that constant balance of trying to figure out which kids are going to be successful and which kids won't; which kids are being successful, which ones are floundering. That's the constant battle: I can't look them in the eye and see if they are understanding something.

Similarly, Rural VS director noted the tedium and isolation that can occur in a virtual learning setting. She said:

It becomes monotonous and dull. Even when they are working, when they first start, we always inform them that this becomes tedious, this becomes monotonous, you may be lonely or experience loneliness. They always say they are not going to, but they do. Sometimes they feel isolated, or that they can't get answers in a timely manner. Sometimes the delivery system or the hardware doesn't work quite right. So those are all challenges that we face.

Another educational challenge for program directors is staffing. Expressed by some on the survey as simply, "staffing," a few articulated further about their challenges in this area. One wrote, "Staffing in regards to finding the right people to build relationships with students online; this is getting better as time goes on." A second explained there is a challenge in, "finding staff who are open to new practices and fully embracing the virtual concept in their pedagogy." This challenge is linked to one benefit noted previously that is provided by partnering with a service center the service center provides the online courses and does the hiring and training for virtual teachers. This can alleviate the challenge of finding skilled online instructors for partnering districts.

The final educational challenge expressed by program directors of virtual programs was ensuring student progress and attendance. Every virtual school in Kansas is required to have an online delivery system for courses and a means to track attendance online. Program directors expressed difficulty with, in the words of one, "monitoring students' performance and ensuring work is getting done in a timely manner." Due to the separation of distance and time in the asynchronous virtual learning environment, oversight of participation is challenging for virtual programs. One director expressed the challenge of needing to ensure "students are putting in enough time to complete courses on time." Further, it is necessary but challenging to "monitor the students who are enrolled in the virtual school for validity of work done."

Patron challenges. Patron challenges were divided into three sub-categories: Parent, Student, and the Public. From the perspective of a virtual program director, parents play an essential role in the success and outcomes of their students. Three challenges these school leaders work to overcome are building parent involvement, helping parents understand the unique needs of the virtual learning environment, and when parents use virtual schools as a

means to avoid truancy claims or escape a traditional school setting. One surveyed director

wrote of the challenge of inducing parent involvement: "Getting students and parents involved in

their learning. Too many parents make the connection (to the school initially) and then step away

from the responsibility of guiding their children." In the interview with the director of Town2

VS, she reiterates the ways in which virtual learning requires a different level of involvement

than when a student attends traditional school:

> And that's what I have to get people to understand a lot. If your child is struggling and they have at teacher in front of them every day that's directing their show, and they do not want to take care of their responsibility in that manner, then they are not going to do it in a virtual world. The big difference is you will not have a teacher in front of you orchestrating the day to day activities. You are basically now having to do it yourself, or as a parent, you now have to step in where your role with your child may not be great anyway, or your relationship may not be great anyway, and you're stepping into the role of not only parent but teacher in guiding them through their day. I warn parents a lot that that can be a train wreck. If your relationship is not the best it could be anyway, that's not going to help it by having to wear that hat (as teacher) as well with your child.

Closely linked to parent involvement was a strong message from directors of needing to

help parents and student alike understand the unique needs of this delivery model. One director

responded on the survey: "A challenge we face is getting students and parents to understand that

the virtual option is not easier than the traditional educational setting. Also getting across to them

that they still have to spend time working on their courses to complete them." A second surveyed

response reiterated:

> Getting parents to carefully consider the work ethic and abilities of their children and whether learning virtually is a good choice for him or her. Many of the parents I work with are letting the student make the choice, and the stimulus for it is usually lack of attendance in the regular school.

As eluded to in the preceding quote, virtual programs are sometimes sought out when families

are trying to evade attendance requirements or legal complications due to truancy from the

traditional school. One director stated the challenge of, "students and parents using virtual school

to get around compulsory attendance requirements" as making for an unsuccessful partnership.

The director of City VS spoke of this in the interview:

> Where we are unsuccessful is where parents are running from the commitment to get their child educated. If they are running from truancy issues, if they are running from teachers and administrators who are trying to hold their children accountable for academics or behavior…That's where we are not going to be successful either because the parents are not going to be supportive of their child and of this school any more than they would have been at another high school in town.

It is clear that the level of parent involvement and degree of parent support is crucial to student success in a virtual program.

Student factors can also present a challenge to program directors, including attracting and recruiting motivated students and the challenge of motivating and engaging students academically. While some directors simply used the words 'motivating students' and 'recruitment' on their survey response, a few elaborated further. One said:

> The perception that virtual education is an easy way to achieve a high school diploma is a tough one to dispel. It is difficult to recruit the types of students who may be successful, i.e. self-motivated, goal-activated, eager learners. Motivating students once they hit the tough parts of their coursework to continue to strive for completion and success (is a challenge).

Directors recognize the need to attract the right kind of student to the virtual learning environment; in the words of one director, one with "the qualifications to be successful in this kind of learning environment. Mainly the attitude of the student and their support system; students need to want to learn, rather than (be trying) to avoid the traditional system." Indeed, one director linked motivation to the challenge of building relationships with learners: "Keeping students moving forward with their course progress and completing (is a challenge). This involves helping my students and staff create the types of relationships that help motivate and encourage participation in the learning process." The director of Town2 VS points to two factors

as predicting student success in a virtual setting: level of motivation and taking advantage of the

opportunities to make meaningful connections with staff and community resources.

> (Success) has so much to do with two things: internal, your own level of motivation, and how much of an opportunity you take to make connections. And we give a great deal of opportunities for families to make connections with us, and if you don't take advantage of that, you are very isolated. And so those two things really play into the success level. You have a family that will take full advantage of the opportunities to connect and if they have the right level of self-motivation, this is a fantastic program. And it leads to great success. And then the other occurs as well. It's just so hard to predict.

Research supports this finding from Kansas directors; student motivation, learner autonomy, and

personal level of responsibility are essential components of an effective online learner (Fjortoft,

1995; Morris et al., 2005; Rice, 2006), and the deficit of these traits is a difficult challenge

plaguing all online learning situations, including Kansas virtual programs.

In addition to challenges involving parents and students, an unexpected finding of this

study was the challenge program directors face in counteracting the negative perceptions of the

public and even educators about virtual education. "Perception" was listed in varying formats a

total of eight times on the director surveys, but not once in the interviews. Responses varied from

the simple word, "perception" to more robust descriptions of this challenge. One director

responded to the question of challenges of virtual education by simply typing, "Perception is

number one!" Survey responses included the "perception of virtual education among

colleagues," the perception of virtual education in the community, and the perception from

traditional school supporters that view virtual education as a supplement to traditional school but

not a viable, high-quality stand-alone option. The strongest sentiment was shared by one

director's response speaking to the challenges of overcoming perceptions from various groups:

> Perception of the public about quality (of virtual education is a challenge). The fear from school districts around Kansas that we are going to steal their students and the requirement that we have to notify the superintendents in these districts that we will be

advertising about our school in their district. We have received anonymous hate mail from superintendents saying that we sold out.

There is a clearly a high degree of negative sentiment surrounding virtual education that program directors face at varying degrees and work to overcome as a challenge within this educational model.

State challenges. Virtual education programs directors identified two challenges from state-wide requirements: administrative requirements and challenges associated with the funding structure of virtual programs. Administrative requirements for virtual schools are different than for traditional schools; one surveyed director stated, "We are held to different standards by KSDE than brick and mortar schools." These requirements include an annual Desktop Audit required by KSDE for accreditation purposes and providing detailed documentation in the form of an Academic Activity Log for students on the two count days in September to receive state funding. One program director described a major challenge of virtual programs as: "Following the attendance requirements to receive funding for our virtual school." Organizing the paperwork and having parents complete and return the needed documentation is an administrative challenge. In fact, in an interview with the program director of Suburb VS, she described the challenge pertaining to documentation:

> Because of the way the funding of that works, we have to have them promise that they will do all the paperwork we need to count them as one of our students. And sometimes that's not very successful, so if a student is not willing to participate in the paperwork we need from them, we do not invite them back next year.

Obtaining the signed Academic Activity Logs documenting learning time allows the virtual program to receive per pupil funding at a rate of 1.05 the BSAPP (base state aid per pupil) amount for full-time students. Partial funding can be claimed for students in a blended or part-time virtual setting with the balance of funding being received by the brick and mortar school

where the student attends. Virtual school records are audited by a KSDE auditor each year, as is the protocol for each school district. According to the Virtual School Act of 2008, funding based on enrollment numbers comes from the state and flows into the virtual school fund at the district level. This money is used for various purposes within a virtual program, including hiring teachers and administrators, training and professional development, purchase curriculum, provide necessary technology to families, and pay for hard costs such as office space and utilities.

As described in research by Berge and Clark (2005), one of the challenges of virtual education is the high start-up cost affiliated with beginning a new program and operating at low enrollment numbers in the early years of operation. Surveyed directors face a financial challenge when students want to enroll in the program following the September funding count days; because no funding is received from the state after this cut-off date, late enrollees can heavily tax a virtual program's budget. Although funding differences between brick and mortar schools and virtual programs are heavily contested in the literature (Barbour, 2012; Clarke et al., 2007; Miron & Urschel, 2012; Roblyer, 2008), the small size of many virtual programs can make it difficult to absorb the costs of students wishing to transfer mid-year. For example, Town1 VS purchases curriculum from a private curriculum company for each of its students. The cost per student ranges from $1200 to $1700 per student. With the 2013-2014 BSAPP amount being approximately $4030 per virtual school student, nearly forty percent of state funding is consumed by curriculum costs alone. To receive a student any time after September 20 for whom no funding is received and to spend $1700 on curriculum can greatly hamper a virtual program's financial viability. Some programs have policies preventing enrollment after the count days for this costly purpose, while others do allow transfers into the program despite the cost burden. One

surveyed program director noted the financial constraints imposed by the funding procedures of

the state as a great challenge to the virtual program: "financing placements for students who

transfer into the program (which we always accept all) after the state funding period." Rural VS,

when interviewed, described the approach of their program to attempt to overcome this challenge

of funding and enrollment:

> The other part of our program is that we also have some on-site licenses for Edgenuity (*their online curriculum provider*), so we allow some students to work partially virtual and partially in the classroom. We have three students doing that right now. And they have come in after that September 20 deadline, and we've just been able to offer this to them as an opportunity.

Enrollment size and cost of curriculum per student are factors that weigh heavily on a program's

ability to accept students after the funding count days have passed.

> *Model limitations.* The final limitation or challenge faced by virtual education in the state

of Kansas is that this model, in the words of the program director of Town2 VS "is not the way

most kids are going to find success." Resoundingly, program directors who were interviewed

voiced this concern and ongoing challenge of counseling parents and families either towards or

away from virtual education based on the situation, motivation, and level of family support.

Town2 VS director passionately stated:

> It's hard to predict (*which students will be successful at virtual education*). And I counsel, counsel, counsel people. I feel like a huge part of my job is to try and counsel people away from this. And it's funny because you think you want to get whatever enrollment you can get. But I spend from May-September basically trying to talk people out of doing this… As much as I love my program and I know what it can offer to families, it's not always the best option. This is not the way most kids are going to find success, and I know that.

Finding the right student with the right level of family support to be successful in a virtual

learning environment was a stated challenge to the director of the City VS:

> I'm going to say that picking the right kids makes a huge difference. Students who, and I try very hard to give most families that voice interest in this opportunity a chance. But if

they have showed no success in a brick and mortar where they have a lot of support system and someone helping them manage their time between 8:00-3:00-if they can't show some success there, I don't see where they could be successful in our program or in any other online program…The kids who don't have support from parents, the kids whose parents don't check on them daily and don't help them manage due dates are the kids that are not very successful…I share with families, it is an *opportunity* and it's just that; if you are not successful at it, we need to be able to agree that we're not successful and move forward (*to find a different learning option*).

The director of Town1 VS concurs: "I think it has to be the right fit for the family in that the parents really believe in virtual education and taking a strong leadership role in the child's education because without that teamwork of (school) and parent, the child is never going to be successful." Echoing these sentiments, the director of Rural VS shared: "I would never, and I know never is a long time, but I don't believe virtual education could be a one size fits all scenario…No, I wouldn't say that it is made for everybody." When there is a disconnect between the capabilities, motivation, or situation of a student and the demands of the virtual education model, program directors resoundingly predict that a change in educational placement is necessary for that student to find success elsewhere.

Summary of challenges and limitations. Virtual program directors engage on a daily basis with students, families, and teachers in a virtual setting and have firsthand experience with the struggles and limitations associated with this educational model. While they concurrently value virtual education for the flexibility, customization, and alternative educational path it provides students, they temper the benefits with very real challenges in the areas of students, stakeholders, the state, and model-specific limitations. The truest and loudest statement to emerge from these conversations was voiced by a seasoned virtual school administrator with over fourteen years of experience who succinctly acknowledged: "this is not the way most kids are going to find success." Clearly, virtual education is not a one-size-fits-all endeavor, and the

limitations faced by users can substantially hinder academic success if the right system of support and level of involvement of student and families are not present.

Summary of Chapter Four Findings

The findings of this study were generated from a two-phase process of data collection which included broad responses from superintendents and program directors via surveys and follow-up interviews of purposefully selected program directors. Data from both phases were cross-analyzed for themes and patterns to contribute to the holistic understanding of the status of virtual education in Kansas.

Currently virtual education is utilized by eighty-five districts in Kansas in the form of ninety-three unique programs. It is a decidedly rural phenomenon, operating most in rural districts with student populations below 1,000 students. Districts with free and reduced lunch rates between 41-60% support the most virtual programs with the highest concentration of program offerings occurring in the Northeast, Southeast, and Southcentral regions of the state. School district superintendents and program directors consistently ranked traditional schools higher than virtual education at accomplishing commonly-stated goals of education. Despite both groups of educators ranking traditional schools higher than the capacity of virtual education on six different measures, virtual programs continue to be adopted by districts to obtain perceived benefits or due to the possible influence of isomorphism. Isomorphic influence was visible in the diffusion analysis of program adoption as dense concentrations of programs sprang up across the state of Kansas over the past sixteen years.

School leaders in Kansas vary drastically in their perception about virtual education and its potential to contribute to educational, financial, and district goals. Supporters of virtual education voiced praise for the ways in which this educational model enhances educational

offerings, increases enrollment and thus funding, and customizes educational services to meet the diverse needs of learners. Non-adopters conversely viewed virtual education as providing lower quality educational opportunities, making money more important than student learning, and a model that did not meet stated district or patron needs. Superintendents described the reasons for adopting virtual education as educational, financial, and aligned to stakeholder needs, while the reasons for non-adoption by dissenting superintendents aligned to the same three categories.

Benefits of virtual education aligned to two main categories: educational benefits and benefits from aligning to stakeholder needs. Themes describing the challenges of this model outnumbered the described benefits two to one in number, and they encompassed four main categories: educational, patron, state, and model limitations. A strong message shared by program directors was that virtual education is not the manner in which all children or even most will be successful. Thus, those educators closest to this educational model simultaneously have great hope for its potential to help address the needs of particular learners when supported in the right environment, but they are wary of making virtual education a panacea for a majority of students because of the inherent limitations of this model.

Chapter Five

Discussion and Implications

This study explored the adoption of virtual education programs across the state of Kansas, including an examination of factors leading to adoption and perceived benefits and limitations of this educational model. Previous research on this topic focuses on nationwide use, structures, and academic effectiveness while this study focused on the decision-making process and factors influencing a district's adoption or non-adoption of virtual education. The general theoretical literature on the topic of K-12 virtual education lacks an examination of factors and district-level motivation to adopt virtual education. This study asks and addresses four questions to target this gap:

1) To what extent do districts with virtual education programs share common characteristics (e.g., enrollment size, urbanicity, SES, region)?

2) What factor(s) influence Kansas districts to consider the adoption of a virtual education program or school?

3) What factor(s) influence a district's decision to adopt or reject a virtual education program or school?

4) What are the reported benefits, challenges, and limitations of virtual education in Kansas?

This chapter will provide conclusions, policy implications, limitations, delimitations, and recommendations for future research on the topic of K-12 virtual education.

Conclusions

After synthesizing data from all sources and analyzing for themes, there are four primary findings from this research study:

1. There is a philosophical divide among surveyed Kansas educators about the value of K-12 virtual education and its place in public education.

2. The adoption of virtual education is essentially an effort to access the perceived benefits of this model and non-adoption is the purposeful avoidance of the perceived limitations of virtual education.

3. There is evidence to suggest that one factor contributing to the spread of virtual education in Kansas is isomorphism or mimicry of other districts already engaged in this model.

4. The model limitations noted by virtual education program directors suggests that virtual education in Kansas is, at best, an add-on reform and not a systemic reform that will reshape modern public education.

There is a philosophical divide among school leaders in Kansas about the purported effectiveness of virtual education for K-12 learners. Superintendents who have chosen to not adopt virtual education highlighted the shortcomings of this educational model, aligning with research on the challenges of virtual learning; superintendents whose districts utilize virtual education focused on the professed benefits of this model, supporting research on the benefits of virtual education. The contradictory view of virtual education for K-12 students paints a picture of a fundamental divide between district leaders in Kansas. This raises the question: How can a practice, viewed as beneficial by some districts and detrimental by other districts, continue to be propagated? As long as Kansas state statute provides for the creation of virtual schools and programs at the discrimination of the school board of each Kansas district, this dichotomy of perception and practice conceivably will continue.

My own experiences as a virtual education teacher and administrator in Kansas underscore this primary finding of this study: state law makers, community members, parents, and fellow teachers display a broad spectrum of understanding and support for virtual education ranging from skepticism to neutrality to strong advocacy. Survey responses in this study from superintendents and program directors were representative of this same spectrum of support; some stated strongly that virtual education places the pursuit of additional funding above educational quality, others intoned an indeterminate level of interest as their district was not engaged in virtual learning, and program directors unwaveringly expressed that virtual education, when accessed by the right kind of student with appropriate levels of self-motivation and family support, has the potential to positively impact a student's educational path. I was not surprised that district leaders intoned such strong support or strong distrust of virtual education, but I was surprised at the honest inclusion of the financial benefits brought by virtual education in the responses of superintendents. District leaders did not attempt to hide the fact that virtual education can conceivably boost enrollment numbers and thus state funding dollars to their districts, and this was a strong motivating factor leading to its adoption from districts of all sizes in Kansas.

The second finding of this study was that factors motivating adoption aligned to the perceived benefits of virtual education, and factors of non-adoption coincided with the perceived limitations of this model. Districts adopted virtual education to access the perceived benefits of this model, which were noted to be educational, financial, or aligning to the needs of stakeholders. Districts decision makers chose not to adopt virtual education to avoid the self-perceived limitations of this educational model, which comprised the same three categories: educational limitations, financial limitations, and alignment limitations. There was notable

overlap between the factors of adoption and benefits of virtual education, confirming the finding that districts engage virtual education to access the perceived benefits. Likewise, districts that chose to not adopt virtual education presumably weighed the perceived benefits and potential limitations and determined that avoiding the possible limitations was ultimately more valuable than entering the virtual school arena. This supports research on diffusion theory which is predicated on bounded rationality whereby potential adopters are assumed to weigh the costs and benefits of an innovation to make an optimal decision for their organization based on available information (Redmond, 2003). In addition to the philosophical beliefs of district decision makers, the needs of districts, such as size, demographic composition, location in the state, student and stakeholder needs, and inclination of administration and board of education to adopt a new or untested model undoubtedly play a large role in a district's predilection to virtual education use.

A third conclusion drawn from the collected data affirms the role of isomorphism as likely impacting the spread of virtual education in Kansas. Applying the theory of diffusion and analyzing adoption of virtual education programs by districts in a time-elapsed manner illustrates pockets of adoption impacted by proximity to operational programs. As the virtual education innovation has spread over the past sixteen years, school district leaders have potentially faced growing pressure to conform and adopt some form of this educational model themselves; deciding to join the virtual education "market" can promote institutional legitimacy, meet the demands of stakeholders, and also prevent students from leaving their districts in favor of a virtual program elsewhere.

Finally, from the words of those charged with its leadership in Kansas, virtual education is not a one-size-fits-all educational model. I was appreciative of the level of honesty virtual

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program directors maintained in speaking of the true limitations of K-12 virtual education. Each of them expressed general or specific instances of student incompatibility with the demands of this learning environment, and the underlying theme was that this is not the model in which most students will find success. Program directors spoke of having to counsel students away from virtual learning if they do not possess the necessary levels of motivation or have strong support from adults in their lives. Some proponents of virtual education tout its potential to reshape K-12 public education in the years to come to address the challenges of failing schools and offer high-quality education to all students regardless of the district in which they live (Greenway & Vanourek, 2006; Patrick, 2008; Tucker, 2007). Extrapolating from the words of program directors who conclude that virtual education is not the way that most students will find success, I infer that virtual education is a programmatic or add-on reform and lacks the structures, quality, oversight of implementation, and scale-ability to reach full-scale reform in K-12 public education. Rather than offering a structural, systemic public education reform, K-12 virtual education is at best an add-on reform with a future highly dependent on funding and policy provisions (Tyack & Cuban, 1995), and virtual education is an educational model that best serves only a small percentage of students with appropriate motivation and family support.

Collectively, these four conclusions contribute to the specific understanding of virtual education in Kansas through the perceptions and opinions expressed by district and program leaders and demographic data. The goal of this qualitative case study was to explore and understand the specific context of virtual learning in Kansas, and in doing so, contribute to the greater conversation about virtual education nationwide. For, in the words of Merriam (2009): "Every study, every case, every situation lies in the particular; that is, what we learn in a

particular situation we can transfer or generalize to similar situations subsequently encountered," (p. 225).

Delimitations

Purposeful decisions were made in selecting the interview participants of this study. Interview participants were selected based on representation of district demographics, and I utilized a convenience sample for one of the six interviews. This person was a colleague with eight years of experience in virtual education, and so I selected his virtual program to represent the town demographic. The other five interview participants were not known to me prior to this study. I am aware that some districts in Kansas have previously adopted virtual education but are no longer operating a virtual program. From the superintendent sample alone, three percent (n=3) formerly utilized virtual education. I purposefully did not pursue this subgroup for separate inclusion in my analysis of adoption or non-adoption, although they would have bridged both categories and offered unique insights from their previous use and subsequent decision to terminate the program.

 Limitations

This study has several acknowledged limitations. As this qualitative study relied on self-reported data in the form of survey responses and interviews, there is potential for bias from participants' selective memory, lack of firsthand knowledge, incorrect transmission of facts, or exaggeration. Survey data was limited to the school district superintendents and virtual program directors who participated; forty-one percent and forty-seven percent of each population participated, and while this percentage was within my goal range, the opinions and perceptions of the majority of each population are not included in this research due to non-participation. Finally, the year that each of the ninety-three virtual programs began was difficult to pinpoint as

some programs did not publish their inception date. The KSDE website offered documentation of virtual education programs operating from 2009 to the current year, and along with interview data and Desktop Audit data provided by some schools, I pieced together the chronology of program adoption to the best of my ability, recognizing that there is a potential small degree for error.

Policy Considerations

The widespread adoption of virtual education in Kansas is made possible by legislative policies affording each school district the opportunity to adopt and maintain a virtual school and to receive per pupil state funding. While this educational trend is growing nationwide, the commitment of the Kansas legislature to allow district-run virtual education programs with funding above the base state aid amount has been challenged at various points in the sixteen year history of virtual education. For example, in 2012, Senate Bill 361 included a provision that would cut virtual school funding from 1.05 to .75 the base amount. At the time of writing this dissertation, the Kansas legislature is entrenched in a school refinance overhaul that has included, at various stages, provisions cutting virtual education funding by as much as fifty percent. Funding provisions for virtual education are a fundamental policy consideration that can allow the continuation or destabilize the future practice of K-12 virtual education in Kansas.

The majority of virtual programs in Kansas operate in conjunction with an outside for-profit curriculum company, known as an educational management organization (EMOs) (LaPlante, 2012) . Districts enter into partnership with an EMO of their choosing to develop and host online course content and to hire, train, and provide state-licensed teachers to implement the courses. Districts develop a contractual agreement with the EMO that typically guarantees a per pupil amount (a portion of the per pupil funding received from the state) to the for-profit

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company. Nationwide, forty-four percent of virtual programs are operated by EMOs, constituting eighty percent of all virtual student enrollments (Molnar et al., 2014). This is an area of policy consideration as it implicitly engages public funds for the purpose of educating children by private companies; a widely-heard critique of this operating structure is that placing for-profit entities in charge of public education yields a governance that is focused on monetary gain and stockholder appeasement rather than the public constituency's educational goals (Carr-Chellman & Marsh, 2009; Molnar et al., 2014; Watson, 2008).

Future Research

The aim of this study was to examine the precursors to the decision to adopt virtual education – the purposes this model is designed to accomplish. Future research would best be served examining the after effects and impacts of virtual education on Kansas students and districts. The rapid expansion of virtual education in the state of Kansas carries significant implications for further outcome-based research on online pedagogy; research should explore instructional methods that pertain to online learning, motivating and monitoring online learners, and providing supportive learning environments for online learners at the K-12 level.

A recent 2014 report published by the National Education Policy Center (Molnar et al., 2014) strongly advocates immediate and in-depth research on the outcomes and implications for students learning in virtual education environments. The report states:

> More than twenty years after the first K-12 online learning programs began, there continues to be a deficit of empirical, longitudinal research to guide the practice of K-12 online learning, particularly full-time learning. Especially critical is research on factors linked to student success… (p. 34).

As this is a notably growing trend in public education, another area of future research is to examine the preparation for virtual education teachers in a pre-service environment as well as ongoing professional development and training. Molnar et al. (2014) advises policy makers and

educational leaders to define new certification measures for teacher licensure to prepare virtual education teachers, provide continual support through comprehensive professional development means, and to customize evaluations for virtual education teachers to address and evaluate effective distance learning pedagogy.

Finally, future research is necessary on the impact and effects of full-time online learning environments to examine student outcomes, such as academic success, high school graduation, social measures, and college and career readiness of virtual students in comparison to their traditional school counterparts (Molnar et al., 2014). While the vast majority of online learners engage in blended learning opportunities, nationwide approximately 275,000 virtual education students engage in fully-online learning without attending a physical school building (Glass & Welner, 2011; Tucker, 2007; Watson et al., 2012). My personal follow-up research interests would include a longitudinal study on virtual school student outcomes, both academically and socially, to explore if and how this educational model accomplishes the multi-faceted goals of education, generally agreed to be educational, social, emotional, and civic in nature. My own experiences with high school virtual education students and the high rate of turnover year to year in full-time online programs compels further exploration into the outcomes of this educational model to determine if the educational integrity of the public school systems in Kansas can be maintained virtually.

Appendices

Appendix A

KSDE DRAFT GUIDELINES – DECEMBER 2000

INTERNET-BASED COURSES

ELIGIBILITY FOR COUNTING STUDENTS

ON SEPTEMBER 20

- All Kansas public schools offering Internet courses must have appropriate certified personnel available to assist students on Internet-based courses.

- All institutions must ensure Internet courses being taken for credit have appropriately certified teachers available to assist students on Internet-based courses. Districts shall develop policies for Internet courses being taken as part of an independent study program or for elective credit.

- For each course in which the individual student is enrolled, teachers must be available daily to respond to student questions and concerns. The regular available time for a certified person should be established so the students know when help is available.

- All students enrolled must take state assessments, local required performance assessment, and any other required district-wide tests for their appropriate grade level.

- School districts are responsible for monitoring and recording the amount of time students spend on courses in which they are enrolled within the district. For example, daily attendance logs should be similar to those for regular students. Districts are responsible for monitoring student progress for courses in which they are enrolled within their district and for providing any additional support and assistance needed to ensure successful completion.

- Students enrolled in courses offered by Kansas school districts must be enrolled in a KSBE accredited school and Internet-based courses must be approved by the school district granting credit.

- All students must have adult supervision unless the student is the age of accountability. Districts should identify a building level contact person to assist students enrolling in online courses and serve as a liaison with the online teacher and provider. Formal assessments delivered online should be supervised in accordance with policies established by the district.

- All school districts should provide instructional materials under the same board of education policy through which textbooks are made available to regularly enrolled students.

- Enrolling students on September 20 for the sole purpose of collecting state aid is considered subterfuge and such students shall not be counted in the school district enrollment.

- If the unified school district does not provide instructional support as outlined above, such students may not be counted in the enrollment.

Appendix B

Superintendent Survey

1. USD #

2. Number of years in current position

3. Please indicate the strength of each educational model in achieving these commonly-stated educational goals.

	Traditional School					Virtual School				
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)
Promoting civic responsibility (1)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Socialization for children (2)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Extracurricular participation (3)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Teacher/student relationships (4)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
High-quality academic preparation (5)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Successful preparation for future role as citizens (6)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

4. Select the descriptor that fits your district.
❍ Currently OFFER some form of virtual education (1)
❍ Formally INVESTIGATING some form of virtual education (2)
❍ Offered virtual education in the past, but NOT currently (3)
❍ NOT offering or considering virtual education (4)

5. Using the sliders below, please indicate your perception of the importance of the following items leading to the adoption of a virtual education program in your district.

_____ Increase enrollment (1)
_____ Increased revenue (2)
_____ Innovative instructional practice (3)
_____ Target homeschool students (4)
_____ Replicate other district's use of virtual education (5)
_____ Other (6)

6. Using the sliders below, please indicate your perception of the importance of the following items leading to the consideration of a virtual education program in your district.

_____ Virtual education is an innovative practice that will benefit our district's students (1)
_____ Potential to increase district enrollment (2)
_____ Target homeschool students to increase enrollment (3)
_____ Board of Education drove the initiative (4)
_____ Teachers drove the initiative (5)
_____ Administrators drove the initiative (6)
_____ Other districts have successful virtual education programs (7)
_____ Other (8)

7. Using the sliders below, please indicate the perceived benefits of virtual education for your district.

_____ Expanded course offerings (1)
_____ Students can accelerate and earn additional credits (2)
_____ Financially efficient to educate in virtual setting (3)
_____ Convenience and flexibility for learners (4)
_____ Higher quality instruction than traditional schools (5)
_____ Offer courses that are difficult to staff with teachers in a traditional school setting (6)
_____ Meet needs of students with special needs (7)
_____ Enrollment is open to students across the state, increasing district enrollment (8)
_____ Offer school choice option to in-district students (9)
_____ Expanded access to rural learners (10)

8. Why has your district refrained from adopting or stopped providing virtual education? Is this a future initiative or one that does not meet the goals of your district?

9. Please describe the process of initially considering and ultimately adopting virtual education in your district. What factor(s) led to the initial consideration? Who was involved in this process? What were the perceived / intended benefits of adopting this model?

Appendix C
Program Director Survey

1. USD #

2. Number of years in current position

3. In what year did your district's virtual education program/school begin?

4. What is the student headcount for school year 2013-2014?

5. What is the student FTE for school year 2013-2014?

6. What percentage of your students are full-time online students (i.e. do not attend another school and take all courses through your program?)

7. Based on your understanding and knowledge of the initial adoption of virtual education in your district, please respond to the following statements. Virtual education was adopted in our district because...

	Agree (1)	Neither agree or disagree (2)	Disagree (3)
Other districts had successful programs (1)	○	○	○
It is an innovative practice that provides high quality learning opportunities to students (2)	○	○	○
It increases district enrollment numbers (3)	○	○	○
It provides a high quality school choice alternative to parents and students (4)	○	○	○
It is a way to recruit homeschooled families back to public school (5)	○	○	○
The Board of Education drove the initiative (6)	○	○	○
Students with special needs can benefit from this instructional model (7)	○	○	○
Other (8)	○	○	○

8. Please indicate the strength of each educational model in achieving these commonly-stated educational goals.

	Traditional School					Virtual School				
	1	2	3	4	5	1	2	3	4	5
Promoting civic responsibility (1)	○	○	○	○	○	○	○	○	○	○
Socialization for children (2)	○	○	○	○	○	○	○	○	○	○
Extracurricular participation (3)	○	○	○	○	○	○	○	○	○	○
Teacher/student relationships (4)	○	○	○	○	○	○	○	○	○	○
High-quality academic preparation (5)	○	○	○	○	○	○	○	○	○	○
Successful preparation for future role as citizens (6)	○	○	○	○	○	○	○	○	○	○

9. How did virtual education come to be adopted in your district? What were the motivating factors?

10. From your perspective as the program director, what are the top three challenges of operating a virtual education program? (e.g., staffing, state regulation and oversight, perception of virtual education in the community, recruitment)

11. Please describe your perception of the level of support shown by the Board of Education for your virtual education program/school.

Appendix D

Interview Guide

Interview participants: Virtual Education Program Directors (n=6)

Introduction
    A. Brief Description and goals of study
    B. Purpose of interview data collection and how it will be used (for your dissertation and possibly a future journal article)

Background Information
    A. Verify demographics of district and school
    B. Program director's level of involvement in initial adoption of virtual education

Program Origins
    A. What was the process to officially adopt a virtual program? What types of due diligence were performed?
    B. What prompted your district to consider a virtual education initiative?
    C. Who the key players / stakeholders in the process?
    D. Did you feel a sense of pressure to adopt your own program based on other districts' experiences with virtual education?
    E. Please describe your program's curriculum provider.
        a. What has been your experience partnering with a for-profit company within the public school context?
    F. What are your future plans for your virtual education program? (e.g. changes, additions, structures, expansion of other content/subject areas, expansion outside current district?

Student Characteristics
    A. Approximately how many of your students re-enroll in virtual education each year?
    B. Who is your target recruitment audience: in-district students or statewide or both? How do you recruit students?
    C. What has been your experience with homeschool students joining your school? Obstacles, challenges, barriers? Positive things?
    D. Does your school offer opportunities for virtual education students to interact with traditionally situated students: field trips, chat rooms, school dances, etc.?
    E. How are students with identified special needs provided services in your program? What about language barriers? Connectivity speed issues?

Challenges/Benefits
    A. Based on the response you provided on the survey, how would you prioritize the five challenges of virtual education in your district?
    B. What are the top five benefits virtual education provides your students? What about teachers? Or parents? Or administrators?
    C. Please describe how these challenges and benefits may be unique to this instructional delivery model.
    D. How does the virtual setting compare to the traditional school setting?

Appendix E

Introduction email to superintendent survey participants

Dear (insert name),

My name is Christi Adams and I am a doctoral candidate at the University of Kansas studying Educational Leadership and Policy Studies under the guidance of Professor Thomas DeLuca. For my dissertation, I want to explore and better understand virtual education in Kansas and the reasons districts choose to adopt or not adopt this educational innovation. While my instructional background includes eight years as a K-8 virtual education facilitator at the Leavenworth Virtual School, I believe your unique insights and perceptions will greatly enhance my research.

I am sending an electronic link to a brief survey (7-10 minutes) to collect data from all Kansas USD Superintendents regarding virtual education; questions will include the current use of virtual education in your district, the process of considering, adopting, or not adopting virtual education, and perceived benefits of this educational model. The first question of the survey requires the USD number of your district strictly as a means to compile demographic data.

If you choose not to participate in this survey, you may respond to this email to christiadams4@ku.edu and your name will be removed from the distribution list, or you may simply delete the subsequent email.

Thank you in advance for offering your time for my dissertation research. If you have any questions or concerns, please contact me at christiadams4@ku.edu. You may also contact my dissertation co-chair, Dr. Thomas DeLuca at tadeluca@ku.edu, or the Human Subjects Committee at the University of Kansas, irb@ku.edu.

Attached to this email is additional Human Subjects information from the University of Kansas Internal Review Board Department.

Link to the survey: https://kansasedu.qualtrics.com/SE/?SID=SV_3PlkwmNovUuM53T

Regards,

Christi Adams
Doctoral Candidate
University of Kansas

Appendix F

Introduction email to virtual education program director survey participants

Dear (insert name),

I am a doctoral student at the University of Kansas studying Educational Leadership and Policy Studies. The topic of my dissertation is virtual education in Kansas and the decision of districts to adopt or not adopt this educational innovation. I have worked at the Leavenworth Virtual School for the past eight years as a K-8th grade facilitator, so I am familiar with virtual education policy and practice within Kansas.

I am collecting data on the decision-making process to adopt or not adopt virtual education in school districts across the state of Kansas. I would ask your cooperation to fill out a brief survey (5-10) about the process of adopting virtual education in your district, perceived benefits, challenges, and perception of Board of Education support of this educational model.

If you choose not to participate in this survey, you may respond to this email to christiadams4@ku.edu and your name will be removed from the distribution list.

Thank you in advance for giving of your time to assist in this research venture. If you have any questions or concerns, please contact me at christiadams4@ku.edu. You may also contact my dissertation co-chair, Dr. Tom DeLuca at tadeluca@ku.edu, or the Human Subjects Committee at the University of Kansas, rgs@ku.edu.

Attached to this email is additional Human Subjects information from the University of Kansas Internal Review Board Department.

Link to the survey: https://kansasedu.qualtrics.com/SE/?SID=SV_8IHXI08YUlKwij3

Regards,

Christi Adams
Ed.D Candidate, Educational Leadership and Policy Studies
University of Kansas

Appendix G

Email request for follow-up interview of program directors

Dear (insert name),

My name is Christi Adams and I am a doctoral candidate at the University of Kansas. For my dissertation, I want to explore and better understand virtual education and the range of use, challenges, and benefits of this educational model in our state.

You recently filled out an electronic survey on this topic. I am now scheduling follow up interviews with six program directors for the purpose of expounding upon virtual school offerings in a range of districts across the state. Would you be willing to participate in a brief 20-30 minute interview in person, via Adobe Connect, or over the phone at a date and time of your convenience?

If you choose not to participate in this interview, you may respond to this email. I very much appreciate your willingness to participate in this study to any degree and to give voice to the practice of virtual education in our state as a whole.

Thank you in advance for contributing your time for my dissertation research. If you have any questions or concerns, please contact me at christiadams4@ku.edu. You may also contact my dissertation co-chair, Dr. Thomas DeLuca at tadeluca@ku.edu, or the Human Subjects Committee at the University of Kansas at irb@ku.edu

Attached to this email is additional Human Subjects information from the University Of Kansas Internal Review Board Department.

Regards,

Christi Adams
Doctoral Candidate
University of Kansas

Regards,

Christi Adams
Ed.D Candidate, Educational Leadership and Policy Studies
University of Kansas

Appendix H

HRP 502 - HSCL – Survey Participants
The Department of Educational Leadership and Policy Studies at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand K-12 virtual education in the state of Kansas. This will entail your completion of a survey. Your participation is expected to take approximately 10 minutes to complete. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of why school districts in Kansas offer virtual education. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. Your identifiable information will not be shared unless (a) it is required by law or university policy, or (b) you give written permission. All information obtained from this survey will be held confidential, and the identity of all participants will remain anonymous. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu.

Sincerely,

Christi Adams   Dr. Thomas DeLuca, Ph.D.
Student Researcher   Faculty Supervisor
Department of Educational Leadership   Department of Educational Leadership
and Policy Studies   and Policy Studies
JRP   JRP
University of Kansas   University of Kansas
Lawrence, KS 66045   Lawrence, KS 66045
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Christiadams4@ku.edu   tadeluca@ku.edu

Appendix I

HRP 502 - HSCL – Interview Participants

The Department of Educational Leadership and Policy Studies at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand K-12 virtual education in the state of Kansas. This will entail your participation in an interview. Your participation is expected to take approximately 30 minutes to complete. The content of the interview questions should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of why school districts in Kansas offer virtual education. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. Your identifiable information will not be shared unless (a) it is required by law or university policy, or (b) you give written permission. All information obtained from this survey will be held confidential, and the identity of all participants will remain anonymous.

This interview will be recorded. Recording is not required to participate. You may stop taping at any time. Interviews will take place in person, via Adobe Connect over the Internet, or over the phone. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response. The recordings will be transcribed by me. Only I and the faculty supervisor will have access to recordings, which will be stored on the student researcher's computer and will be destroyed after 6 months.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Participation in the interview indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu.
Sincerely,

Christi Adams   Dr. Thomas DeLuca, Ph.D.
Student Researcher   Faculty Supervisor
Department of Educational Leadership   Department of Educational Leadership
and Policy Studies   and Policy Studies
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