The Purpose and Potential of Virtual High Schools:
A National Study of Virtual High Schools and their Head Administrators

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ABSTRACT

Purpose: The purpose of this study was to investigate the emerging world of virtual high schools and the people who lead them to better understand virtual schooling’s purpose and potential, particularly within the context of public education in the United States.

Data collection and analysis: The mixed-methods study used three sequential phases. The first was a document analysis of the 142 virtual school Web sites listed on the NACOL Clearinghouse List (the only national list available) to identify key characteristics of the schools and programs. The second was a survey of the head administrators of all these schools (n=58, response rate = 46%), with 27 questions focusing on enrollment information, mission and purpose, curriculum and instruction, school management and leadership, and head administrators’ personal and professional characteristics. The third phase, semi-structured interviews of eight of the survey respondents, addressed exploratory questions about their work, their school, beliefs about virtual schooling, and predictions for the future. The head administrators interviewed were from the five main types of virtual schools (state, public school/district, charter, private, and university-based). Qualitative analysis was done with a blend of an immersive approach and a template analysis.

Findings: In terms of basic characteristics, there appear to be some patterns emerging, particularly by virtual school type. Virtual school administrators believed that K-12 virtual schools will continue to expand and that online learning will become a mainstream component of K-12 students’ education. They believed a key purpose of
virtual schools is to individualize students’ educational experiences, both in terms of increasing course options and for personalizing instruction. Those leading the publicly funded virtual schools (state, charter and district/school) believed a purpose of virtual schools is to reform the traditional education systems. Head administrators surveyed shared a variety of characteristics and described their work as similar to a traditional principal with an emphasis on instructional leadership and marketing. They were of the first generation of virtual school leaders and came to their roles as experienced educators who had a desire to innovate and to transform education.

336 words
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CHAPTER 1: INTRODUCTION

In June 2009, at the annual International Society of Technology Education (ISTE) convention, a featured keynote presentation was an “Oxford-style debate” with the following proposition: “Bricks and mortar schools are detrimental to the future of education” (International Society for Technology in Education, 2009). The premise behind the proposition was that it is virtual schools, meaning those in which students and teachers are separated by time and distance and work together via the Internet, that are the future of education. After a spirited debate, the members of the audience overwhelmingly sided with the opposition who had argued that the future of education includes both brick-and-mortar schools and the integration of technology in the classrooms, including those that are online. Yet, what is most interesting about the debate is not which side won or lost but that only 14 years after the first K-12 virtual school opened its electronic doors (Greenway & Vanourek, 2006), a proposition was framed with the assumption that virtual schooling is the future of K-12 education.

Although still a relatively new phenomenon, the concept of virtual schooling has very quickly established itself as a force to be reckoned with in K-12 education, evidenced by a variety of measures. As an article in Business Week notes, the online secondary school market is estimated at $500 million (Damast, 2007). Damast also cites a Standards and Poor’s analyst who argues that it makes strategic sense that two major players in higher education online learning, Kaplan and Apollo Group, which runs the University of Phoenix, have recently expanded into the secondary market.
Enrollment growth in the K-12 market has also been substantial. In a recent survey, 40% of state-led programs reported annual growth of over 25% in the 2006-2007 school year; half of these programs reported growth rates of 50% or greater (Watson & Ryan, 2007). There has also been growth in the number of virtual charter schools and their enrollment, from 86 schools serving 31,000 students in 13 states in 2004-2005 to 173 schools serving 92,235 students in 18 states in 2006-2007 (iNACOL, 2009, citing Center for Education Reform). Looking at the data from the perspective of brick-and-mortar school districts that offer online learning opportunities for their district students, there were an estimated 700,000 courses accessed in 2005-2006 (Picciano & Seaman, 2007) and 1,030,000 in 2007-2008 (Picciano & Seaman, 2009), an increase of 47% in two years. As the authors of these studies note, however, these estimates do not include private school students, for whom no online learning estimates are available, or home school students, a population in which 19% reported using Internet, email and Web-based distance learning media in 2003 (Princiotta, Bielick, & Chapman, 2006), meaning full nationwide numbers would be considerably higher. And looking ahead, in Disrupting Class, Christensen, Horn, and Johnson (2008) predict that in six years 10% of all courses will be computer-based and 50% of courses will be delivered online by 2019.

While sometimes assumed appropriate for only particular student demographic groups such as gifted students or those in need of remediation, the K-12 online learning audience has proven to be expansive as well. Various studies and reports indicate a range of student audiences who can benefit from the virtual schools, such as gifted students (Vanourek, 2006), students at risk of dropping out of high school (Sturgeon, 2008;
Vanourek, 2006), rural students (Damast, 2007; Watson & Ryan, 2007), and home school students (Vanourek, 2006). Also identified are students who are looking for schedule flexibility (Watson, 2007; Watson & Ryan, 2007) because of other interests (e.g., Olympic sports, arts), time commitments (e.g., work or family), or physical constraints (e.g., hospitalized, homebound, incarcerated). These students are enrolled in a wide variety of type of virtual schools and programs, such as ones operated or supported by state education agencies, public schools and districts, private schools, charter schools, consortia, and home-school curriculum providers (Clark, 2000, 2001; Greenway & Vanourek, 2006; Watson, 2007; Watson, Winogran, & Kalmon, 2004).

Answers to the dominant question in the field, namely whether courses delivered online are of equal quality to those delivered in a traditional face-to-face settings, are starting to emerge, particularly for the post-secondary level. A recent U.S. Department of Education meta-analysis and review of online learning studies found that, on “on average, students in online learning conditions performed better than those receiving face-to-face instruction” (p. ix). The authors note, however, that because there were limited studies conducted with K-12 students that were appropriate for inclusion in the meta-analysis, caution should be used in generalizing these findings to elementary and secondary settings. While similar meta-analyses that included all levels of online learning found no significant differences in student achievement (Bernard et al., 2004; Cavanaugh, Gillan, Kromrey, Hess, Blomeyer, 2004; Ungerleider & Burns, 2003), a synthesis of recent studies focused on K–12 settings (Smith, Clark, & Blomeyer, 2005) established evidence
of the effectiveness of online learning as a promising instructional intervention “that can improve student academic performance” (p.56).

Finally, virtual schools are garnering attention from a wide array of educators and professional groups. There is a high degree of awareness of and interest in online courses from brick-and-more high school principals nationwide (Picciano & Seaman, 2007, 2009; Setzer & Lewis, 2005). Various federal agencies and departments have published reports about Internet access (United States Department of Commerce, 2002; Wells, Lewis, & Greene, 2006) and, more specifically, about K-12 online learning (Setzer & Lewis, 2005; United States Department of Education, 2004). National education associations have contributed policy reports and online learning standards to the field (National Association of State Boards of Education, 2001; National Education Association, 2002; National School Board Association, 2007; North American Council for Online Learning, 2008). And a professional organization focused on virtual schools, the International Association for K-12 Online Learning (iNACOL), was launched in 2002 and currently reports membership of 2,300 (http://www.inacol.org/) and hosts an annual conference with over 1,200 educators interested in K-12 online learning.

Given all of this growth in terms of money, enrollment, students served, types of schools, and professional and government organizations involved, virtual schooling does appear to be a part of the future of K-12 education. Yet, amidst all the reports, studies and media attention surrounding virtual schools, surprisingly little attention has been paid to who is responsible for creating and managing these virtual schools and bringing online learning into prominence in our educational system. This study is the first to look
nationwide at the leaders of virtual schools and explore their beliefs about this emerging
form of education.

**Statement of the Problem**

Much of the discussion to date about K-12 virtual schooling has focused on issues
of finance, growth, efficacy, and implementation. However, as Walling (2003) notes,
issues that are more fundamental need to be examined: “Less attention is paid to how
these changes could affect the deeper purposes and principles underlying a system of
public education—in other words, the expectations and ideals that have shaped the
American vision of public education for more than a century” (p.1). The history of public
high school education in the United States is one of evolving purposes and competing
values (Murphy, Beck, Crawford, & McGaughy, 2001; Oakes & Guiton, 1995; Rury,
2002), as the public and private goods achieved through this system are rearticulated to
meet the challenges and opportunities of the times.

Recent research demonstrating the importance of school leadership (Bryk,
Camburn, & Louis, 1999; Leithwood & Jantzi, 2008; Louis & Marks, 1998; Newmann,
Smith, Allensworth, & Bryk, 2001; Robinson, Lloyd, & Rowe, 2008; Wahlstrom, 2008)
indicates that virtual school leaders would be well suited to define the purpose and
potential of these new schools and to help place the virtual school movement within the
larger context. Yet, surprisingly little research exists that examines such issues from the
perspective of these key figures. In fact, there is no information on who these leaders are,
what paths they took to virtual school administration, or the experiences they bring to the
leadership of these new schools. In addition, profile information about the schools in
which they work are lacking. Studies that examine virtual schools nationwide are either outdated Clark (2000, 2001) or focus only on the major program types, i.e., state-run, state-led, charter, district, and consortium (Watson, 2005; Watson, Gemin, & Ryan, 2008; Watson & Ryan, 2006, 2007; Watson, Winogran, & Kalmon, 2004), leaving a large body of schools unexamined and the overall picture incomplete.

**Purpose and Research Questions**

The purpose of this study was to investigate the emerging world of virtual high schools and the people who lead them to better understand virtual schooling’s purpose and potential, particularly within the context of the history of public education in the United States. The following research questions were developed and refined through the review of the literature, with the first three questions designed to create the context for exploring the fourth:

1. What are the basic features of K-12 virtual schools and programs nationwide?
2. What are the stated purposes and potential of K-12 virtual schools and programs?
3. Who are the leaders of K-12 virtual schools and programs?
4. What do leaders of virtual high schools and programs believe about the purpose and potential of virtual schooling?

Taken together, these four questions were then used to guide the study’s design, implementation, and analysis.

**Study Design**

Given that the field of K-12 virtual schools is still in an emergent phase of development and so, is a little-known phenomenon, a qualitative research approach was
at the heart of this study. Because data is scarce about the virtual schools and the head administrators, quantitative methods were also used to provide descriptive data about them. The mixed-methods study used three sequential phases designed developmentally to allow results from one method to inform subsequent ones. The first phase used document analysis of virtual school/program Web sites to identify key characteristics of the schools and programs listed on the North American Council of Online Learning (NACOL) Clearinghouse List. Results from this analysis were used to develop the instrument for the second phase, an online survey of virtual school head administrators. The third phase, semi-structured interviews of selected survey respondents, used data from the previous phases to shape the interview guide and sought expert opinion on patterns or issues that emerged from the document analysis and survey. Most importantly, the interviews addressed exploratory questions about administrators’ beliefs about virtual schooling. The three phases were complimentary in that both overlapping and different facets of the phenomenon emerged from them (Creswell, 1998).

Summary

Chapter 2 reviews the literature related to K-12 virtual schools in the United States, including an examination of the purposes that underlie them and of the people who are leading them. It also presents a conceptual map of the context of public secondary education used in the analysis of the interview data. Chapter 3 presents the research methodology and details the methods used in each of the three phases of the study. Chapter 4 is focused on the descriptive findings about virtual schools and their head administrators while Chapter 5 presents qualitative findings that emerged from head
administrator interviews. Finally, Chapter 6 summarizes the study and then discusses the study’s key findings and their implications.
CHAPTER 2: REVIEW OF THE LITERATURE

In order to describe and define the current state of K-12 virtual schools in the United States, the review of the literature begins with a summary of school-level information about these schools, including the types of schools, the programs offered, and enrollment data. Examination of these virtual schools shows that while there are many differences among them, there seem to be some shared purposes underlying them; an exploration of these purposes forms the second section of the review. Technical reports and policy papers specify a range of purported virtual school purposes and a limited set of studies present the perceptions of virtual school students, teachers, and parents and brick-and-mortar school administrators regarding these purposes. Yet missing from the research are the perspectives of those who are leading these new schools, the virtual school administrators, the subject of the third section. Finally, in order to place the emergence of virtual schools within a larger context, a fourth section examines history of public secondary education in the United States and explores current contextual issues potentially relevant to the development of virtual schools. This section concludes with conceptual map of historical tensions and current contextual issues that will be used to examine administrators’ beliefs regarding virtual schools.

K-12 Virtual Schools and Programs

Types of Schools and Programs

In the first wave of development, a variety of structures or school types emerged that delivered K-12 online learning. The Distance Learning Resource Network (DLRN), a U.S. Department of Education dissemination project, created a list of virtual school
programs nationwide (see Table 1), categorizing the various programs by type of
structure (Clark, 2000; DLRN, 2003).

Table 1

<table>
<thead>
<tr>
<th>Type of Structure</th>
<th>Description</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State or regionally certified</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State-level virtual schools</td>
<td>Operated or supported by state education agencies.</td>
<td>13</td>
</tr>
<tr>
<td>University-based virtual schools</td>
<td>Offers at least a partial K-12 curriculum through Web-based courses.</td>
<td>9</td>
</tr>
<tr>
<td>Virtual schools operated by public schools/districts</td>
<td>Serve their own supplemental or alternative education needs and to reach out to home school populations.</td>
<td>28</td>
</tr>
<tr>
<td>Virtual charter schools</td>
<td>Operated by state-chartered entities.</td>
<td>12</td>
</tr>
<tr>
<td>Virtual private schools</td>
<td>Serve private or home school students.</td>
<td>7</td>
</tr>
<tr>
<td>Virtual school consortia</td>
<td>Operated by educational entities, non-profit and for-profit organizations.</td>
<td>10</td>
</tr>
<tr>
<td><strong>Not state or regionally certified</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virtual home schools or private schools</td>
<td>Serve private or home school students.</td>
<td>19</td>
</tr>
<tr>
<td>For-profit providers</td>
<td>Curriculum, content, development tools, and infrastructures.</td>
<td>15</td>
</tr>
</tbody>
</table>

(Clark, 2000, 2001; Distance Learning Resource Network, 2003)

As the field grew, the DLRN list was no longer maintained and so the National
Association for Online Learning (NACOL), established in 2003, launched the NACOL
Online Clearinghouse to provide a searchable list of online learning programs and
schools. According to Tim Stroud, then President and CEO of NACOL, the list was
created through a comprehensive search process and verified by virtual school expert,
Tom Clark (personal communication, January 27, 2005). The list is still hosted by
NACOL (now named iNACOL, International Association for K-12 Online Learning) and
program leaders are invited to update their school information in the system. This Online Clearinghouse is the only summary list of virtual schools and programs nationwide and, while neither accurate nor complete, demonstrates the growth in the field between 2005 and 2009 and hones the school type schematic used within the field (see Table 2).

Table 2

Virtual Schools Listed on the NACOL Online Clearinghouse by School Type

<table>
<thead>
<tr>
<th>School/program type</th>
<th>2005</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>District or county</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Public school</td>
<td>12</td>
<td>72</td>
</tr>
<tr>
<td>Charter school</td>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td>Private school</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>University</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Consortium</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Home school</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>123</td>
<td>*223</td>
</tr>
</tbody>
</table>

(North American Council for Online Learning, 2005, 2009)
* The total number of schools in 2009 is less than the sum of the schools by category because entries in the NACOL 2009 list were allowed to have multiple categories.

Another significant source of information about virtual schools is a series of reports, *Keeping Pace with K-12 Online Learning*, conducted by John Watson and others annually since 2004 (Watson, 2005; Watson, Gemin, & Ryan, 2008; Watson & Ryan, 2006, 2007; Watson, Winogran, & Kalmon, 2004). These reports focus on state-level policies and practice and include profiles of programs, typically organized by state and in the major program types, i.e., state-run, state-led, charter, district, and consortium. Unfortunately, these reports do not provide summary data on all types of virtual school programs nationwide (e.g., private schools), leaving a large body of schools unexamined and the overall picture incomplete.
Other Defining Features

As Greenway and Vanourek (2006) note, the problem with defining virtual schools only by school type is that critical distinctions are mixed and the full array of elements are missed (p. 36). The six dimensions of virtual schooling they defined (comprehensiveness, reach, type, location, delivery, and operational control) are used as a base to create an even more extensive list of defining features that have been used to categorize virtual schools.

- **School type** is the most common method for categorizing online learning schools and programs (Watson & Ryan, 2007). The initial categories used by Clark (2000, 2001) and the DRLN is fairly extensive (see Table 1); others collapse the categories into a smaller set, such as one that includes only the following: district, magnet, contract, charter, private, and home (Greenway & Vanourek, 2006).

- **Operational control** is a less examined defining feature of virtual schools and is one that is often conflated with the school type categorization. In the Greenway and Vanourek (2006) dimensions, operational control options include local board, consortium, regional authority, university, state, and independent vendor. As can been seen in Tables 1 and 2, these categories are also included with the school type lists.

- **Geographic reach** is another related feature used to define a school by the geographic unit from which it draws its students, such as district, multi-
district, state, multi-state, national, global (Greenway & Vanourek, 2006; Vanourek, 2006; Watson, 2007).

- **Location** means the place from which students attend their online courses. While little used, it can be seen as a defining feature as well, with key options being school, home, or other (Greenway & Vanourek, 2006; Vanourek, 2006).

- **Comprehensiveness** is used to define the structure, reach, and curricular options of the school. The first and more prevalent are supplemental programs in which students attend part-time but have a school-of-residence with which they are affiliated. The second are virtual schools that students attend full time. Student data (e.g., demographic, enrollment, achievement) are typically reported within the full-time schools’ accountability measures but not in the supplemental programs (Greenway & Vanourek, 2006; Tucker, 2007; Vanourek, 2006; Watson, 2007; Watson & Ryan, 2007).

- **Student audience** identifies the type of students served by the school. For example, this categorization model can include programs for students who are gifted or are in need of remediation or credit recovery (Clark, 2001; Finne, 2008; Vanourek, 2006; Watson & Ryan, 2007). Some virtual schools focus on the expanding home school audience (Princiotta, Bielick, & Chapman, 2006) while others offer access to advanced placement coursework (U.S. Department of Education, 2007).

- **Grade levels served** provides more specificity about the grade levels of the student audience. While elementary level online learning may not yet be as
prevalent or easily envisioned by people new to the concept of virtual schooling, this youngest audience is growing nationwide. Given the different instructional needs of elementary, middle, and high school students, identifying the grade levels served by a particular school is seen as important (Watson, 2007; Watson & Ryan, 2007).

- **Delivery** is another important defining feature, noting whether instruction is asynchronous, when teachers and students do not work at the same time together, or synchronous, when they do. The asynchronous model is most common in K-12 schools, allowing teachers and students to participate according to their own schedules via email or discussion boards. Synchronous instruction does exist, however, using real-time Internet-based software that may include audio, video, file sharing, instant messaging, or other collaborative tools (Greenway & Vanourek, 2006; Vanourek, 2006; Watson, 2007). Typically, courses must be asynchronous if they are to allow students to work at their own pace and to be freed from schedule restraints (e.g., if there were a significant time-zone difference between teacher and student or if the student is trying to add a course to an already full school day). Synchronous course design is needed if live student-student or student-teacher interaction is desired, described further in the next defining feature.

- **Instructional interaction** is a feature that addresses the type and level of interaction students have with content, the teacher, and other students (Watson, 2007). Susan Lowes (2007) defines virtual courses as either a
correspondence course with minimal interaction with the teacher or self-paced, which includes more on-going student-teacher interaction. Virtual classrooms, again as defined by Lowe, have students work as a cohort, follow a course calendar together, and have extensive student-student interaction, through either asynchronous discussion forums or synchronous tools.

- Course development identifies by whom the curriculum is developed. While not often discussed, the curriculum development process used by a school is a significant defining feature as it determines the curriculum expertise needed within the school and related management and oversight. Options within this characterization scheme include creating the courses in-house, adapting a course from another provider, or purchasing the course from an online curriculum vendor (Clark, 2001).

As seen in the discussion above, many different and interrelated features can be used to define and describe virtual schools. An examination of the research shows that while limited studies and reports address some of the features when examining particular virtual schools (Kozma et al., 2000; Zucker & Kozma, 2003), a particular state (Tankersley & Burnham, 2007), or select virtual school types (see the Keeping Pace reports), there are no studies that examines some or all of these feature with a full nationwide sample of virtual schools, a significant gap in the literature.

**Enrollment**

The decentralized nature of K-12 schools in the U.S. and the lack of a single data source for virtual school enrollment data makes it difficult to get an accurate count of all
K-12 students who are taking online courses (Picciano & Seaman, 2007). In the first national estimate, Clark (2001) conducted a survey using a peer group approach, using representatives from accredited or state-approved virtual schools serving K-12 students with Internet based instruction, to extrapolate a "ballpark estimate" of 40,000 to 50,000 students who would take an online course in 2001-2002 from such schools. Other projections predicted 600,000 students for 2005 (Smith, Clark, & Blomeyer, 2005) and over a million for 2006, based on reports from the Peak Group and West Ed (Boria, 2006).

Some studies address a particular population of students nationwide, those who are enrolled in public K-12 schools. An NCES survey of public school administrators estimated that in 2002-2003 there were 327,680 K-12 students enrolled in distance education courses; but this included more than just Internet-based courses, such as two-way interactive video (Setzer & Lewis, 2005). To focus the data on courses delivered online to public school students, Picciano and Seaman, sponsored by the Sloan Foundation, have twice surveyed a similar population, public school districts in the United States and estimated the student enrollment in online courses as 700,000 in 2005-2006 (Picciano & Seaman, 2007) and 1,030,000 in 2007-2008 (Picciano & Seaman, 2009), an increase of 47% in two years. But, as the authors note, these estimates do not include private school students, for whom no online learning estimates are available, or home school students, a population in which 19% rate reported using Internet, email and Web-based distance learning media in 2003 (Princiotta, Bielick, & Chapman, 2006).
Data from the state level virtual schools highlights another key issue to consider when discussing online learning enrollment data, the distinction between student enrollment and course enrollment. As Watson and Ryan note (2007), state-led virtual schools primarily provide supplemental programming; given that some students take more than one course, registration numbers are typically 20-30% higher than the number of unique students they serve. That being said, from summer 2006 to spring 2007 there were approximately 160,000 course registrations reported from the 15 state-led schools surveyed for the 2007 Keeping Pace report (p.29). This number does not include data from the 27 other state-led schools not profiled in the report; it also reports the data in an unusual way, from summer to spring rather than fall to summer.

Of those 160,000 course registrations, 100,000 were reported from one school, the Florida Virtual School (FLVS) which has clearly experienced rapid growth, having served approximately 11,000 students in the 2002-2003 school year (Florida Virtual School, 2003). Such growth is seen throughout the field. The Virtual High School, a national consortium that had more than 3,000 individual course enrollments in the 2000-2001 school year (Zucker & Kozma, 2003) most recently reported 11,902 course enrollments (Virtual High School, 2009). In Utah, 8% (11,267 students) of the state's high school population took between one or more courses from the state's Electronic High School (EHS) in the 2002-2003 school year (Richard M. Siddoway, Principal, EHS, personal communication, June 20, 2003). The online course required for all Utah students graduating in 2006 had a projected enrollment of 30,000 students, an anticipated tripling of the school’s total course enrollment in just three years. This is consistent with a recent
survey in which 40% of state-led programs reported annual growth over 25% in the 2006-2007 school year, half of which reported growth rates of 50% or greater (Watson & Ryan, 2007). There has also been growth in the number of virtual charter schools and virtual charter school enrollment, from 86 schools serving 31,000 students in 13 states in 2004-2005 to 173 schools serving 92,235 students in 18 states in 2006-2007 (iNACOL, 2009, citing Center for Education Reform).

Taken together, the various enrollment data indicate there is considerable growth in the number of virtual schools, course enrollments, and student enrollments nationwide. Unfortunately, the full national scope of K-12 online learning can only be seen through a patchwork of different reporting purposes, measures, and formats and misses significant portions of the virtual school landscape, private schools and the home school audience.

**Purpose and Potential of Virtual Schools and Programs**

An examination of reports and studies shows that while there are many differences among K-12 virtual schools, there seem to be some shared purposes underlying them. Initial studies indicated that the primary goal for online learning programs was to increase learning opportunities and options for students (Anderson & Dexter, 2003; Augustine-Shaw, 2001; Lary, 2002; Zucker & Kozma, 2003). As the field developed, reports about virtual schooling continued to emphasize expanding student access to learning opportunities as a key goal (Watson & Ryan, 2007), and specified the particular courses or programs being made available through online learning, such as Advanced Placement (iNACOL, 2009; U.S. Department of Education, 2007) and foreign languages (iNACOL, 2009). Others note particular student audiences who can benefit
from the virtual schools, such as gifted students (Vanourek, 2006), students at risk of dropping out of high school (Sturgeon, 2008; Vanourek, 2006), rural students (Damast, 2007; Watson & Ryan, 2007), and home school students (Vanourek, 2006). Also identified were students looking for schedule flexibility (Watson, 2007; Watson & Ryan, 2007), because of other interests (e.g., Olympic sports, arts), time commitments (e.g., work or family), or physical constraints (e.g., hospitalized, homebound, incarcerated).

In recent years, research has also emerged that examined the perspectives of some key stakeholder groups regarding the reasons for K-12 online learning. For example, three studies focus on the parents of students attending online charter schools (Carr-Chellman & Sockman, 2006; Clemens, 2002; Gray, 2005; Jaycox, 2004). Similar to findings in a study of home school parents (Princiotta, Bielick, & Chapman, 2006), online learning parents framed the virtual school as an alternative to the traditional school environment. Such an alternative was needed, according to these parents, because the traditional school was perceived as not meeting students’ needs (Carr-Chellman & Sockman, 2006; Jaycox, 2004), not having high quality teaching, administration and curriculum (Gray, 2005), had issues of safety (Gray, 2005), and did not support the family’s cultural or religious values (Carr-Chellman & Sockman, 2006). Parents also perceived that the online school could customize the students’ learning (Carr-Chellman & Sockman, 2006), that parents could have more control over the curriculum and take an integral role in teaching their children (Clemens, 2002), and appreciated that the schooling was free (Carr-Chellman & Sockman, 2006). Parents also identified virtual schools as offering their student freedom to travel, to work, and to progress at their own
pace (Gray, 2005) while students in that same study identified flexibility, meeting their individual needs, and choices and curricular options as the primary benefits of virtual schooling for them (Gray, 2005). Finally, online teachers, in addition to valuing flexibility and course options for their students, valued the higher motivation they saw in their online students and appreciated the removal of some of the social issues typically seen in a traditional school (Gray, 2005).

Another key stakeholder group whose perspective has been examined are the administrators of brick and mortar schools who provide online learning opportunities to some of their students. A NCES Fast Response Survey System study, conducted by Setzer and Lewis (2005), asked a nationally representative sample of public school district administrators to identify how important various reasons were in their choice to provide distance learning opportunities to their brick-and-mortar school students. These findings, while focused on distance learning rather than specifically online courses, are congruent with a variety of other studies (Heidlage, 2003; Picciano & Seaman, 2007; Robison, 2007) that identify the following five reasons why administrators value online learning opportunities for their students: to offer courses not available at the school; to meet the needs of specific groups of students; to offer Advanced Placement or college-level courses; to reduce schedule conflicts for students; and to provide for remediation (see Table 3).
### Table 3

*District Administrators’ Reasons for Having Distance Education Courses*

<table>
<thead>
<tr>
<th>Reason for having distance education courses (additional concurring sources listed in parentheses)</th>
<th>Level of importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offering courses not available at the school (Heidlage, 2003; Picciano &amp; Seaman, 2007; Robison, 2007)</td>
<td>80/11</td>
</tr>
<tr>
<td>Meeting the needs of specific groups of students (Picciano &amp; Seaman, 2007)</td>
<td>59/22</td>
</tr>
<tr>
<td>Offering AP or college-level courses (Heidlage, 2003; Picciano &amp; Seaman, 2007; Robison, 2007)</td>
<td>50/19</td>
</tr>
<tr>
<td>Reducing schedule conflicts for students (Heidlage, 2003; Picciano &amp; Seaman, 2007)</td>
<td>23/33</td>
</tr>
<tr>
<td>Permitting students who failed a course to take it again (also described as remediation) (Picciano &amp; Seaman, 2007; Robison, 2007)</td>
<td>17/15</td>
</tr>
<tr>
<td>Addressing growing populations and limited space (Picciano &amp; Seaman, 2007)</td>
<td>8/17</td>
</tr>
<tr>
<td>Generating more district revenues (Picciano &amp; Seaman, 2007)</td>
<td>4/12</td>
</tr>
</tbody>
</table>

from Setzer & Lewis, 2005, p.56

Picciano and Seaman (2007) identified three other reasons brick and mortar administrators identified as important, namely to provide students with certified teachers not available for traditional face-to-face instruction, to apply specific pedagogical approaches, and because students preferred the online courses. Robison (2007) found some administrators also thought providing options for homebound students was an important benefit.

Taken together these studies provide a strong base of data to see what purposes virtual schools are fulfilling for some key K-12 online learning stakeholders groups.
involved, namely online students, parents and teachers and brick-and-mortar public school district administrators. Unfortunately, there are no such studies of another significant stakeholder group, the ones responsible for setting the vision of a virtual school and administering its mission, the administrators of virtual schools, the subject of the next section.

**Leaders of K-12 Virtual Schools and Program**

Research in recent years has demonstrated that a K-12 school administrator can have direct influence on many elements of their school, such as the school’s professional community (Bryk, Camburn, & Louis, 1999; Louis & Marks, 1998) and high quality instruction (Newmann, Smith, Allensworth, & Bryk, 2001). Evidence also is emerging that school leadership, particularly instructional leadership (Robinson, Lloyd, & Rowe, 2008), can indirectly influence student achievement (Leithwood & Jantzi, 2008; Wahlstrom, 2008). Regarding implementation of online learning initiatives, secondary teachers involved in the development of virtual schools identified administrative support as very important to their work (Lightfoot, 2003; Sellers, 2001). Yet, surprisingly, although an administrator is a pivotal figure in the life of a school, as the K-12 virtual schools have developed over the past decade, very little has been written about them.

There are resources written for these administrators. The first wave of literature that emerged regarding K-12 virtual school administration identified the range of policy and administrative issues that would need to be addressed by leaders in the field (Ausbrooks, 2000; Clark, 2000, 2001; Glick, 2002; Kirby, 1998; National Association of State Boards of Education, 2001). At the time, people argued online learning was
developing so quickly, the virtual schools and programs were operating in a policy vacuum at both the state and local levels (Glick, 2002; National Association of State Boards of Education, 2001). The issues were “numerous and complex” and were organized in various lists, including such categories as funding, learner options, equity, special needs students, quality assurance, teacher licensure and contracts, statewide coordination, district policy development and support, and technology (Glick, 2002, p. 4).

As the field expanded and developed, a variety of management and planning books and reports were published to address these policy issues and concerns faced by virtual school administrators (Abdal-Haqq, 2002; Berge & Clark, 2005; Cavanaugh, 2004; Karlin, 2005). Others laid out guiding principles for those making and implementing virtual school policies (Fulton, 2002; National Association of State Boards of Education, 2001), yet all left unanswered the question of who were the people who were to address these issues, follow these principles, and lead these virtual schools?

There are also resources written with the help of these administrators. These trends and issues reports, begun by Tom Clark (Clark, 2000, 2001) and conducted annually since 2004 in John Watson’s Keeping Pace with K-12 Online Learning series (http://www.kpk12.com/index.html), are the most comprehensive analyses of K-12 virtual schools nationwide and depend on survey and interview responses from the school administrators. Yet, while these reports are very extensive and cover a wide range of issues important to virtual school administration, not one presents data on who the school leaders are, how they arrived in their position, or what personal and professional characteristics they bring to their work. The only modicum of profile data about our
nation’s virtual school leaders is found within a study of professional development models used in K-12 virtual schools (Rice & Dawley, 2007) and indicates that while the majority of respondents (73%) had been an online administrator for less than 5 years, many came to their virtual school work with previous experience in education.

This is a paltry amount of information to have about the people who have been at the forefront of a technological innovation that some argue will transform education (Christensen, Horn, & Johnson, 2008). As noted earlier, data is emerging about what many other virtual school stakeholders (students, parents, teachers, brick-and-mortar administrators) believe about the purpose of online learning and virtual education, yet we do not have any data on the beliefs of those people responsible for setting those purposes and leading a school to enact them. This is a significant gap in the research literature, both in the field of virtual schooling and in school leadership more generally, and is addressed by this study.

**Public High School Education in the United States**

This final section of the literature review establishes, in broad strokes, the larger context in which the phenomenon of virtual schooling is emerging and creates a conceptual map of this context that can use to examine administrators’ beliefs regarding virtual schools. An overview of the history of public secondary education begins with the vision of the common school then traces the development of the comprehensive high school, a model that is still prevalent today. Curriculum differentiation, a key component of the comprehensive high school, is also briefly described. A summary of the purposes woven throughout this history shapes the first part
of the conceptual map. The second part of the conceptual map captures current contextual issues identified as potentially relevant to the development of virtual schools, namely shifting demographics, a changing economy, results focus for school, a demand for school choice, and the infusion of technology in daily life.

**Historical Overview**

The vision of the common school.

The vision of the common school has its roots in the founding of our nation. Thomas Jefferson warned that, without check, those entrusted with democratic power could convert to tyranny and that the best defense of the fledgling democracy would be "to illuminate, as far as practicable, the minds of the people at large" (Jefferson, n.d.). Admitting that some of the people "whom nature hath endowed with genius and virtue" may come from families who cannot afford to educate them, Jefferson also called for public support of their education (Jefferson, n.d.). John Adams advocated for even wider support of public education. As historian David McCullough argues, the Massachusetts State constitution provides evidence of "Adam's faith in education as the bulwark of the good society.... The survival of the rights and liberties of the people depended on the spread of wisdom, knowledge, and virtue among all the people, the common people, of whom he, as a farmer's son, was one" (McCullough, 2001, p.223). Another Massachusetts leader, Horace Mann (1796-1859), would later take this vision even further. Mann used his role as secretary to the Massachusetts State Board of Education to lay out a vision of American public education and to launch what became known as the "common school" movement. The purpose of the common school was to ensure a
citizenry educated for democracy, economic self-sufficiency, and moral life, and to supply the nation with inventors, discoverers, artisans, and judges; leaders of government, practical science, and construction; and heroes in war and in peace (Mann, 1848). The common school vision, a vision that still underlies our nation's public school system, posits education not just as a private good that benefits only the individual who receives it, but as a public good, the effects of which benefit society as a whole.

The early development of the public secondary school.

It took many years, however, for the vision of the common school to be extended from its roots at the elementary school level to the secondary level. In a comprehensive review of the literature on the public high school's history, Murphy, Beck, Crawford, Hodges, and McGaughy (2001) trace three early waves of its development—the Latin grammar school, the academy, and the early public high school. The Latin grammar schools, started in 1635 and present through the next two centuries, were managed by local governments but supported through private tuition. These schools were small in size and number, serving only male students whose families could afford tuition, and as such had little influence on the society as a whole. Their classical, college preparatory curriculum was focused on Latin and Greek and was intended to prepare students for further academic study (Murphy et al., 2001, p.4).

Dissatisfaction with the limited scope and audience of these schools led to the development of the academy model, started by Benjamin Franklin in 1751 and expanding to more than 6,100 schools through the U.S. and territories by 1850. The academies also required tuition but were more democratic in character than the Latin grammar schools.
With an expanded purpose to serve students who were preparing for college and those who were not, the academies presented a broader and more modern curriculum, including subjects such as science, history, and modern languages, and used English rather than Latin as primary language of instruction. Still, however, the private nature of the academies limited the enrollment, public support, and widespread impact of these schools (Murphy et al., 2001, p.5).

A variety of factors are cited as influencing the development of the early public high school in the mid to late 1800s, including the following: (a) the emerging market economy that solidified a connection between education and success in the workplace; (b) reformers' call for free universal schooling; (c) an extension of the elementary schools' curriculum to higher levels; and (d) population growth and centralization that increased the capacity for public financial support of schools. While these early high schools attracted more students than the Latin grammar schools or academies and did include girls, enrollment numbers were still negligible in terms of the population as a whole; the total attending public high schools in 1890 (203,000 students) was approximately 1% of the total national population (Murphy et al., 2001, p.10). Murphy et al. present a rough algorithm, shown in Table 4, that demonstrates the low proportion of the population who attended and graduated from high schools at this time.

Table 4

<table>
<thead>
<tr>
<th>Rough Algorithm of 1890 Public School Enrollment Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of 10,000 students who entered first grade</td>
</tr>
<tr>
<td>1,000 completed elementary school</td>
</tr>
<tr>
<td>100 entered high school</td>
</tr>
<tr>
<td>10 graduated from high school</td>
</tr>
<tr>
<td>1 went on to college</td>
</tr>
</tbody>
</table>

(From Murphy et al., 2001, p.10.)
While these early high schools varied by community, in general, the initial intent was to provide curriculum that was more focused on preparation for modern, practical life rather than the classical curriculum of the past. By the end of the century, however, the schools had begun to try to serve two distinct purposes and so, offer two different courses of study—English (intended for practical life) and classical (intended for college preparation). "Public high schools with dual aims and differentiated curricula had become part of the fabric of the educational tapestry" (Murphy et al., 2001, p.14) and paved the way for the comprehensive high school.

**The comprehensive high school.**

The period from 1890 to 1920 was a pivotal time for the development of the comprehensive high school: "It was the time when the learning and teaching foundations that have defined the comprehensive high school for nearly a century were poured" (Murphy et al., p.21). The first of two key reports, the 1893 *Report of the Committee on Secondary School Studies*, argued that the development of the intellect through an academic curriculum was the foundation for both college preparation and for practical life. This call for a common, academic curriculum, however, could not withstand the challenges of the changing nation, the appeal of a more practical curriculum, and the movement for social control through public education (Murphy et al., 2001, p.23). Responding to an influx of southern and eastern European immigrants, a changing industrial and economic structure, and widespread migration from rural to urban living, the secondary school went through a rapid period of development. "What in 1890 was a rather haphazard assortment of courses of study taught in a handful of secondary schools
to a small and privileged segment of the nation's youth became by the later 1920’s a
disproportionately represented in vocational track. "What resulted, then, by 1930 was a

of the comprehensive high school model, focusing on universal access and the uniting
nature of the public high school (Murphy et al., 2001, p. 38). Underlying this report was
the belief that schools "should help ensure two necessary components of a democratic
society—unification and specialization" (Oakes et al., 1992, p. 578). Unification was to
come through having students attend the same school, take some common courses
(English and social studies), and mingle socially in the life of the school. Specialization
came through the curriculum differentiation, allowing curricular tracks to meet what
educators perceived to be students' different vocational needs. According to Oakes et al.,
this report "stimulated a flurry of reorganization as high schools sought to become
comprehensive, with specialized programs for college preparation, vocational
preparation, and general preparation" (p. 578). The three main curriculum tracks that
evolved to support the perceived needs of the expanding base of students included an
academic track, a general track that added practical courses to the academic, and a new
vocational track intended to prepare workers for various trades. Socially differentiated
course-taking patterns were established early on, with middle and upper class students
primarily following the academic track and students from low-income families
fairly distinct and well-organized set of curricular alternatives intended to prepare
different groups of adolescents for informed citizenship in the commonwealth and for
differentiation in the economy" (p. 578).

Curriculum differentiation's role within the comprehensive high school was
further articulated and expanded upon by school reformer James Bryant Conant.
According to Rury (2002), Conant wrote a series of reports (The American High School,
1959; Slums and Suburbs, 1961; The Comprehensive High School, 1967) in which he
emphasized the democratic and egalitarian principles underlying the design of the
American high school but did not argue for a return to a more common curriculum:

As indicated earlier, of course, the comprehensive high school also was rooted in
the principle of curricular differentiation. At the same time that it represented the
ideals of equality and democracy, it acknowledged the fact that individuals were
destined to play a variety of roles in the larger society. This too was appealing to
Conant and to other devotees of all-inclusive secondary education. It represented
a practical solution to the problem of varying interests and abilities in a large and
diverse society, and linked the institution to the labor market. At the same time
that the high school prepared the most academically gifted students, it would also
provide vocational training for those destined to menial careers. Conant favored
ability grouping within subject over forming explicit "tracks" to distinguish these
groups of students, and he argued that some subjects—such as civics—ought to
be taught in common. But there could be little doubt that the comprehensive high
school was supposed to separate students along curricular lines, in accordance
with what educational leaders expected to be their eventual occupational roles in
society (p.309).

As the comprehensive high school continued to grow in enrollment and social
significance throughout the century, a variety of characteristics evolved. These include an
expansion of course offerings, a continual shift away from academic to practical courses,
and an increased emphasis on the social needs and interests of students (Murphy et al.,
2001, pp.53-65), all of which are reflected in the current context of the public high school and will be discussed later in the chapter.

Conceptual map of historic tensions

From this history of the public high school emerges a picture of shifting and evolving purposes underlying and shaping the U.S. secondary education system, represented in Figure 1 and described in this section.

Figure 1

*Historic Tensions within Secondary Public Education in the United States*

**HISTORIC TENSIONS**

Public education is:

- **a Public Good**
  - benefiting society as a whole by:
    - supporting democracy
    - supporting the economy
    - enacting social justice

- **a Private Good**
  - allowing individuals to prepare for:
    - further schooling
    - the world of work
    - practical and personal life

Curriculum should be:

- standardized
- individualized

**Purposes focused on the public good.**

In one category are the purposes that support the vision of education as a public good, meaning the benefit is received by society as a whole from publicly educating our nation’s young people. These purposes include supporting the democracy, supporting the economy, or enacting social justice. As noted earlier, Thomas Jefferson claimed that an
educated citizenry was necessary to support democratic system of government, claims echoed and expanded upon by a range of writers and educators, from early leaders such John Adams and Horace Mann to recent writers such as Amy Gutmann (1999) and John Rury (2002). The society’s economic interests in education also are reflected early in the development of the nation’s school system, most notably in curriculum differentiation tracks based on students’ perceived futures in the world of work. As Murphy et al. note (2001), it was the evolution of the U.S. market economy that led to the increased connection between schooling and the marketplace, and hence, to an increased demand for schooling (p.7). Such a focus continues today with the nation’s business leaders calling for a better-educated work force, with school-to-work initiatives, and with an array of special programs that help prepare students for life after high school.

Finally, using education to address the society's social justice needs can be seen early in the development of our school system when Jefferson argued that talented students who could not afford education should be helped by public schools. Social justice aims were of great focus and development in the 20th century, most evident with the Brown vs. Board of Education ruling and the ensuing work to increase access to quality public education for all students, regardless of their race, economic status, home language, or ability status. This continues in the underlying philosophy (if not the effect) of legislation that argues that it is the responsibility of our society to ensure that all students, no matter with which subgroup(s) they are associated, demonstrate academic progress and achievement ("The No Child Left Behind Act of 2001", 2002).
**Purposes focused on the private good.**

In the other category are purposes focused on the private good that individuals receive through their education and include preparing individuals for future schooling, for the world of work, or for practical and personal life. As noted earlier, the precursor to the public high school, the academies, were created in response to the academically focused Latin grammar schools and offered two different courses of study – English (intended for practical life) and classical (intended for college preparation). The early public high schools first were intending to serve students who would not be going to college, but then eventually spread to include preparation of students for college as well (Murphy, Beck, Crawford, & McGaughy, 2001). As these high schools subsequently shifted to a more academic focus, however, there was concern that students who were not going to college were not being served. "By 1890, the high school had largely repeated the history of the academy in that after beginning as a practical, non-college preparatory institution, it had come to be dominated by higher institutions and the college preparatory aim. This was true even though the majority of those who entered it did not continue their education further. Thus high school was failing to meet the need of a large portion of adolescent youth who desired a secondary education" (Odell, 1939, as cited in Murphy et al., 2001 p. 11).

The pendulum shifted again, when the *Cardinal Principles Report of 1918* and the ensuing comprehensive high school model reaffirmed the principle of offering distinct courses of study based on students' perceived post-high school plans. This system continues today through vocational education programs, through formal and informal
systems of curriculum tracking (Oakes et al., 1992; Oakes & Guiton, 1995), and through programs such as International Baccalaureate and Advanced Placement that specifically target college-bound students. Also questioned is whether these two purposes, preparation for life or for college, really are different. The message from the 1893 Report of the Committee on Secondary School Studies that life and college require the same mental preparation and as such, do not require separate courses of study (Murphy et al., 2001) still resonates today for those who argue for a return to a common curriculum intended for all, irrespective of students' intended life plans.

**Common or individualized curriculum.**

This leads to the related tension woven throughout the history, the question of whether curriculum should be a common to all or individualized. As discussed earlier, the curriculum of the early comprehensive high school was intended to promote both unification and specialization. Yet, ever since public opinion compelled the early high schools to offer both a college preparatory and a more practical curriculum, "public high schools with dual aims and differentiated curricula had become part of the fabric of the educational tapestry" (p.14). As will be discussed further in the following section, the amount of curriculum differentiation both within school and between schools has continued to expand in recent years, providing more and more options for students to individualize their course of study. Simultaneously, however, has been the rise of the standards movement, which is premised on the expectation of common outcome measures, if not common curriculum and instruction. Some continue to argue the merits of a common curriculum. For example, Bryk, Lee and Holland (1993) demonstrate the
success of Catholic high schools' "constrained curriculum"—one that provides less choice for students and focuses more heavily on a common, academically focused curriculum—for reducing the achievement gaps that exist for minority and low-income students. Others such as Oakes et al. (1992) note that curriculum differentiation, far from being just about options, ability grouping, or tracking processes, reflects systemic issues and fundamental values.

**Current Contextual Issues**

The model of the comprehensive high school, while still prevalent in our national consciousness, no longer captures the complexity of the current and evolving system of secondary public education. While there are many economic, social, and political forces that shape the current context in which the system exists, five key factors stand out as potentially having an impact on the development of virtual high schools.

**Shifting demographics.**

The first factor is the shifting cultural geography, or, as Murphy et al. (2001) describe it, the "need to address the changing social dynamics of American society and to repair an ever widening tear in the social fabric of the nation" (p.68). Rury (2002) asks "whether the comprehensive high school, and the democratic ideal that it represented at the time of Conant's reports, is possible in a society as divided by race, social class, and culture as the United States is today" (p. 308) and concludes that changes in the U.S. culture and society have made realization of Conant's vision of the comprehensive high school problematic. A "new cultural geography defined by race and income" was created after WWII, particularly in the larger metropolitan areas; white flight from the central
cities and the development of the suburbs served to segregate people by income as well as race and ethnicity (p. 311). The vision of the comprehensive high school as a place in which representatives of a diverse community are together, at least within the institutional life, if not in curriculum tracks, does not apply when majority of the high school population are primarily of the same income bracket or of the same ethnicity. Curriculum differentiation, while still present within individual schools, became even more pronounced between schools, particularly as the disparities in educational, financial, and social resources among urban and suburban schools and districts grew.

**Changing economy.**

A second contextual factor is the evolution of the economy and its impact on work force expectations. As Rury (2001) notes, "the very idea of the comprehensive high school, of course, was premised on the principle of differentiation: the notion that high school youth are destined to enter a variety of occupational fields upon graduation" (p.319). The variety of occupational fields since the post-war society has changed dramatically, however, resulting in far fewer industrial jobs for which the vocational track was created. Office jobs replacing manufacturing ones, a shift to the knowledge economy, and higher college enrollment have led to an increased expectation for academic skills and preparation for all students (Rury, 2001). This has led to an increased emphasis on academics and a more focused curriculum, at least in desired outcomes if not in instruction (Murphy et al., 2001, p. 71). And as the Partnership for 21st Century Skills, an advocacy organization focused on infusing 21st century skills into education, notes: “There is a profound gap between the knowledge and skills most students learn in
school and the knowledge and skills they need in typical 21st century communities and workplaces” (Partnership for 21st Century Skills, 2009). While mastery of core subjects is still valued, they argue that in order for students to “face rigorous higher education coursework, career challenges and a globally competitive workforce,” they will need skill sets in the following categories: (a) information and communication skills; (b) thinking and problem-solving; (c) interpersonal and self-direction; (d) global awareness; (e) financial, economic and business literacy; and (f) civic literacy.

Focus on outcomes.

A third factor, evolving in response to the second, is the focus on outcomes rather than processes. Ever since the publication of A Nation at Risk (1983) and other reform reports of the 1980s, there has been a profound shift in how we talk about K-12 education. Previously, the emphasis had been on inputs (e.g., equalization of funding, conditions of schools, access to qualified teachers) and processes (e.g., instruction and testing practices, teacher interaction) with an emphasis on how they were being distributed among racial, gender or class groups. While these elements continue to receive considerable attention, they are recognized instead as means to an end, rather than ends in themselves. The overwhelming emphasis is now on the student learning outcomes or achievement effects of public schools. This shift is evidenced by many of the current educational movements, including the following: data-driven decision-making, the standards movement, the accountability movement, state and national student testing, the increased expectation for publication and comparison of schools’ student test data, state takeovers of under-performing schools, continuous improvement planning and
comprehensive school reform models focused on student achievement, and continued interest in results from international comparative studies. The *No Child Left Behind* (2002) legislation further codifies this emphasis on student achievement outcomes, particularly attending to adequate yearly progress measures among all sub-groups within a school and applying punitive measures to schools and districts who are not demonstrating progress with their students.

**School choice.**

The fourth contextual factor is the increasing variety of alternatives within the public school system as a whole. First, there are choices within schools. The *National Commission on the Reform of Secondary Education: A Report to the Public and the Profession*, published in 1973, called for fundamental change to public high schools. Specifically, students were to be able to select from a wide variety of alternatives, including non-formal sources for learning and the option to take a GED exam (General Educational Development) as an alternative to a high school diploma. "All of these measures were intended to provide greater freedom and flexibility to students, to allow them to achieve their goals through a variety of means" (Rury, 2001, p. 325). The continued expansion of such course offerings have led to what Powell, Farrar, and Cohen (1985) describe as the "shopping mall high school." This metaphor captures the new role of students as consumers, picking and choosing their educational experiences from a dizzying array of option. In this model, the authors argue, educators have "expanded almost limitlessly the variety of experiences considered educationally valid," creating an "amalgam of elementary education, university instruction, technical education, and adult
education, plus the offerings of mental health and social service agencies" (p.2). In so
doing, they "take few stands on what is educationally or morally important" and place the
responsibility of defining the purpose of schooling on individual students and their
families.

There are more and more choices between schools as well. Families historically
have been able to make choices about their students' schooling through where they chose
to live, by paying tuition to private schools, or by home schooling. These options,
however, required financial and personal resources not necessarily available to all
families. To expand school choice within the public school system and to motivate public
schools to reflect on and improve their programs to meet the needs of current or potential
students, an even wider array of school choice options have been developed in recent
years. For example, in Minnesota, a state known as a leader in the school choice
movement, the following publicly funded school options are available to high school
students: (a) Post Secondary Options in which juniors or seniors take courses for credit at
post-secondary institutions with the tuition, fees and required texts paid for by the state;
(b) an Enrollment Options Program that allow students to attend a school or program
outside their resident district at no additional cost to the family; (c) Area Learning
Centers that are alternative programs designed to meet the needs of individual learners
for whom the tradition school setting is not working; and (d) Charter Schools which are
independent public schools established and managed with decentralized forms of
governance and greater parental involvement (Minnesota Department of Children
Families and Learning, 2001). Curriculum and instructional plans in all of these varied
and diverse programs are developed within the specific programs, thereby leading to an ever-expanding system of curriculum differentiation both within and between schools.

Infusion of technology in daily life.

Finally, the fifth factor is the ubiquitous nature of technology in the lives of students. As early as 2001, the United States Department of Commerce noted significant increases in computer and Internet use for all demographic groups and reported a nationwide Internet use rate of 59.9% (U.S. Department of Commerce, 2002). Recent estimates suggest that 90% of all people in the United States will have access to high-speed online networks by 2014 (Rainie, Fox, & Anderson, 2005). Technology literacy standards for students (the NETS-S), have been revised twice since they were first articulated in 1998 (International Society for Technology in Education, 2000) in order to reflect the changing technological opportunities available to and additional competencies needed by students living in an increasingly digital society. The most current draft of these standards, which emphasize creativity and innovation, communication and collaboration, research and information fluency, critical thinking, and digital citizenship (International Society for Technology in Education, 2007), have been widely adopted and adapted nationwide. Access to Internet in the classroom has also increased nationwide, with 94% of public school instructional classrooms having Internet-connected computers with a ratio of students per computer at almost 4:1 (Wells, Lewis, & Greene, 2006).

Yet there is growing concern that even with the increase of technology and Internet access in schools, there is a disconnect between the technologies used in students’ personal lives and those used in school. As Greenhow, Robelia, and Hughes
(2009) argue, young people’s personal use has shifted from first generation Web technologies that are primarily read-only formats to what has been termed “Web 2.0” technologies, those which allow for collaborative and participatory engagement (e.g., text-messaging, instant messaging, social networking sites such as Facebook, and media sharing sites such as YouTube). Summarizing a variety of studies, Greenhow et al., describe today’s youth as “creative, interactive and media oriented; use Web 2.0 technologies in their everyday lives; and believe that more use of such technologies in school would lead to increased preparation and engagement” (p.247) although much of this technology use is happening outside of school time (National School Board Association, 2007).

**Conceptual map of current contextual issues.**

In summary, public high school education in the United States is a complex and continuously evolving system with a myriad of contextual issues that will help shape its evolution. Five of this issues, listed in Figure 2, have been discussed with the intent to create a conceptual map of the context in which virtual schools have emerged and will be used, along with representation of historical tensions discussed earlier, to explore virtual school leaders’ beliefs about virtual schools purpose and potential.

**Figure 2**
*Current Contextual Issues within Secondary Public Education in the United States*

<table>
<thead>
<tr>
<th>CURRENT CONTEXTUAL ISSUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shifting demographics</td>
</tr>
<tr>
<td>Globalized economy</td>
</tr>
<tr>
<td>Results focus for schools</td>
</tr>
<tr>
<td>Demand for school choice</td>
</tr>
<tr>
<td>Technology infusion</td>
</tr>
</tbody>
</table>
Summary of the Literature Review

The purpose of this study was to investigate the emerging world of virtual high schools and the people who lead them to better understand virtual schooling’s purpose and potential, particularly within the context of public education in the United States. A review of the literature described key features of virtual schools in the United States and identified range of purported virtual school purposes, both from technical reports and research studies that examined some key constituents of virtual schools (students, parents, teachers and administrators of brick-and-mortar schools). Yet, little information about the background or perspective of virtual school administrators was found, giving evidence to the need for research in this area. To create a conceptual map with which to analyze virtual school administrators’ perspective, an overview of the history of public education and public secondary education in the United States and five current contextual issues were also discussed. As represented in Figure 3, the first three sections of the literature review led to one or more research questions for the study and the fourth was used to create a conceptual for data analysis.
Figure 3
*Relationships Among Literature Review Sections and the Research Questions*

<table>
<thead>
<tr>
<th>Literature Review Sections</th>
<th>Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12 virtual schools and programs</td>
<td>1. What are the basic features of K-12 virtual schools and programs nationwide?</td>
</tr>
<tr>
<td>Purpose and potential of virtual schools and programs</td>
<td>2. What are the stated purposes and potential of K-12 virtual schools and programs?</td>
</tr>
<tr>
<td>Leaders of K-12 virtual schools and programs</td>
<td>3. Who are the leaders of K-12 virtual schools and programs?</td>
</tr>
<tr>
<td></td>
<td>4. What do leaders of virtual high schools and programs believe about the purpose and potential of virtual schooling?</td>
</tr>
<tr>
<td>Public high school education in the U.S.</td>
<td>Conceptual map of context</td>
</tr>
</tbody>
</table>

*Framework for Analysis*
CHAPTER 3: RESEARCH DESIGN

Research Questions

The purpose of this study was to investigate the emerging world of virtual high schools and the people who lead them to better understand virtual schooling’s purpose and potential, particularly within the context of the history of public education in the United States. Four research questions were developed and refined through the review of the literature and were then used to guide the study’s design, implementation, and analysis.

1. What are the basic features of K-12 virtual schools and programs nationwide?

2. What are the stated purposes and potential of K-12 virtual schools and programs?

3. Who are the leaders of K-12 virtual schools and programs?

4. What do leaders of virtual high schools and programs believe about the purpose and potential of virtual schooling?

Methodology and Research Methods

Given that the field of K-12 virtual schools is still in an emergent phase of development and, as such, is a little-known phenomenon (Marshall & Rossman, 1999), a qualitative research approach was at the heart of this study. This interpretive research orientation was an inductive mode of inquiry (Merriam, 1998) that focused on understanding complex experiences and meanings, rather than testing a particular hypothesis or theory. Because so little is known about both the K-12 virtual schools and
the head administrators who lead them, quantitative methods were also used to provide
descriptive data and to create the context in which the interpretive work could be placed.

The mixed-methods study used three sequential phases designed developmentally
to allow results from one method to inform subsequent ones. The first phase used
document analysis of virtual school Web sites to identify key characteristics of the
schools and programs listed on the North American Council of Online Learning
(NACOL) Clearinghouse List. Results from this analysis were used to develop the
instrument for the second phase, an online survey of virtual school head administrators.
The third phase, semi-structured interviews of selected survey respondents, used data
from the previous phases to shape the interview guide and sought expert opinion on
patterns or issues that emerged from the document analysis and survey. Most importantly,
the interviews addressed exploratory questions about administrators’ beliefs about virtual
schooling. The three phases were complimentary in that both overlapping and different
facets of the phenomenon emerge from them (Creswell, 1998), as noted in Table 5.
Table 5
Research Questions, Phases, and Methods

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Phases and methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the basic features of K-12 virtual schools and programs nationwide?</td>
<td>√</td>
</tr>
<tr>
<td>2. What are the stated purposes and potential of K-12 virtual schools and programs?</td>
<td>√</td>
</tr>
<tr>
<td>3. Who are the leaders of K-12 virtual schools and programs?</td>
<td>*</td>
</tr>
<tr>
<td>4. What do leaders of virtual high schools and programs believe about the purpose and potential of virtual schooling?</td>
<td>√</td>
</tr>
</tbody>
</table>

√ = major data source; * = minor data source

The sections that follow describe each phase in detail and include information about the sampling procedure, data collection, and data analysis.

**Phase 1: Document Analysis**

**Sampling Procedure**

The sampling frame used for the document analysis was the entire population of K-12 virtual schools and programs listed in the North American Council on Online Learning (NACOL) Online Clearinghouse, the only national list available as of spring 2005. According to Tim Stroud, then President and CEO of NACOL, the list was created through a comprehensive search process and verified by virtual school expert, Tom Clark, with data accurate as of October 2004 (personal communication, January 27, 2005). A comparison between the Minnesota state list of online programs and the
Minnesota listing in the NACOL list, however, demonstrated that the list was incomplete, an issue also noted by Illinois Virtual School Director, Matt Wicks (personal communication, September 1, 2005). As this list was the only one available at the time, however, the incomplete nature of it was accepted as a limitation of the research.

Given how little is known about the characteristics of the population and the relatively small number of schools and programs on the list (142), the entire list was used for both the document analysis and the online survey. The NACOL list provided school name, address, contact information, and Web site address. Other data from the list (type and accreditation) were used to confirm information found during the document analysis.

The unit of analysis was the virtual school or program as described on its Web site. It is important to note the context of these Web sites and the limits of the information presented on them. For a virtual school, the Web site is both the front door to the school and a marketing publication, serving current and potential students, schools, and families. The sites varied in terms of marketing and design sophistication as well as in amount of content presented. Some sites were quite comprehensive, presenting information about the school’s history, course offerings, sample courses, student academic and community centers (password protected), staff profiles, management board information, and student achievement results. Others had more limited information, focusing on logistics such as registration processes and course listings.

Of the 142 virtual schools listed on the NACOL Online Learning Clearinghouse as of January 2005, 123 schools were coded and used for the document analysis. Eight percent of the schools on the full list were not coded because the school had closed or had
no active Web link (n=6) or did not provide enough information on the Web site for even basic coding (n=5), giving evidence to the need for frequent updating of the NACOL list to maintain accuracy. The other eight schools removed from the list did not provide K-12 online learning programming, offering instead programming such as online staff development, college level courses only, video conferencing, or home school curriculum published online.

Table 6  
Schools by Type Coded During Document Analysis

<table>
<thead>
<tr>
<th>School type</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>District or county</td>
<td>18</td>
<td>14.6</td>
</tr>
<tr>
<td>Charter school</td>
<td>30</td>
<td>24.4</td>
</tr>
<tr>
<td>Public school</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>Private school</td>
<td>34</td>
<td>27.6</td>
</tr>
<tr>
<td>University</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>Other *</td>
<td>5</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>123</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Other includes three consortia, one network of charter schools, and one funded directly by the state department of education, similar to a public district

**Data Collection**

As recommended for quantitative document analysis (Altheide, 1996; Fraenkel & Wallen, 2000; Gall, Gall, & Borg, 2003), the protocol for data collection emerged over several drafts. Initial items focusing on school structure, curriculum, and student audience were used to code seven randomly selected schools and then refined to reflect the information that was and was not available on the Web sites. With advisor input, items related to school management structure were added, and over a series of coding phases, the items and codes were further refined and included the following categories: structure;
Once the protocol was established, sites used during the protocol development process were re-coded to reflect the new items or codes. The majority of items were of manifest content, meaning that which is obvious on the surface (Fraenkel & Wallen, 2000), and coded with either a pre-defined code or a number. An item about stated goals or purposes was qualitative in nature and so the list of responses was generated throughout the coding process. In addition, each category included an open-ended notes item for explanatory text or comments. The complete list of items and coding scheme is available as Appendix A. The data for this phase were collected between March and August, 2005.

**Data Analysis**

The data analysis used descriptive statistics (count, percentage, mean, range, standard deviation) to describe the characteristics of the virtual schools and programs. When appropriate, cross tabs were used to examine the data by school type. Items for which information was not complete or were qualitative in nature were presented in narrative descriptions. While the Web site document analysis did provide an introductory overview of key components of the virtual schools and did help develop a broad overview of the field, the results were used primarily to inform the instrument development in the second and third phases of the data collection.
Phase 2: Online Survey of Head Administrators

Sample

The initial plan was to use the entire population of K-12 virtual schools and programs listed in the North American Council on Online Learning (NACOL) Online Clearinghouse for sampling purposes. Fourteen schools, however, were removed from the list because document analysis showed that the schools had closed (6) or that the organization did not actually provide K-12 online learning programming (8). Hence, for the survey, the head administrators of the 128 NACOL virtual schools or programs that were offering K-12 online learning were recruited for participation. Use of the term “head administrator” reflects the varying titles used to describe the highest-ranking leader of virtual schools and programs, such as principal, director, coordinator, CEO, or manager.

Data Collection

Instrument.

The survey items were constructed to address the research questions and were organized in the following five sections: introduction and enrollment information, mission and purpose, curriculum and instruction, school management and leadership, and head administrators’ personal and professional characteristics. An additional set of follow-up questions was included at the end. Questions were developed following the design principles presented by Dillman (2000), revised with advisors’ input, piloted with a small group of people familiar with virtual school administrative roles, and revised again based on the feedback. In order to triangulate the survey data with that of the other two phases, the survey responses were not anonymous. See Appendix B for the survey
questions. An online survey tool, Zoomerang, was used to administer the survey. This allowed for easy online access by potential respondents, most of whom, given their role within a technology-based school, would presumably be comfortable with the use of an online tool. The online survey tool was also used to increase the efficiency and accuracy of the data collection.

Recruitment.

Each head administrator’s contact information (name, address, and email address) was gathered from the NACOL listing, the virtual school Web site, or through an email request of the school’s general contact person. While the first contact was made via U.S. postal mail, all subsequent recruitment correspondence was conducted via email, a format appropriate for leaders of online learning schools and programs. Using Dillman’s (2000) tailored design principles, the following contacts were made: an introductory letter that described the study and provided information about the informed consent process (see Appendix C); a recruitment email message that included a link to the online survey and a pdf copy of the introductory letter; and a thank-you message sent once the survey was completed. In addition, up to two survey reminder messages were sent to non-respondents. The survey was launched on November 28, 2005 and closed on December 20, 2005.

Response.

Of the 128 virtual school head administrators, 59 completed the survey, a response rate of 46%. As noted in Table 7, a higher response rate was obtained from the head administrators for whom a name and direct email address could be obtained.
Table 7
Survey Response by Level of Contact Information for Head Administrator

<table>
<thead>
<tr>
<th>Survey response</th>
<th>Name and direct email</th>
<th>Name but no direct email</th>
<th>No name and no direct email</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>52</td>
<td>7</td>
<td>0</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>(50%)</td>
<td>(33%)</td>
<td>(0%)</td>
<td>(46%)</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
<td>14</td>
<td>2</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>(50%)</td>
<td>(67%)</td>
<td>(100%)</td>
<td>(54%)</td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td>21</td>
<td>2</td>
<td>128</td>
</tr>
</tbody>
</table>

A chi-square test indicated that the distribution of survey respondents by school type was not significantly different than the school type proportions of the document analysis sample, \(X^2 (6, N=59) = 4.819, p.567\). Charter schools had the greatest residual, or proportional difference between the two samples, with only 9 of the 30 schools (30%) participating in the survey (see Table 8); other program types were more similar.

Table 8
School Types by Research Method

<table>
<thead>
<tr>
<th>School/program type</th>
<th>Number</th>
<th>Percent of sites (%)</th>
<th>Number</th>
<th>Percent of responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>12</td>
<td>9.8</td>
<td>8</td>
<td>13.6</td>
</tr>
<tr>
<td>District or county</td>
<td>18</td>
<td>14.6</td>
<td>12</td>
<td>20.3</td>
</tr>
<tr>
<td>Charter school</td>
<td>30</td>
<td>24.4</td>
<td>9</td>
<td>15.3</td>
</tr>
<tr>
<td>Public school</td>
<td>12</td>
<td>9.8</td>
<td>5</td>
<td>8.5</td>
</tr>
<tr>
<td>Private school</td>
<td>34</td>
<td>27.6</td>
<td>15</td>
<td>25.4</td>
</tr>
<tr>
<td>University</td>
<td>12</td>
<td>9.8</td>
<td>7</td>
<td>11.9</td>
</tr>
<tr>
<td>Other *</td>
<td>5</td>
<td>4.0</td>
<td>3</td>
<td>5.1</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
<td>59</td>
<td>100</td>
</tr>
</tbody>
</table>

* Other includes three consortiums, one network of charter schools, and one funded directly by the state department of education, similar to a public district.

In addition, grade level programming data in the two data sets were compared, namely the grade levels served as coded from the school Web sites and as reported by the head
administrator in the survey. Correlation coefficients were computed and, as Table 9 demonstrates, for the elementary, middle and high school levels the correlations were statistically significant.

Table 9

<table>
<thead>
<tr>
<th>Grade levels served</th>
<th>Pearson Correlation (N=59)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>.584*</td>
</tr>
<tr>
<td>Middle</td>
<td>.326**</td>
</tr>
<tr>
<td>High</td>
<td>.527*</td>
</tr>
<tr>
<td>Post-Secondary</td>
<td>.199</td>
</tr>
</tbody>
</table>

*p < 0.01  ** < 0.05

**Data Analysis**

Data analysis was similar to that of the first phase, namely descriptive statistics (count, percentage, mean, range) to describe the characteristics of the virtual schools and programs. When appropriate, cross tabs were used to examine the data by school type. Data were used to help create the context for the interviews and to help guide the development of the interview protocol. In addition to the descriptive reporting, the data could be used to identify variables for future quantitative studies examining the relationships among the various virtual school characteristics.

**Phase 3: Interviews**

**Sample**

Purposive random sampling was used to recruit interview participants in order to select cases that were information-rich, illustrate a range of perspectives, and yet also allow for some comparison of themes that emerge within and between school types (Gall et al., 2003). Of the 59 survey respondents, all but one of the head administrators indicated in the survey that they would also be willing to participate in a follow-up
interview. The three “other” schools were removed from the list and the public district and school categories were merged into one school type. Finally, given that the conceptual framework to be used for the analysis focused on high school education, only virtual schools that provided programming for high school students were used, resulting in the removed of six more schools. These modifications to the list resulted in 49 schools sorted into five school type categories (see Table 10). Within each school type, administrators were randomly selected and then invited via email to participate in the interview. Of those that participated in the interviews, two administrators were at schools whose school type had changed in the years between the survey (December, 2005) and interviews (February - March, 2009), one switching from a district-based school to a statewide one and one changing from a statewide one to a charter school. Given the small size of the population, descriptive information about the administrators and the schools they led could result in individuals and/or schools being identifiable. Hence, administrators interviewed will only be described by the virtual school type.

Table 10

<table>
<thead>
<tr>
<th>School type</th>
<th>Responded to survey</th>
<th>Agreed to possible interview</th>
<th>School served high school level</th>
<th>Interviewed (school type in 2005)</th>
<th>Interviewed (school type in 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Public school/district</td>
<td>17</td>
<td>16</td>
<td>16</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Charter school</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Private school</td>
<td>15</td>
<td>15</td>
<td>13</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>University</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55</td>
<td>49</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: two schools had changed auspices since the 2005 survey; one state school became a charter and one district school became a state one.
For the most part, the head administrators who participated in the interviews were in the same position that they had held at the time of the survey, with the exception of two. One had left virtual school administration and was working as a district level administrator in a different school district. A second remained in the same district and had supervision of the virtual school among other district administration responsibilities. An administrator of a charter school who had agreed to participate but could not because of scheduling issues, also had left virtual school administration, and was currently serving as the principal of a brick-and-mortar charter school.

Seven other administrators were invited to participate in the interviews but either did not reply or declined. This included four administrators from private schools and one university-based school administrator whose program was on hold for program evaluation. Finally, a state school contacted for the study had experienced a recent retirement of its head administrator; the new administrator chose not to participate.

Data Collection

The semi-structured interviews were conducted over the phone, lasted between 30-50 minutes, and, with the permission of the respondents, were recorded to allow for transcription and analysis. The interview guide was designed based on the findings from the previous two phases and followed a general outline as described by Robson (1993), including introductory comments, a list of topics and key questions, a set of associated prompts, and closing comments. Key questions were arranged in the following four topic areas: about the head administrator and their role at the school, about the virtual school or program, administrative issues, and, looking to the future. See Appendix D for the
Interview Guide. While still allowing for a conversational approach that let the researcher explore and probe, the guide provided focus for the interview and helped make efficient use of the limited time (Patton, 2002). In advance of the interview, the respondents were provided with the list of topics and guiding questions for the interview, something particularly important for high-status respondents such as head administrators.

**Data Analysis**

Informal data analysis was conducted during the data collection process (Creswell, 1998) and notes on emerging themes were generated throughout. Formal analysis was conducted once the interviews were complete, following what Marshall and Rossman (1999) describe as typical qualitative analysis procedures in six phases:

1. **Organizing the data.** Interviews were transcribed, formatted, and organized using word processing (Word) software and made available for analysis in both hard copy and electronic formats. Three of the interviews were transcribed by the researcher to allow for initial data analysis and to refine the interview protocol and technique; five of the interviews were transcribed professionally and the email correspondence of one respondent was formatted to match that of the transcripts. The study participants’ names were removed from the transcripts so the text would have some degree of anonymity, particularly when coded quotations were later aggregated by code. However, given the small sample and the distinctive “voices” of the study participants, there was never full anonymity in the analysis.

2. **Generating categories, themes, and patterns.** The categories emerged from the data through the constant comparative method or inductive analysis (Creswell, 1998;
Marshall & Rossman, 1999; Merriam, 1998), yet were also informed by findings from the earlier phases of the study and by the conceptual map created through the literature review, essentially a balance of an immersive approach and a template analysis (Marshall & Rossman, 1999). Initial reading of the transcripts and listening to the audio recordings was completed to “get a sense of the whole” (Creswell, 1998, p. 155) and notes were generated about the underlying meanings and topics raised within each interview. The conceptual map was also used in this analysis phase to begin noting if and how the head administrators spoke of the various tensions and issues presented within it. A holistic review of all notes taken throughout the data collection and initial analysis process was then conducted, resulting in an initial list of categories that reflected the purpose of the research (Merriam, 1998, p. 183) and that were organized in the following main sections: purpose, context, administrators, and future. After using the preliminary categories to code two transcripts, the list was refined further and a more formal coding scheme was developed (see Appendix E, Interview Data Coding Key).

3. Coding the data. All the transcripts were then coded on the hard copy of the transcript with quotations later aggregated electronically into separate documents by section and code. During the coding process ten new codes emerged and were incorporated into the coding scheme. Transcripts were then recoded to ensure that all the transcripts had been analyzed with the complete coding scheme.

4. Testing the emergent understandings; 5. Searching for alternative explanations; and 6. Writing the narrative report. These final three phases of the analysis were conducted concurrently and in a recursive manner, allowing for interplay among the
various phases and reflecting the inductive nature of the analysis. The data within each section (purpose, context, administrators, future) were explored and examined (phase 4), challenged, particularly in comparison to the ideas presented in the conceptual map (phase 5), and then woven into a written argument (phase 6) with the data used as the supporting evidence (see Chapters 5 and 6).

Validity and reliability.

Three primary strategies were used to demonstrate the study’s validity and reliability, particularly in this third and most important phase of the study. First multiple methods of data collection were used, namely the document analysis, survey, and interviews. This triangulation of the data helped address the question of internal validity, described by Merriam (1998) as dealing with “how research findings match reality” (p.201). The critical examination of the study by the doctoral dissertation committee also helped establish the validity as well as the reliability, or “whether the results are consistent with the data collected” (p. 206). Finally, the inclusion of an audit trail “describing in detail how the data were collected, the categories created, and decisions made throughout the inquiry process” (p. 207) also help address the study’s reliability.

Strengths and Limitations of the Study

This study had a number of strengths. First, the study used a national sample of virtual schools. Given the relative small number of virtual schools nationwide (142 on the NACOL list at the time of the document analysis) and the wide variety among them, it was important to get as broad of a picture as possible. Second, the study examined the five main types of virtual schools (state, district/school, charter, private, and university-
based), allowing for an exploratory analysis of possible patterns between and among the school types. Third, this study was the first to focus on the head administrators of these virtual schools, in terms of profile data about them (characteristics, education, previous experience) and regarding their fundamental beliefs about the purpose and potential of virtual schooling. Finally, the data were collected at a time in which the field of virtual schools was experiencing great growth but was also transitioning from being a new phenomenon into a more established one. All of the administrators interviewed for the study were pioneers in the virtual school movement and many could speak, firsthand, of their particular school’s evolution and of the rapid development of the field nationwide.

This research had a number of limitations as well. First, only the head administrator, defined as the highest-ranking leader of the virtual schools or program (e.g., principal, director, coordinator, CEO, or manager), was sampled for this study. The distribution of leadership and influence within these schools is presumably wider and more complex. Given how little was known about the leadership of these schools and the desire for a wide, national sample for the study, however, it was decided to value breadth over depth when defining the leaders of the schools. It is hoped that future studies will examine the leadership structure more broadly within these schools, including other positions of leadership within the schools. A second limitation was that the phases of data collection were extended over more time than planned (document analysis and survey in 2005; interviews in 2009), rendering the possibility of discrepancies among the data sets based on developments in the schools that happened in the intervening years. An unintended benefit of the timing, however, was that the core of the study, the interviews,
were conducted at a time identified by many interviewees as a pivotal juncture for their schools and for the field as a whole. Finally, a third limitation was the under-representation of private school administrators in the interview sample. Given that the study’s conceptual framework focused on how virtual schools might fit within our nation’s system of public education, the lack of response from private school administrators for the interview requests was accepted as a limitation for this particular study. It is hoped that future studies would be tailored to elicit a greater response rate from this school type, particularly given that the survey data demonstrated a high rate of student enrollment in such programs.
CHAPTER 4: DESCRIPTIVE FINDINGS

Given how little is known about the field of K-12 virtual schools, descriptive data about the schools and the people who lead them were collected to establish the context in which the qualitative analysis could then be conducted. Data for this chapter came from both a document analysis of the virtual school Web sites and a survey of the virtual school head administrators, as described in Chapter 3. When there were two sets of data for a particular question or topic, unless there were discrepancies between the data sets worth noting, the survey data are presented. This decision was made given that the survey data are more current and potentially more accurate. For example, a school’s Web site might have advertised that they serve middle level students but enrollment data from the head administrator shows that middle school students were not yet enrolled in the program.

The chapter begins with a summary of the virtual schools basic characteristics in terms of school type, enrollment, grade levels served, course enrollment, and whether the program is full-time or supplemental. Also addressed is a curriculum design feature, namely the type of interactions are supported within the course, i.e., with content, instructor, or peers. The next section on the schools’ history and mission includes patterns that appeared in document analysis data regarding the schools’ development histories as well as survey data describing their stated mission and purposes. The chapter ends with profile information about the head administrators, focusing on their personal characteristics, degrees and licenses, teaching and administrative experiences, and previous work settings.
Basic Characteristics of K-12 Virtual Schools

As noted previously, K-12 virtual schools are usually categorized by type, defined through the locus of organizational sponsorship and control. Data are presented by the following types: state, district or county, public school, charter school, private school, and university-based. While this type schematic allows for clean, non-overlapping categorization of the majority of schools on the NACOL Online Learning Clearinghouse list, five schools (4%) have been clustered together as “other.” This includes three consortiums, one network of charter schools, and one funded directly by the state department of education, more similar to a public district than a state-run school.

School Type and Enrollment

As shown in Table 11, private schools, typically tuition-based stand-alone schools that serve students both in campus and online settings, have the greatest representation in the NACOL list of schools (27.6%) and, based on enrollment data from the survey of head administrators (see Table 12), enroll a corresponding percentage of the total online students (29.6%). Public charter schools and public school programs located in districts or schools each represent a similarly high percentage of schools by type (24.4%), but have considerably smaller percentage of total student enrollment (6.5% and 9.5% respectively). Although nationwide there are fewer state and university-based programs (each nearly 10%), these large programs together enroll 50% of the total K-12 online students.
Table 11

School Types by Data Source

<table>
<thead>
<tr>
<th>School/program type</th>
<th>From Document Analysis</th>
<th>From Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>State</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>District or county</td>
<td>18</td>
<td>14.6</td>
</tr>
<tr>
<td>Public school</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>Charter school</td>
<td>30</td>
<td>24.4</td>
</tr>
<tr>
<td>Private school</td>
<td>34</td>
<td>27.6</td>
</tr>
<tr>
<td>University</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>Other *</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

* Other includes three consortiums, one network of charter schools, and one funded directly by the state department of education, similar to a public district.

Table 12

2004-2005 Grade Level Virtual School Student Enrollment by School Type

<table>
<thead>
<tr>
<th>School type</th>
<th>Grade Levels</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elementary</td>
<td>12,068</td>
<td>100.2</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>27,713</td>
<td>137,073</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>3,226</td>
<td>180,080</td>
</tr>
<tr>
<td>State</td>
<td>0</td>
<td>10,314</td>
<td>69,828</td>
</tr>
<tr>
<td>Private school</td>
<td>7,225</td>
<td>59,514</td>
<td>38.8</td>
</tr>
<tr>
<td>University</td>
<td>0</td>
<td>20,485</td>
<td>53,251</td>
</tr>
<tr>
<td>Charter school</td>
<td>3,743</td>
<td>5,358</td>
<td>11,624</td>
</tr>
<tr>
<td>District</td>
<td>905</td>
<td>13,609</td>
<td>14,857</td>
</tr>
<tr>
<td>Public school</td>
<td>45</td>
<td>1935</td>
<td>2,078</td>
</tr>
<tr>
<td>Other</td>
<td>150</td>
<td>5,636</td>
<td>7,636</td>
</tr>
<tr>
<td>Total</td>
<td>12,068</td>
<td>27,713</td>
<td>137,073</td>
</tr>
</tbody>
</table>

Note: school types listed in order of enrollment.

Grade Level Enrollment

For the student enrollment data, survey respondents were asked the following question: “In the 2004-2005 (12 month) school year, how many students were enrolled in your online courses in each of the following grade level categories?” What is not reflected in the data are students who by age would be identified at one level but who take some or all their courses at another level (e.g., a middle school students who takes high school level courses). With that caveat in mind, enrollment data provided by the
head administrators demonstrate that for the 2004-2005 school year, K-12 virtual schooling was predominantly a high school phenomenon (see Tables 12 and 13). This may be in part because two of the school types with the largest enrollments, state and university-based, focused on high school audiences. A common development pattern for these school types was to begin with a high school audience and then expand downward to include middle level students and courses.

Table 13
*Grade Level Offerings by School Type*

<table>
<thead>
<tr>
<th>School type</th>
<th>Elementary</th>
<th>Middle / Junior</th>
<th>Senior</th>
<th>Post-Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (n=8)</td>
<td>0%</td>
<td>50%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>District or county (n=12)</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Public school (n=5)</td>
<td>20%</td>
<td>60%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Charter school (n=9)</td>
<td>88.9%</td>
<td>88.9%</td>
<td>66.7%</td>
<td>0%</td>
</tr>
<tr>
<td>Private school (n=15)</td>
<td>33.3%</td>
<td>40%</td>
<td>86.7%</td>
<td>13.3%</td>
</tr>
<tr>
<td>University (n=7)</td>
<td>0%</td>
<td>14.3%</td>
<td>85.7%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Other (n=3)</td>
<td>33.3%</td>
<td>66.7%</td>
<td>100%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Total (n=59)</td>
<td>35.6%</td>
<td>55.9%</td>
<td>88.1%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

Elementary age online students were served primarily by private schools (7,225) and charter schools (3,743) in a K-8 model. There were no schools that served only elementary students. All middle level students were served either in a K-8 online school or a secondary (7-12) one. Of the 24 online charter schools serving K-8 students, half were run by either K12.com or Connections Academy, for-profit companies that create and manage virtual charter schools throughout the nation. Given the rapid expansion of
these schools in the years since the survey, it is anticipated that elementary and middle
level enrollment has increased greatly since the survey was conducted.

Student enrollment at the college level appears to not be a focus of the K-12
online schools and programs. Initial document analysis data had suggested that 97% of
university-based programs did provide access to college level courses (see Appendix F,
Table 1), but enrollment data from the survey only indicates minimal numbers (311).
This discrepancy may be because of the wording of the survey question used to gather
this data, as noted earlier, or it may be due to the clear definitions these administrators
had for the scope of their specific program. For example, both administrators from
university schools interviewed for this study (see Chapter 5) described their program as
being housed within a larger umbrella of distance learning at their universities. These
secondary level programs might support student access to courses in the larger university,
but they did not provide curriculum or instruction for these courses; hence, it was not
considered to be under the purview of the high school program head administrator
surveyed. Similarly, there may be many universities providing online courses to
secondary level students, but simply not within the auspices of a secondary-specific
online program. Some states, such as Minnesota, provide advanced secondary students
access to and full financial support for post-secondary courses, many of which may be
taken online. Hence, the low post-secondary enrollment is likely not indicative of
secondary students’ actual degree of enrollment in such courses, just that they are not
doing so from within the auspices of K-12 virtual schools.
School Size

Using the enrollment data collected in the survey, schools were categorized into three sizes (see Table 14), using the categories from The Study of the American School Superintendency (Glass, Bjork, & Brunner, 2000). A majority of the schools falls in the mid-size category (56.4%), a pattern that seems to hold for most of the school types except for the university-based programs, which had more large schools (50%).

Similarly, all the state and “other” schools were either mid-size or large while district, public, and charter schools were all predominantly small and mid-sized.

Table 14
Virtual School Sizes by School Type

<table>
<thead>
<tr>
<th>School type</th>
<th>&lt; 300</th>
<th>300-2,999</th>
<th>&gt;3,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (n=7)</td>
<td>0%</td>
<td>71.4%</td>
<td>28.6%</td>
</tr>
<tr>
<td>District or county (n=12)</td>
<td>25.0%</td>
<td>66.7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Public school (n=5)</td>
<td>60.0%</td>
<td>40.0%</td>
<td>0%</td>
</tr>
<tr>
<td>Charter school (n=9)</td>
<td>22.2%</td>
<td>66.7%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Private school (n=13)</td>
<td>15.4%</td>
<td>46.2%</td>
<td>38.5%</td>
</tr>
<tr>
<td>University (n=6)</td>
<td>16.7%</td>
<td>33.3%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Other (n=3)</td>
<td>0%</td>
<td>66.7%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Total (n=55)</td>
<td>20.0%</td>
<td>56.4%</td>
<td>23.6%</td>
</tr>
</tbody>
</table>

Note: 4 of the 59 respondents did not provide enrollment data.
Course Enrollment

To get a complete picture of the size of an online school, however, course enrollment must also be discussed. Unlike many brick and mortar schools, many virtual schools allow for supplemental enrollment, meaning students may take just one or two courses from the online school to supplement their studies at another school or a home school program. To illustrate the issue, a school with 100 students enrolled could be providing 100 courses in a semester (each student taking one course) or 700 (each taking a full load of courses), a significant difference in size and scope of the school. Course enrollment means (see Table 15) show that, similar to the student enrollment, state and university schools had the highest course enrollment, 13,083 and 15,435 respectively, with a wide range and high standard deviation for each.

Table 15

<table>
<thead>
<tr>
<th>School type</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>13,082.63</td>
<td>8</td>
<td>19,984.059</td>
<td>726</td>
<td>53,416</td>
</tr>
<tr>
<td>District and county</td>
<td>1,177.36</td>
<td>11</td>
<td>1,736.778</td>
<td>32</td>
<td>5,900</td>
</tr>
<tr>
<td>Public school</td>
<td>789.00</td>
<td>5</td>
<td>568.005</td>
<td>175</td>
<td>1,400</td>
</tr>
<tr>
<td>Charter</td>
<td>1,977.25</td>
<td>4</td>
<td>3,483.452</td>
<td>100</td>
<td>7,200</td>
</tr>
<tr>
<td>Private school</td>
<td>4,755.20</td>
<td>10</td>
<td>6,830.047</td>
<td>3</td>
<td>20,000</td>
</tr>
<tr>
<td>University</td>
<td>15,434.57</td>
<td>7</td>
<td>30,909.581</td>
<td>200</td>
<td>85,000</td>
</tr>
</tbody>
</table>

Supplemental and Full Programs

Document analysis showed a large percentage of virtual schools (77%) offer a full program, meaning the program is degree-granting for high school level and grade-advancing for middle and elementary levels (see Table 16). All of the charter schools in the survey sample offered a full program with only a small percentage of them (13.8%) offering supplemental courses (see Table 17). This finding is not surprising given that, as
noted earlier, most are K-8 schools and so do not have a structure that typically supports students taking a class or two outside of the school. Many public and private schools also offer full programs (72.7% for each type) but a high percentage of these also offer supplemental courses (90.9% and 87.1%). Conversely, 100% of the university and state schools offer supplemental programming while 58.3% of the university and only 8.3% of the state schools offer a full degree-granting program.

Table 16
Schools with Full Programs by School Type

<table>
<thead>
<tr>
<th>School type</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (n=12)</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>District (n=17)</td>
<td>5</td>
<td>29.4</td>
</tr>
<tr>
<td>Public (n=11)</td>
<td>8</td>
<td>72.7</td>
</tr>
<tr>
<td>Charter (n=30)</td>
<td>30</td>
<td>100.0</td>
</tr>
<tr>
<td>Private (n=33)</td>
<td>24</td>
<td>72.7</td>
</tr>
<tr>
<td>University (n=12)</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>Other (n=5)</td>
<td>2</td>
<td>40.0</td>
</tr>
<tr>
<td><strong>Total (n=120)</strong></td>
<td><strong>77</strong></td>
<td><strong>64.2</strong></td>
</tr>
</tbody>
</table>

Note: 120 of the 123 schools used in the document analysis had enough information on their Web site to identify whether or not the school offered a full program.

Table 17
Schools with Supplemental Programming by School Type

<table>
<thead>
<tr>
<th>School type</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (n=12)</td>
<td>12</td>
<td>100.0</td>
</tr>
<tr>
<td>District (n=18)</td>
<td>16</td>
<td>88.9</td>
</tr>
<tr>
<td>Public (n=11)</td>
<td>10</td>
<td>90.9</td>
</tr>
<tr>
<td>Charter (n=29)</td>
<td>4</td>
<td>13.8</td>
</tr>
<tr>
<td>Private (n=31)</td>
<td>27</td>
<td>87.1</td>
</tr>
<tr>
<td>University (n=12)</td>
<td>12</td>
<td>100.0</td>
</tr>
<tr>
<td>Other (n=5)</td>
<td>3</td>
<td>60.0</td>
</tr>
<tr>
<td><strong>Total (n=118)</strong></td>
<td><strong>84</strong></td>
<td><strong>71.2</strong></td>
</tr>
</tbody>
</table>

Note: 118 of the 123 schools used in the document analysis had enough information on their Web site to identify whether or not the school offered supplemental courses.
Figure 4 is used to demonstrate a potential pattern among the virtual school types, in terms of the two kinds of programming. True to their names, most of the “schools” offer full time school programs, with charters doing so almost exclusively and public and private schools including a high degree of supplemental course offerings as well. State-, district- and university-sponsored virtual schools mostly provide supplemental course offerings could more precisely be labeled “programs.” Clearly there are exceptions to this school or program schematic, but it can be helpful in understanding the differences among the online learning opportunities for K-12 students.

Figure 4  
Patterns of Full and Supplemental Programming for Virtual School Types

<table>
<thead>
<tr>
<th>Supplemental</th>
<th>Full time</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (&lt;30%)</td>
<td>Medium (30-70%)</td>
<td>High (&gt;70%)</td>
<td></td>
</tr>
<tr>
<td>Charter School</td>
<td>University</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Low (&lt;30%)</td>
<td>Medium (30-70%)</td>
<td>High (&gt;70%)</td>
<td></td>
</tr>
<tr>
<td>State District</td>
<td>Public School Private School</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interaction within Course

Given that there is some debate among the online learning providers regarding what level of online instructional interaction is best for the K-12 audience, the following question was asked of the virtual school head administrators: “For most of your online courses, which best describes the interactions they are designed to support? Please select the one used for the majority of your courses.” Table 18 presents the six possible interaction types, clustered in the three categories of instructional interaction model for the data analysis. This topic was raised, unsolicited, by head administrators in the
interviews, with arguments presented for all three different instructional models, and will
be discussed further in the following chapter.

Table 18
Instructional Interaction Model Categories

<table>
<thead>
<tr>
<th>Instructional interaction model</th>
<th>Type of Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>1. The student interacts with content independently</td>
</tr>
<tr>
<td></td>
<td>2. The student interacts with content; a teacher monitors progress</td>
</tr>
<tr>
<td></td>
<td>3. The student interacts with content; a teacher provides instructional help as needed.</td>
</tr>
<tr>
<td>Classroom</td>
<td>4. A teacher leads instruction; the student interacts with content and the teacher</td>
</tr>
<tr>
<td></td>
<td>5. A teacher leads instruction; the student interacts with content, the teacher, and sometimes other students</td>
</tr>
<tr>
<td>Peer-focused</td>
<td>6. Student to student interaction is emphasized. A student interacts with content, the teacher, and other students.</td>
</tr>
</tbody>
</table>

The first instructional interaction model, essentially an independent study design, was
cited mostly frequently with 44.8% of respondents selecting one of the three type of
interaction as the one used by the majority of their school’s courses (see Table 19). This
finding is consistent with many virtual schools’ emphasis on letting students work at their
own pace, made possible only when students are not bound by the progress of other
students in the class. The classroom model, the one most similar to the traditional brick-
and-mortar classroom with the teacher leading instruction with little or some student
interaction around the course content, also appears to be fairly common, with 37.9%
using it for the majority of their classes. Although the instructional model in which peer
interaction is emphasized was the lowest (17.2% of respondents), it would be interesting
to see if the social networking tools that have emerged in the years since the survey was
conducted have affected this rate.
Table 19
Type of Instructional Interaction Model in Online Courses by School Type

<table>
<thead>
<tr>
<th>School type</th>
<th>Independent</th>
<th></th>
<th>Classroom</th>
<th></th>
<th>Peer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>State (n=8)</td>
<td>2</td>
<td>25.0</td>
<td>4</td>
<td>50.0</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>District (n=12)</td>
<td>7</td>
<td>58.3</td>
<td>2</td>
<td>16.7</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Public (n=5)</td>
<td>2</td>
<td>40.0</td>
<td>3</td>
<td>60.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Charter (n=8)</td>
<td>4</td>
<td>50.0</td>
<td>3</td>
<td>37.5</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Private (n=15)</td>
<td>6</td>
<td>40.0</td>
<td>7</td>
<td>46.7</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>University (n=7)</td>
<td>4</td>
<td>57.1</td>
<td>2</td>
<td>28.6</td>
<td>1</td>
<td>13.3</td>
</tr>
<tr>
<td>Other (n=3)</td>
<td>1</td>
<td>33.3</td>
<td>1</td>
<td>33.3</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Total (n=58)</td>
<td>26</td>
<td>44.8</td>
<td>22</td>
<td>37.9</td>
<td>10</td>
<td>17.2</td>
</tr>
</tbody>
</table>

Mission and Purpose

Create New or Evolve from Existing

One way to explore a school’s mission is to examine how and why the school was started. Of the 123 virtual school Web sites used in the document analysis, 58 had at least some information about how or why the online school or programming developed, ranging from cursory information to brief histories. From a qualitative analysis of this data emerged two main categories of school development into which all of the schools analyzed can be sorted. The first type of development was the creation of a completely new school. In this category fall all of the schools that were developed under the auspices of a state or consortia and some of the district-based ones. The initial development of these schools was supported by start-up grants and other short-term funding from federal, state, and foundation sources with the expectation that the schools would transition to be self-sustaining or would eventually be supported through regular state appropriations.

The second type of development, used for a wider variety of schools, was to evolve an existing program into an online one. A prime example of this is the
correspondence course programs, most of which were based in universities, which used the emerging technologies to deliver their correspondence instructional model electronically. Similarly, private schools and public alternative schools appeared to move into online learning to work with their existing or similar populations of students, using online learning to extend or improve their brick-and-mortar programs. Finally, two schools in the sample had evolved from publishing home school curriculum materials to delivering the same type of curriculum online, adding online instructional services as well.

**Marketing Appeals**

Also examined during the document analysis was how the schools appealed to possible students through their Web site. Marketing appeals were found throughout the Web sites, including within the home page of the Web site, mission statements, letters to students and parents, and FAQs (frequently asked questions). The list presented in Table 20 emerged throughout the coding process with each appeal counted if the school used it at least once on their Web site.
Table 20

Marketing Appeals Appearing on Virtual School Web Sites

<table>
<thead>
<tr>
<th>Marketing appeals</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule flexibility</td>
<td>52</td>
<td>41</td>
</tr>
<tr>
<td>High standards</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>Credit recovery</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>Complete work from anywhere</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>Support of qualified professionals</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>Work at own pace</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>Expand learning opportunities</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>Advancement</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>Customized program for individual</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Individualized instruction</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Flexibility</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Work in a home school environment</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Free</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>A complete curriculum</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Strong parental involvement</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Preparing students for college</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Supporting Christian values</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Partnership of parents, teachers, and students</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

Mission and Purpose Statements

This list of marketing appeals was used to add to and refine the mission and purpose statements used in a previous study (Setzer and Lewis, 2005) in which administrators of public secondary brick and mortar schools had been asked to identify why they would provide online learning opportunities for their students. Virtual school head administrators surveyed were then asked to respond to each of these statements, noting how important each was to the mission and purpose of their particular school. As seen in Table 21, there was considerable consensus among the respondents, with nine statements considered somewhat or very important by at least 90%. Particularly worth noting are two statements that were not asked of the brick-and-mortar school administrators in previous studies but were added to the list based on a review of the
virtual school literature. “Providing students with an online learning experience” and “creating an alternative, nontraditional learning environment for students” were somewhat or very important to 98.3% and 94.9% of the virtual school administrators.
<table>
<thead>
<tr>
<th>Mission and purpose statement</th>
<th>Very or somewhat important</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not important</th>
<th>Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowing students to take courses from any place</td>
<td>100.0</td>
<td>83.1</td>
<td>16.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Providing students with an online learning experience</td>
<td>98.3</td>
<td>81.0</td>
<td>17.2</td>
<td>1.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Providing students with access to qualified teachers</td>
<td>96.6</td>
<td>88.1</td>
<td>8.5</td>
<td>3.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Creating an alternative, non-traditional learning environment for students</td>
<td>94.9</td>
<td>84.7</td>
<td>10.2</td>
<td>3.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Meeting the needs of specific groups of students</td>
<td>94.9</td>
<td>69.5</td>
<td>25.4</td>
<td>3.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Allowing students to take courses at any time</td>
<td>94.9</td>
<td>71.2</td>
<td>23.7</td>
<td>0.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Encouraging parental involvement in their child’s education</td>
<td>93.2</td>
<td>61.0</td>
<td>32.2</td>
<td>5.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Providing students with a particular curriculum and instruction methods</td>
<td>91.5</td>
<td>52.5</td>
<td>39.0</td>
<td>5.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Permitting students to catch up in their coursework</td>
<td>91.2</td>
<td>66.7</td>
<td>24.6</td>
<td>7.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Permitting students who failed a course to take it again</td>
<td>89.9</td>
<td>64.4</td>
<td>25.4</td>
<td>8.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Allowing students to work at their own pace</td>
<td>89.8</td>
<td>64.4</td>
<td>25.4</td>
<td>8.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Reducing scheduling conflicts</td>
<td>86.4</td>
<td>61.0</td>
<td>25.4</td>
<td>8.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Permitting students to get ahead in their coursework</td>
<td>83.1</td>
<td>59.3</td>
<td>23.7</td>
<td>15.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Offering courses not otherwise available at other schools</td>
<td>83.1</td>
<td>50.8</td>
<td>32.2</td>
<td>15.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Customizing a program for individual students</td>
<td>82.8</td>
<td>48.3</td>
<td>34.5</td>
<td>15.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Providing tutoring or remediation</td>
<td>74.1</td>
<td>43.1</td>
<td>31.0</td>
<td>15.5</td>
<td>10.3</td>
</tr>
<tr>
<td>Offering Advanced Placement or college-level courses</td>
<td>72.9</td>
<td>39.0</td>
<td>33.9</td>
<td>18.6</td>
<td>8.5</td>
</tr>
<tr>
<td>Supporting home school families</td>
<td>72.9</td>
<td>50.8</td>
<td>22.0</td>
<td>15.3</td>
<td>11.9</td>
</tr>
<tr>
<td>Addressing growing populations and limited space</td>
<td>72.5</td>
<td>39.9</td>
<td>32.8</td>
<td>22.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Retaining students within the school system</td>
<td>71.2</td>
<td>49.2</td>
<td>22.0</td>
<td>15.3</td>
<td>13.6</td>
</tr>
<tr>
<td>Generating revenue</td>
<td>62.1</td>
<td>39.7</td>
<td>22.4</td>
<td>22.4</td>
<td>15.5</td>
</tr>
<tr>
<td>Providing education from a particular religious or ethical perspective</td>
<td>25.5</td>
<td>15.3</td>
<td>10.2</td>
<td>42.2</td>
<td>32.2</td>
</tr>
</tbody>
</table>
Profile Characteristics of K-12 Virtual Schools’ Head Administrators

The document analysis of the K-12 virtual school Web sites demonstrated that there are a variety of titles used by the leaders of virtual schools and programs, such as principal, director, coordinator, CEO, or head of school. For the purpose of this study and to define the population of the survey, the term “head administrator” was used as an umbrella term to describe the highest-level administrator for the online school or program. Of the 59 survey respondents, 58 of these head administrators answered questions regarding personal and professional characteristics. When cross tabulation is used to present these results, school-type is defined in the following five categories: state, school/district, charter, private school, and university. “Other” is omitted from these analyses to avoid identifying individuals (n=2) and “public school” was merged with “district” as the results were similar and the programmatic distinctions among them seemed minimal.

Personal Characteristics

Of the survey respondents, 55.2% (32) were male and 44.8% (26) were female. Caucasian was the predominant race/ethnicity reported (93.1%). Other ethnicities reported included African American, Asian or Pacific Islander, and American Indian. The head administrators had a mean age of 48 years (standard deviation 8.829, range 29-69) with most (75.7%) being between the ages of 36-55 (see Table 22).
Table 22

Age of Head Administrators

<table>
<thead>
<tr>
<th>Age range</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 36</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td>36-40</td>
<td>14</td>
<td>24.1</td>
</tr>
<tr>
<td>41-45</td>
<td>10</td>
<td>17.2</td>
</tr>
<tr>
<td>46-50</td>
<td>6</td>
<td>10.3</td>
</tr>
<tr>
<td>51-55</td>
<td>14</td>
<td>24.1</td>
</tr>
<tr>
<td>56-60</td>
<td>7</td>
<td>12.1</td>
</tr>
<tr>
<td>&gt; 60</td>
<td>4</td>
<td>6.9</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Degrees and Licenses

The vast majority of the head administrators surveyed (91.5%) had some post-baccalaureate coursework through graduate degrees and/or licensure programs. Advanced degrees were quite common, with 71% holding master’s degrees, 25% specialist degrees, and 25% doctorates (see Table 23). While charter schools had the highest percentage of head administrators with Master’s degrees (89%), the private schools and university-based programs had the highest percentage of doctorates (47% and 43% respectively).

Table 23

Head Administrators’ Degrees by School Type

<table>
<thead>
<tr>
<th>School type</th>
<th>Degrees</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Master’s</td>
<td>Specialist</td>
<td>Doctorate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>State (n=8)</td>
<td>6</td>
<td>75</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>District/school (n=17)</td>
<td>13</td>
<td>77</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>Charter (n=8)</td>
<td>8</td>
<td>89</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>Private (n=15)</td>
<td>5</td>
<td>53</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>University (n=7)</td>
<td>5</td>
<td>71</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Total (n=56)</td>
<td>40</td>
<td>71</td>
<td>14</td>
<td>25</td>
</tr>
</tbody>
</table>

Note. Two schools categorized as “Other” were removed from the analysis, resulting in N= 56.
Head administrators’ school-related licensure rates were considerably lower than for the academic degrees (see Table 24). Fifty-two percent of the administrators reported having teaching licenses, although this number may have been higher if the question had asked respondents to include expired teaching licenses. Similarly, only 45% reported having an administrative license, one that presumably would apply to their current position.

Table 24

<table>
<thead>
<tr>
<th>School Type</th>
<th>Teaching</th>
<th></th>
<th>Counseling</th>
<th></th>
<th>Administrative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>State (n=8)</td>
<td>3</td>
<td>38</td>
<td>1</td>
<td>13</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>District/school (n=17)</td>
<td>8</td>
<td>47</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>47</td>
</tr>
<tr>
<td>Charter (n=8)</td>
<td>7</td>
<td>78</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>Private (n=15)</td>
<td>7</td>
<td>47</td>
<td>1</td>
<td>7</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>University (n=7)</td>
<td>4</td>
<td>57</td>
<td>1</td>
<td>14</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Total (n=56)</td>
<td>29</td>
<td>52</td>
<td>3</td>
<td>5</td>
<td>25</td>
<td>45</td>
</tr>
</tbody>
</table>

Note. Two schools categorized as “Other” were removed from the analysis, resulting in N= 56.

Teaching and Administrative Experience

The vast majority of head administrators (93.1%) had experience teaching in face-to-face settings. One of the four respondents who did not have such experience noted that the size and leadership structure of his organization was such that people with teaching experience held other positions of management and leadership in the school. The other survey respondents without teaching experience were from state or consortium schools, which may have had similar leadership structures and size, and hence, other administrators with teaching experience. Those who had taught had done so in a variety of settings, many of them in more than one. In Table 25 below, the mean number of years
for each setting is presented, demonstrating that as a group, the head administrators bring a solid base of face-to-face teaching experiences to their work as leaders of virtual schools.

Table 25
*Head Administrators’ Years of Teaching in Face-to-Face Settings*

<table>
<thead>
<tr>
<th>Setting</th>
<th>No.</th>
<th>Mean</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public elementary</td>
<td>21</td>
<td>8.21</td>
<td>1.516</td>
</tr>
<tr>
<td>Public secondary</td>
<td>36</td>
<td>10.03</td>
<td>.975</td>
</tr>
<tr>
<td>Private elementary</td>
<td>6</td>
<td>6.00</td>
<td>2.191</td>
</tr>
<tr>
<td>Private secondary</td>
<td>6</td>
<td>5.67</td>
<td>1.202</td>
</tr>
<tr>
<td>Colleges or universities</td>
<td>26</td>
<td>6.38</td>
<td>1.250</td>
</tr>
<tr>
<td>Business</td>
<td>8</td>
<td>7.63</td>
<td>2.764</td>
</tr>
<tr>
<td>Non-profit</td>
<td>6</td>
<td>14.7</td>
<td>4.693</td>
</tr>
</tbody>
</table>

N=56

In terms of online teaching, 60% of question respondents (30 of 50) reported that they did have such experience (see Table 26). (Six people did not respond to this question and two from the “Other” category were removed for the school-type analysis.) Included in the 20 respondents who had not taught online were the three administrators mentioned above whom had also reported no face-to-face teaching experience. The private school type had a considerably higher percentage of head administrators with online teaching experience (79%), perhaps reflecting the private school culture in which an administrator may also have a teaching role in the school.
Table 26

*Head Administrators with Online Teaching Experience by School Type*

<table>
<thead>
<tr>
<th>School type</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (n=8)</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>District/school</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Charter (n=7)</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Private (n=14)</td>
<td>11</td>
<td>79</td>
</tr>
<tr>
<td>University (n=6)</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Total (n=50)</td>
<td>30</td>
<td>60</td>
</tr>
</tbody>
</table>

Note. Three schools categorized as “Other” were removed from the analysis and there were 5 people who did not respond to this set of questions, resulting in N= 50.

Seventy-six percent of the head administrators reported having administrative experience prior to beginning work in their current role. Of the 24% for whom the virtual school position was their first in administration, none were working in state level or consortium schools. The higher percentage of those “cutting their teeth” in administration were in the district and public schools (41%) and the university based schools (29%).

**Previous Work Settings**

Finally, to begin to explore the career paths to virtual school administration, the head administrators were asked to identify all the settings in which they had previously worked (see Table 27). This question did not specify whether the experience was in teaching or administration. Similar to data presented earlier, the head administrators had worked in a wide variety of settings, with the most often cited settings being public secondary (66%), colleges and universities (49%) and public elementary (41%). Many administrators also had worked in business and/or had been self-employed (37% and 35% respectively), possibly reflecting the entrepreneurial nature of leading a virtual school in this time of initial development and growth.
Table 27
*Head Administrator’s Previous Work Settings*

<table>
<thead>
<tr>
<th>Setting</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public elementary</td>
<td>24</td>
<td>40.7</td>
</tr>
<tr>
<td>Public secondary</td>
<td>39</td>
<td>66.1</td>
</tr>
<tr>
<td>Private elementary</td>
<td>6</td>
<td>10.2</td>
</tr>
<tr>
<td>Private secondary</td>
<td>8</td>
<td>13.6</td>
</tr>
<tr>
<td>Technical or trade schools</td>
<td>2</td>
<td>3.4</td>
</tr>
<tr>
<td>Colleges or universities</td>
<td>29</td>
<td>49.2</td>
</tr>
<tr>
<td>Education agencies</td>
<td>11</td>
<td>18.6</td>
</tr>
<tr>
<td>Other government agencies</td>
<td>8</td>
<td>13.6</td>
</tr>
<tr>
<td>Non-profit</td>
<td>13</td>
<td>22.0</td>
</tr>
<tr>
<td>Business</td>
<td>22</td>
<td>37.3</td>
</tr>
<tr>
<td>Self-employed</td>
<td>21</td>
<td>35.6</td>
</tr>
</tbody>
</table>

An analysis by virtual school type (see Table 28) indicates some potential patterns of career paths taken by head administrators at different types of virtual schools.

Table 28
*Head Administrator’s Previous Work Settings By Current School Type*

<table>
<thead>
<tr>
<th>Work Settings</th>
<th>Public schools</th>
<th>Private schools</th>
<th>Universities</th>
<th>Business and self-employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>School type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>63%</td>
<td>0%</td>
<td>38%</td>
<td>50%</td>
</tr>
<tr>
<td>(n=8)</td>
<td>(5)</td>
<td>(0)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>District / public</td>
<td>100%</td>
<td>0%</td>
<td>29%</td>
<td>53%</td>
</tr>
<tr>
<td>(n=17)</td>
<td>(17)</td>
<td>(0)</td>
<td>(5)</td>
<td>(9)</td>
</tr>
<tr>
<td>Charter school</td>
<td>100%</td>
<td>22%</td>
<td>22%</td>
<td>44%</td>
</tr>
<tr>
<td>(n=9)</td>
<td>(9)</td>
<td>(2)</td>
<td>(2)</td>
<td>(4)</td>
</tr>
<tr>
<td>Private school</td>
<td>47%</td>
<td>47%</td>
<td>67%</td>
<td>73%</td>
</tr>
<tr>
<td>(n=15)</td>
<td>(7)</td>
<td>(7)</td>
<td>(10)</td>
<td>(11)</td>
</tr>
<tr>
<td>University</td>
<td>71%</td>
<td>0%</td>
<td>100%</td>
<td>43%</td>
</tr>
<tr>
<td>(n=7)</td>
<td>(5)</td>
<td>(0)</td>
<td>(7)</td>
<td>(3)</td>
</tr>
</tbody>
</table>

For example, people with previous experience in private schools only moved into head administrative roles at private or charter schools. Looking from the other perspective, all of the head administrators currently in public schools (district, school, and charter school) had worked in public schools before. Those who led the state schools had no private
school experience but did have considerable experience in both public schools (63%) and private business (50%). As a group, private school administrators seemed to have the widest base of experience with 47% or higher rates in each of the work settings. These potential relationships warrant further exploration and study to better understand the career paths that people have taken to get to virtual school administration.
CHAPTER 5: HEAD ADMINISTRATORS’ PERSPECTIVES

This chapter presents the themes that arose from the interviews of nine head administrators of virtual high schools, beginning with a discussion of what the administrators perceive to be the purpose and potential of virtual schooling and two key contextual issues that were impacting its current development. The map of the conceptual framework presented in Chapter 2 is then revisited and revised to reflect the administrators’ perspectives on the concepts presented within it. After a section examining how the administrators describe their work, the chapter ends with their predictions for the future of K-12 virtual schools.

Purpose and Potential of High School Virtual Schools

Although the administrators worked in a variety of virtual school types, three clear and interconnected themes emerged regarding the purpose and potential of their virtual schools. First, online learning could help individualize education for students, in terms of both course offerings and personalized instruction. Second, it could provide students with greater access to educational opportunities and third, those opportunities would be of high quality.

Individuals Benefit through Individualization

The first theme that emerged throughout the interviews was administrators’ belief in virtual high schools’ potential to meet the needs of individual students. Administrators’ larger goals focused on the private good each student would receive through the virtual school. Students would be prepared for college and careers, adept in 21st century work and communication skills, successful adults and citizens of the world, and life-long
learners who believed in themselves. The means to these ends, according to the administrators, included individualization that virtual schools could provide, in terms of both course options and personalized instruction.

Administrators saw their virtual schools as providing choices or options to students in a variety of different ways. Many spoke of how their school or program offered specific courses—credit recovery, Advanced Placement, honors, foreign language, or unique areas of interest—to which students otherwise would not have access. For some, the flexibility of course calendar and pacing was the important option they provided:

This opens doors to them, this gets them options that they haven’t had before. They are not locked into that calendar. You know, they don’t have to enroll in January in order to be able to finish a course in May. They don’t have to stay at the same rate as all of their classmates are at. They can proceed as slow or as fast as they like, within some minimum and maximum course completion guidelines (A-5).

The administrator of the private virtual school also described time and schedule flexibility as an important feature that helped place more control in parents’ hands: “First and foremost, our school puts the parents back in control of their children’s education … The common thread throughout the communities that we serve is that they desired to take control of their children’s education” (A-9). It was not content, however, that was discussed as the primary item over which parents wanted control (though they well might), but schedule:

Our families have control of their child’s day. There are minimum expectations, but most families have no problem meeting those expectations. Education is important to our families, but not at the cost of time with their children. We enable our students to attend school asynchronous or synchronously. While there are many synchronous events, everything is recorded so that children who live in
a different time zone or are traveling with their family miss the event, they can participate asynchronously at a later time. If a family has time off in February and chooses to travel, they can. If the family is agricultural family, and it is calving season, the children are able to help when they are needed (A-9).

Another public school administrator spoke of the learning environment and structure as the object of choice:

I think that that’s been an untapped population, really looking at the crisis that I think that we have with graduation rates and failures and find—you know, we’ve just seen so many kids that there was really no reason for them to fail and that’s really not a knock on the public school, it’s really about the environment. I mean when you have a structure that gives every student the same number of minutes and the same homework, and the same number of days, you know that doesn’t follow the logic of human nature (A-6).

Also addressed was virtual schools’ potential to serve students for whom “public schools are not a good fit” (A-5) (e.g., a student with severe allergies or one who is distracted by the social environment of her high school) or who have a very specific need that is hard to meet within the brick-and-mortar school systems. One example arose when a student’s post-secondary plans changed:

At that time, early on, you had to have an additional math, say. And a child had decided they did not wanna go to college and they got in their senior year and decided all of a sudden they wanted to go to college. Well, they didn’t have room in their schedule for the math they needed. So they supplemented their traditional instruction with an online course to allow them to get the math that they needed (A-1).

Solving individual students’ scheduling and course needs has long been touted as a primary purpose of virtual schools. In addition, however, many administrators also emphasized the individualized instruction and teacher attention that their virtual schools and programs can provide. As one administrator noted, “Well, I know it sounds kind of odd, but most of the attention that a kid gets in a virtual school is one to one” (A-3).
Another countered the assumption that online programs are computer-taught, noting that “it is the teacher’s expertise that comes into play“ (A-8) in making the curriculum fit the needs of the students. Another argued, “We want to be able to give each child the attention that they need to be successful” (A-9). Finally, some administrators see this personalized instruction as key component to their schools’ success: “But I think it really is changing the way teachers are teaching classroom students to where they are looking at the results. That now if I personalize instruction, I really make this about the student, I get different results” (A-6).

**Expanding Access**

A second theme that emerged was the administrators’ strong belief in virtual schools’ potential to expand access to high quality education for students. This was framed as an equity agenda for many, as they focused on students who were underserved or at risk of dropping out of high school. Also discussed was a general expansion of the target audiences for their schools.

**Blue-sky stuff.**

Many of the administrators spoke adamantly about the ways in which their virtual school was changing the lives of their students. They focused on those students who were at risk of not graduating or who were underperforming: “Once we get them into the work, we feel like we can engage kids who have been unengaged, that have been very traditionally unengaged” (A-6). Such engagement in the online environment, they argued, can set the students on a path of real learning:

We hope, number one, that they gain a belief in themselves and a love of learning. We find so many students that feel like they can’t and if they’re able to put a
program together that really focuses on their needs and because we are not bound by space and by time and traditional methodologies, we really have been able to redesign education. And when you do that, you find that students, if they have the time to learn, they typically learn. If they have the instructional methodology that really speaks to their learning style, they typically learn. If they are in a situation where they are not taught with peer pressure, you know where they don’t wanna ask the questions because they feel stupid, they typically ask the question and they learn (A-6).

And once the students re-engage with learning, they start to see new paths for themselves:

And so we have so much anecdotal evidence of students who probably would have dropped out, who now wanna be architects and engineers and school teachers because they kind of went, “Wow, I’m not dumb” (ibid).

This transformation was framed as both good for the individual students and for society as a whole:

And then the most important thing is that many of the students that we serve would have dropped out of school and not gotten a high school diploma. And you can—I mean, imagine what happens there. You have less productive members of society. I mean what is it, 80 percent of the inmates in prison are high school dropouts? Our graduation rates—I mean, you’re saving lives in some cases I think. You’re helping to contribute to a safer world. I mean this is really blue-sky stuff here … I believe that and that’s why I do what I do (A-8).

**Widening the target.**

Many of the administrators expressed surprise at how the target audience served by their schools had expanded over the years. For example, one school started with a focus on remediation for a single English class that was keeping high school seniors from graduating on time. Over the years, the school widened its audience:

The audience expanded to almost every, almost every example you can think of. It expanded to athletes who were not able to attend traditional school, it expanded to children who needed credit recovery courses and were getting behind. It expanded to children who could not have access to advanced placement courses in the schools they were in, so we provided them. It expanded to children who only
needed one or two courses to graduate but needed to work. They could get the courses at night over the Internet with us, and work during the day. It obviously is one of the solutions that worked for many kids on homebound. It also works for—depending on circumstances and how the design is set up—it works for those children who are long-time suspended. It works—well you just can’t hardly think of a situation where it would not work for some students (A-1).

Another school went through a similar expansion, focusing first on remediation but then expanding so that the population mirrored that of a typical high school:

We worked primarily with at-risk students, and so we were helping schools with dropout recovery, remediation, and that kind of thing. That was in the early years. And so today we’re … much more heavily weighted toward the at-risk student, credit recovery, dropout recovery, remediation. But we also have a profile of students that probably looks a lot more like a typical urban school district where we have several at-risk, a bunch in the middle, and then a few at the accelerated end of things (A-7).

Some schools are widening their service to the home school audience: “We do see a increase in people that are just deciding to home school their kids because they don’t like going to the public school that’s in their area, their state, their city” (A-4). Others are drawing in students who were previously in private schools:

We are finding with the economic problems, now, a lot of the private school kids are wanting to come into this school instead of traditional public school. It seems, for them, a lot more rigorous. And they are used to that. And their parents really can’t afford tuition now, so that is a new group that never existed before (A-7).

And special education students are also being served with success in some schools:

[It is] not like haven’t seen this before, but it always amazes me .. this one child, is a junior right now, the last evaluation meeting we had he was the eight grade reading level. Two days ago, one year after being in our school, his standardized reading level is post-graduate. … So then I looked at the teacher and said, well, after the meeting, I said, is that correct? She said, “Yeah.” And she said, “Let me you show the scores of the other special ed kids that have been up for review this year.” And all of them [improved their scores]; one was fifth grade up to eight grade. And what it basically is, there is so much reading that they have to go through on the computer, and so much focused attention, that many of these special needs kids are now getting close to rescinded. And that surprises me all
the time. … So it makes me wonder, you know, what haven’t we been doing about this very thing, in a traditional environment, that could happen so rapidly in an online environment (A-7)?

Even as a school’s audience expands to all types of students, as one administrator notes, the schools could keep its focus on underserved student populations:

Well it’s interesting because you know, when we started out, we really thought that there would be a clearly defined target population that would emerge. We talked about, you know, doing some type of pretest or personality test or what have you, with the opinion that although online learning should be available to every student, not every student is going to be successful in that environment, and just the same way that they’re not 100% successful in our schools. And that it’s really about having options. What has kind of transpired though over the years, our target audience is any student in the state of [name removed] (A-6).

**Quality Education—“Tradition of” or “Transformation to”**

The third theme that emerged regarding the purpose and potential of virtual schools was a commitment to providing a “quality education” for the students. In this area, there was a clear distinction between the school types, with the university-based administrators describing their work as maintaining a tradition of high quality education and the administrators of public schools (state, district, and charter) focusing on transforming education to be of higher quality (see Table 29). The administrator from the private company that provides service to public schools also focused on the reform agenda.
Administrators’ Emphasis on Quality by School Type

<table>
<thead>
<tr>
<th>Virtual school / program maintains tradition of high quality education:</th>
<th>Virtual school helps transform public education to higher quality:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• University-based schools</td>
<td>• State schools</td>
</tr>
<tr>
<td>• University-based schools</td>
<td>• District schools</td>
</tr>
<tr>
<td>• University-based schools</td>
<td>• Charter school</td>
</tr>
<tr>
<td>• University-based schools</td>
<td>• Private company that provides curriculum and services to public schools</td>
</tr>
</tbody>
</table>

Tradition of quality.

Both administrators from the university-based programs spoke of their schools’ deep roots in independent study education, noting that their correspondence schools had been serving students since the 1910s and 1920s:

You know, we’ve been doing it a long time and are pretty good at what we do. And think of the number of kids that have gone through these doors. I mean, basically, we average about anywhere from 150 to 200 kids that graduate from us every year—with a diploma—and then, we have another 7,000 or 8,000 that take courses from us every year and so, I think about that in 80 years, the number of kids that have been touched by this program, it’s pretty amazing (A-4).

Given that their programs were tuition-based, with families typically paying the tuition, such longevity was also cited as evidence of their quality: “You know, if you’re not offering a quality product, you know, you’re not gonna be in business long” (A-4).

While both schools’ have transitioned their course delivery to be online, they see their independent study model as different from most of the virtual schools that have emerged more recently: “We have open enrolling, open enrollment, or, rolling enrollment, where students can enroll at any time and they can proceed through the coursework at their own rate. … They wanna get what they know, know what they get,
and get on with it—and we give ‘em that opportunity” (A-5). One also noted a perceived bias against such correspondence models:

And one of the kind of complaints that I have is that we’ve been in the business of distance education for a long time. Since 19[xx], you know. Granted our roots are correspondence course. But some of the places which don’t offer, that don’t operate under that open enrollment, that completely asynchronous model … they kind of look down their noses at people like us even though we have got a lot of experience doing this (A-5).

They argue that this model, which uses online delivery to support a traditional correspondence method, i.e., students work through the content with regular teacher feedback, is of high quality and is well-suited for particular types of students:

What we are aiming at and written to and geared to the average to high ability student. We do realize that our program doesn’t work real well in the credit recovery arena. We’re a little bit too rigorous for that. Now, it can work and it does, and there are groups that use us that way, but you have to have a very motivated student to make that happen. And, you know, sometimes, the threat of not graduating is motivation enough for them. But, for the average, you know, credit recovery kid, we don’t work well. We don’t—and we tell people that and we don’t apologize for being rigorous (A-4).

**Transformation to quality.**

The administrators from the public schools (district, school, and charter) and from the private company that works with public schools also spoke about their goal to provide quality education, but their focus was on transforming the existing system to do so. One spoke of the potential for change not just as “picking at the edges” but as a full scale transformation:

And you know, I hate the word reform because I think reform means you’re fixing something, you’re bandaiding something that’s broken, and I don’t kinda like the reinventions. … but there’s not a day that goes by that I don’t kinda pinch myself that this is really [happening]—because I think it’ll be in history books and I think that it has produced transformation (A-6).
Another noted that online learning schools and services “are the kinds of things that are gonna force the public system into providing the kind of learning opportunities that students need, really transforming public schools from teaching institutions to learning institutions” (A-8). Undergirding this hope for transformation was a belief in making choices based on what is best for students, rather than what is good for adults:

You know, if you’re gonna reinvent a school, how do you reinvent a school completely around the child’s needs, whereas high schools are traditionally not necessarily designed that way. So it’s a completely different angle (A-6).

It needs to be much more of a student-centric focus on what needs to be done as opposed to some administrator’s kingdom or protecting teaching jobs (A-8).

The intent to be transformational was present even as these schools were first being developed. For example, one administrator spoke of how he pitched the idea to the teachers he was recruiting to create a district level virtual school, one that eventually would ultimately expand to serve a statewide and international audience:

I said, “I’ve known you for a while, I’m going to ask you based on my relationship with you, to trust me and attend these three days training, and at the end of these three days of training, if you don’t wanna be part of what we’re doing, that’s fine. There’ll be no hard feelings but my instincts tell me that the end of these three days of training, we’re going to be embarking on something that’ll change education in [name removed] forever” (A-1).

One administrator summarized well what many of the others referenced regarding how rapid and continuous the change and expansion has been at their school:

It is interesting, because everyone asks me why is it that your school looks so different every year? It is intentional. Because how can you say you are a school of ideas of you don’t try those ideas every year? You know, or every time you want to change something to make it better? So I know it will look different. Significantly (A-7).
Finally, the administrators also were aware of the leadership role that they and their schools have played in what they see as an emerging transformation. One spoke of her consulting work with other states, regions, and districts that were developing their own online schools as an important and intentional contribution to the wider society, noting “We feel like we have established a model and a philosophy that we would—that we have seen others desire to adopt” (A-6). Similarly, another administrator identified their school’s role as a change agent that would help the traditional system:

Well I think that one of the reasons that we created this charter, was not that would last forever and ever, but that we would be serving as an incubator of ideas for school reform. And trial testing … because as a charter, you can pretty much do anything you want to, for structural changes and so forth, and we believe that we’ll push every envelope to help the traditional environment embrace some of these changes, instead of them having to destroy their structure and try to implement something that they are not familiar with. We are small enough, fast enough that we can do it for them, and then they can figure out how to transition into our environment better (A-7).

**Contextual Issues Influencing the Schools**

Throughout the interviews, the head administrators raised two key contextual issues that were affecting the development of the virtual schools and programs. The first was the culture of competition in which they were operating, described as competition with traditional brick and mortar schools and among the virtual schools themselves. The second dealt with the expansion of technology in students’ lives.

**Culture of Competition**

The most-often mentioned contextual issue for the administrators was the culture of competition within which their schools were operating. Some focused on the perceived competition with the public brick-and-mortar schools, noting that that such competition
was not their intent and that the best way to counter this misconception is to be a
“solution” for these schools:

We created a principal’s advisory group and a guidance counselor advisory group
that was county wide, and ultimately it went beyond the county, but the idea there
was [to say], “Okay, what is it that you people need at your level that online
instruction can help you solve?” And by approaching it that way, it’s easy to see
why people [joined with us]. You know if you wanna get to a high school
principal, get rid of one of his problems because that’s what his desk is full of (A-
1).

The administrator of the for-profit company in the interview sample also claimed a
problem-solver approach to the relationships with the public schools:

Our belief has always been we’ll go out and we’re happy to do whatever we can
to help them meet their goals. We strongly recommend that they leverage our
capabilities or someone else’s. But if they want to do their own thing, we help
’em do that, too. And typically that’s come back around to us (A-8).

And finally, another administrator noted that over time, use of this approach helped
correct the misconception of the virtual-school as brick-and-mortar competitor:

But the school districts are using us in a very different way now whereby up until
this point, probably two years ago, we were perceived as pure choice and
therefore it was purely—you know how some feel about choice. But now, we’re
an economic solution. It has really changed our relationship with the schools—
for the better (A-6).

For other administrators, however, the competition they discussed was among the
increasing number of virtual schools and programs. The administrators of the tuition-
based university programs were particularly feeling competitive pressure from the
provider expansion: “Because of increased competition, I do think it is hurting some of
the college-based programs that have been around for a long while” (A-5). One noted that
they had been focusing on growing their international audience because of the increasing
competition:
And then, we kind of backed off from the K-12 national market somewhat because of all the virtual schools, the state-sponsored virtual schools. And, you know, it makes sense. Why does a student choose to pay to come to our program when they can attend their state sponsored virtual school for nothing (A-4)?

There was also considerable concern that some of the newer companies and organizations entering the K-12 online market were “fly-by-nights”:

I think one of the challenges facing us nowadays—it is rewarding and it is a challenge—is the increased competition that seems to be coming from everywhere. This is a bandwagon that everybody seems to be jumping on, whether they are qualified or not, whether they have done background research. You know, it is great to see such an interest and it is great to see that it is growing and it is being so accepted, but they are not all created equally (A-5).

One administrator worried that some getting on this “bandwagon” were expanding too quickly and did not understand the complexity of high school education. And, more troubling to him, they appear to be focused only on their potential profit:

Where some of our competition, their bottom line is their bottom line and I guess one of the surprises, we continue to see the fly-by-night operations that are, basically, diploma mills that, you know, I just, really, to myself think, how could people sleep at night?… You know what I mean? Really, how can you go home and sleep at night knowing that, you know, you honked somebody out of some money and they’re gonna get a fraudulent diploma … How can you do that to a kid? You know? I mean, who’s in that corner advocating for that kid? (A-4).

Many administrators also spoke of various ways in which the regulatory environment of a state impacts their ability to compete within it. School choice legislation, allowing “students and parents to transfer freely to find a program that’s gonna work best for them” (A-8) was seen as an important condition for virtual schools to thrive. Also important were funding mechanisms that support innovation (A-8) and that do not set the virtual schools in direct competition with the brick-and-mortar schools for funding: “so LEAs are going to be—are going to lose money for every course that is
delivered online. Well, that sets up a situation where you have online instruction fighting traditional education for students. That is a lose, lose, lose” (A-1).

State legislation requiring high school students to take at least one distance education course before they graduate was perceived as something that could have a positive impact on enrollment: “We know we would pick up kids from that” (A-1). But state-funded schools, particularly those that are entering in market of virtual schools and programs, pose a threat to some of the existing schools: “When your state department of education is offering something, there is already a built-in audience” (A-5). While further discussion of specific legislation is beyond the scope of this study, it is important to note that many of the administrators described the culture in which they were competing for students as deeply impacted by recent or potential legislation.

**Technology-Ready Students**

The second main contextual issue raised in the interviews and described as impacting the development of virtual schools was students’ engagement with technology, particularly given that traditional brick-and-mortar schools were seen as lagging behind the students in this area. One administrator’s anecdote illustrated the issue. As he and a student walked into a traditional school together, the student started turning off his phone and iPod and said, “Well, it’s time to power-down now” (A-1). Another administrator described a graphic showing data on media use by hour, quantifying school time as such powered-down time:

You have this huge spike in the morning when you are, you know, around breakfast time, and around lunch time, and around after school. The lowest level of tech use, and I am not just talking about computers, but any kind of technology, is when [students] are in school (A-7).
Not recognizing that students are “digital natives” (A-1) was seen to be missing a key connection to students or worse: “Not only were we not helping that child, we were probably holding him back” (A-1), particularly in terms of multi-tasking skills:

Yes, I think that traditional school takes that away from them. I hate to be harsh about that, but I think what happens is that traditional school downplays all of that part, multitasking part, that those skills don’t get refined. They get dulled (A-7).

Online learning courses that make use of the current communication technologies, it was argued, help the students integrate the school experience with their technologically enhanced personal lives:

Yes, and I won’t take credit for that. Because most of them already know how do to that stuff, whether it is MySpace, whether it is Second Life, you know, whether it is the newest thing on the block, regarding social networking, through the Internet … They are there already. I am not helping that, I am just trying to connect the school part to that, you know, so that they are consistent (A-1).

In addition to being a way to engage students in their current schooling, use of these technologies was seen as a necessary preparation for online learning they would experience in college:

Well, most colleges are requiring at least one online course now, so we think that we’re giving them that—an opportunity to see what that’s like and how to—how you regulate yourself, what kind of time management skills you need to develop to do online learning (A-3).

Another claimed that it would better prepare students for leadership in the 21st century:

Well, I think it is going to strengthen them to be that 21st century citizen. That our students—our current traditional schools are not preparing. These kids are far more—being multitask. They are problem solvers, they know the tech well enough to compete in the workplace if they need to, a very different kind of student. I think what we expect them to be—hey are already sort of like that when they come to us, but they are going to now be not only just participants but they are going to be leaders in this century, because they will have a lot stronger skill sets, from this environment (A-7).
In summary, many of the administrators seemed very aware of and focused on the technologically-rich world in which their students are living. They argued that online schools should engage with such technology both to connect with students and to prepare them for the future.

**Conceptual Map**

The conceptual map described in Chapter 2 was used throughout the data analysis process. While analyzing each respondent’s interview transcript, a separate map was used as a place to note the administrator’s references to education as a public or private good, the need for standardized or individualized curriculum, and current contextual issues influencing the development of virtual schools. In addition, emergent themes and contextual issues not yet listed in the conceptual map were noted. A synthesis of these results was used to revise the conceptual map to reflect the virtual school head administrators’ perspectives (see Figure 5) and to summarize the results discussed above in the first part of this chapter.
Figure 5
Conceptual Map of Historic Tensions and Current Context of Public Education in the United States—Revised to Reflect Interview Data

HISTORIC TENSIONS

Public education is:

<table>
<thead>
<tr>
<th>a Public Good</th>
<th>- OR -</th>
<th>a Private Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>benefiting society as a whole by:</td>
<td></td>
<td>allowing individuals to prepare for:</td>
</tr>
<tr>
<td>supporting democracy</td>
<td>reducing dropouts</td>
<td>further schooling</td>
</tr>
<tr>
<td>supporting the economy</td>
<td>increasing access</td>
<td>the world of work</td>
</tr>
<tr>
<td>enacting social justice</td>
<td></td>
<td>practical and personal life</td>
</tr>
</tbody>
</table>

Curriculum should be:

standardized → individualized

CURRENT CONTEXTUAL ISSUES

- Shifting demographics
- Globalized economy
- Results focus for schools
- Demand for school choice
- Technology infusion

Culture of competition

Education as a Public or Private Good

The administrators described their school’s purpose as serving both public and private goods, with comments arising in all of the benefit areas except “supporting democracy”. Overwhelmingly, the benefit emphasized the most was a private one, namely “allowing individuals to prepare for the world of work” (see darker highlighting).
Two specific goals of the virtual schools discussed earlier—reducing dropouts and increasing access—were framed as benefits to both the public and to individuals.

**Standardized or Individualized Curriculum**

For the question of whether high school curriculum should be standardized and common for all or individualized based on student needs and interests, the administrators had a clear and adamant focus on individualization. As discussed earlier, they described the increased course options and personalized instruction as key components of their virtual schools. While a couple administrators noted that the online curriculum was now aligned to specific state standards, there was no reference to a “common curriculum” that all students should have and that would serve to help unify the nation.

**Current Contextual Issues**

Finally, only two current contextual issues presented in the conceptual map were raised by the respondents. The first, the demand for school choice, was discussed as part of a related issue of the culture of competition in which the virtual schools were operating. The graphic has been revised to note this area of emphasis. The second was the infusion of technology tools into students’ daily life, with administrators arguing that online schools should engage with such technology, both to connect with students and to prepare them for the future.

**The Head Administrators’ Work**

The administrators interviewed came to their virtual school work with a wide range of experiences as teachers, district leaders, and administrators. In addition, one had worked in journalism and publishing, another had experience in a technology-based
business, and a third had worked in their state department of education. Not one described their path to virtual school administration as planned, which is not surprising given that all but the university-based administrators were with their school at its founding. They “applied on a whim” (A-5) and got into the job “purely by accident” (A-6) or found an opportunity to merge interests they had worked on in their career (educational technology, school reform, instruction) in a new medium. Moreover, they seemed to relish this work without roadmaps:

So I really do feel like I had the opportunity to kind of fall into a wonderful situation and the person that hired me pretty much, she just said, how do you feel about doing something that has no rules and no roadmaps and I said, “That’s exactly what I would love to do, as long as I know that I have your support (A-6).

Although there were many differences among the administrators in terms of background, school structure (e.g., state, district, private, university, charter, for-profit provider), and administrative structure and title (e.g., principal, CEO, head of school, director), they described their work as administrators of virtual schools in similar terms, focusing on the following three areas: the regular administrative work of schools, instructional leadership, and public relations and communications.

**Everything Except Hallway Duty**

Both in describing their work and in comparing it to that of a traditional school administrator, they emphasized how similar it was to administration of a brick-and-mortar high school: “You still have the same management and administrative issues that come across your desk, whether it is budget or personnel” (A-7); “All of the issues except perhaps for physical grounds remain the same” (A-9); and “You know at some level, being a high school principal is being a high school principal. You have many, many,
many, many of the same issues” (A-1). Many voiced relief that they avoided disciplinary situations common in a brick-and-mortar high school, such as food fights, hallway scuffles, dress code violations, and physical fights. Yet they also noted that discipline issues do still arise, particularly in schools with asynchronous classrooms and other online spaces in which students can interact:

I mean, you wouldn’t think you’d have discipline issues, but you have significant discipline issues, particularly with synchronous instruction because the kids are in class all the time at the same time. So you’ve got boys hittin’ on girls and girls hittin’ on boys. You’ve got behavior issues. You’ve got language issues, inappropriate language. You’ve got—in some cases you have particularly gifted technology, children who are particularly gifted in technology, trying to gain access into areas they have no business in. There’s just a myriad of things that come up that you don’t anticipate (A-1).

They argued that the technology used in online learning, rather than removing physical issues from the administrative realm, may instead just alter them. One example is the accidental streaker encountered at one school. A home-based student had his video camera placed such that other students could see past him, into the family hallway. His sister, walking naked from the bathroom shower to her bedroom, inadvertently was caught on camera and seen by the class. This example highlights the potential challenges for an administrator when the technology expands the scope of the school beyond their physical reach. Another example demonstrates how the technology can alter a typical administrative task, that of parent communication:

But, really, I mean, we still deal with angry parents, we deal with upset – and, in some cases, that parent is more vocal on the phone and in the email than they would be meeting with you face to face in a public school because they know they’re not gonna run into us at the grocery store or see us at the ballgame (A-4).
There were two areas of administrative leadership, however, that appeared to get more attention from the administrators because they were working in virtual school environment.

**Focus on Instruction**

First, the administrators shared a focus on their school’s instructional design and delivery. The following two examples demonstrate that while the positions taken may be on opposite ends of a spectrum, in this case on the debate over asynchronous or synchronous instruction, the engagement with and conviction about the different instructional models were similar:

\[
\ldots \text{students submit the work, the instructors grade, and they send responses back to the students. They give very good and detailed feedback back to the students. But again, it is not that real time component, when some times people think is necessary. We’d argue that here that the interaction is most important between the students and the content, and not necessarily that real-time component (A-5).}
\]

It was my feeling from the very beginning, from day one when I began, that synchronous instruction was better. The more synchronous instruction you had, the better the content delivery was gonna be. And I feel that even stronger today (A-1).

One administrator focused on personalized instruction and mastery learning:

\[
\text{Students being able to resubmit their assignments; that was a philosophical change … and a very hard one for teachers to accept initially, especially high school teachers because what we said is they want these kids to leave us knowing the material (A-6).}
\]

Another highlighted the teachers’ expertise as critical to the school’s success:

\[
\text{Because the bottom line is, it doesn’t matter what curriculum or what vendor you use, it is the teacher who is going to create, out of that curriculum, what needs to be taught. It is the teacher’s expertise that comes into play. There is a very distinct difference and I don’t think the rest of the world has really caught onto yet. Many feel that, ok, we buy from a vendor and we just implement it. You can’t, we’re not facilitators of a course. We do teach in the course (A-7).}
\]
But all addressed, in some way, their need to be aware of and intentional about the instructional decisions that are unique to online teaching environment:

What does an instructional model look like online? How do you create content, which a traditional high school principal obviously doesn’t generally have to do. What does a delivery mechanism look like, what are the delivery tools with inside a classroom, how do you design the model for the most success, issues that—those issues that—those are issues that are unique to online (A-1).

**Proving the Concept**

Second, the administrators spoke more about their extensive work in outreach, public relations, and marketing. “I really do a lot of PR and marketing type stuff, going out and promoting our programs” (A-5) and “I really do a great deal of outreach” (A-6). One described “how online learning is perceived by both the general public and traditional public school educators” (A-5) as a complex political problem requiring a lot of their attention. Most of this problem seemed to center around “proving the concept” (A-7), convincing other educators and policy makers that their program is of comparable quality:

The greatest challenge has been changing or influencing the educational community that this is a credible education opportunity for kids and very, very solid opportunity for kids (A-6).

Taking on this role of champion and advocate for their school in particular and online learning in general, the administrators voiced nothing but confidence in the quality of the their program and its appropriateness for the students they serve:

Well, I mean, for one, I think the public school or the brick and mortars don’t consider the distance schools as like real. I think they think it’s a lesser option, you know, that if you can’t do it face to face, it shouldn’t be done or, you know, they only—I think a lot of the administrators only think, “Well, it’s okay if that’s
their last resort.” —And I don’t think they think this is a serious player and, for some kids, we work out much, much better (A-4).

The challenges are mindsets. You know, it is like people always thought “second rate education.” And unbeknownst to them, it is probably even better, its more individualized, it’s a lot more rigorous, less downtime, more focused time (A-7).

In summary, the virtual school administrators described their work as similar to that of an administrator in a brick and mortar school, although with a heightened focus on instructional leadership and public relations work.

Looking to the Future

Finally, the head administrators were asked to imagine the challenges and opportunities that lie ahead, both for their virtual school and for K-12 online learning nationwide. The following is a synthesis and compilation of their thoughts, presented as a set of predictions:

1. The expansion of K-12 online learning will continue. Many voiced surprise at the enrollment demand at their school. One described being “overwhelmed with enrollments, completely unprepared for the number” (A-3) and another identified “keeping up with demand” (A-8) as their greatest challenge ahead. Others focused on the rapid development of other online schools and providers, using words such as “bandwagon” (A-5), “proliferation” (A-8), and “fly-by-nights” (A-4, A-5). For many, this rapid growth indicated that the field is still very much in flux, leading to the next prediction.

2. It is not yet clear which schools and models will be most successful—or survive—over time. One administrator argued that state schools (other than one well-established one) would not work and that district ones will prove to be the most
pervasive; another had the absolute opposite prediction. A leader of a university program voiced concern that their model was in jeopardy while the for-profit provider envisioned growth from schools and districts looking for specific online learning services. Such uncertainty about the future of the various virtual school types seemed driven, in part, by financial concerns, leading to the third prediction.

3. Funding mechanisms developed for K-12 online learning will directly impact the growth of particular virtual schools and models. As one administrator noted, “And the funding, just nobody quite understands what the right way is to fund online learning” (A-8). Another echoed those sentiments:

I think there’s gonna be a huge struggle over money and unfortunately there are very few people who truly understand what good online instruction at K-12 looks like. So out of a lack of knowledge, a lot of really bad decisions are being made and will continue to be made by legislators and by academicians. So I think there’s gonna be, I think there’s a lot of problems layin ahead (A-8).

4. Online learning in K-12 education will become more and more mainstream. Some spoke of how virtual schools are becoming more widely accepted; others focused on how common supplemental courses will become:

Oh, I think it’s just expanding, it’s exploding and I think it’s just a matter of time before it becomes second nature, you know? “Here’s what you need to take. How are you gonna take it? How much of it is gonna be online? Well, how much of it is gonna be in a building?” I think it’s gonna make schooling a lot more flexible (A-3).

Another described online courses as a component within the larger system:

I don’t know that we’ll think of ’em as virtual schools in five years. I don’t know that that term will even still be around. I think it will be part of a student’s education, part of the offerings that we provide in our education system in the country and you won’t really think of it as a separate thing (A-8).
Also mentioned by some was that the instructional practices developed in online courses increasingly will be applied in a so-called “blended learning environment,” one which includes both face-to-face and online components. It was expected that all three levels of online learning—virtual schools, online courses, and online instructional practices—will become mainstream.

5. The market focus will shift to focus on services (instruction, platform, and professional development) rather than commodities (online curriculum and content). Over the years, virtual schools and traditional publishers who have moved into online publishing, have created a solid based of content and curriculum, aligned with state content standards, to be used in online education. The next step, says one, is to focus on the services:

But the courses, the content, the curriculum, has also almost become a commodity. And not that you don’t need good curriculum. You have to have really good robust courses that are tied to standards and can be modified easily to meet specific student needs. But there’s a lotta really good content out there. And it really is not the thing—I thought early on that curriculum content would set various providers apart. But it’s really not. It’s really a seat at the table. And what really sets providers apart is the service they provide (A-8).

One area of service focus is the technology and platform:

Because many schools are under-resourced in terms of technology, and so that’s something that we’ve been able to add as well. Just how do you really create an environment that allows you to take the most advantage of technology-enabled learning? (A-8).

However, even more emphasized was the need for high quality instruction, served directly to students or indirectly, through professional development:

It is going to have to be simultaneously done with professional development. Because you can’t just—otherwise you are going to have the tremendous wave of curriculum companies, like the Houghton Mifflin, and all them, which they
already are, jumping into the online market to sell wares, to sell the curriculum, and teachers not knowing how to do it, so they’ll just sit back at let the curriculum teach itself. That is when you have lack of rigor and lack of true instructional practices (A-7).

As an example, the area of growth and expansion for the market lies not in creating yet another Algebra 1 course, but in either delivering the course directly, with high quality online instruction, or in providing professional development in online instructional practices so other teachers can teach it.

6. Online learning will help schools shift to a K-20 model, connecting students to post-secondary and career plans. This final prediction seemed important to include, even though only two administrators raised it. Through Advanced Placement and “College in the Schools” programs, many high school students currently do have access to college level courses, both online and face-to-face. According to the administrators, these opportunities will become more common through online learning programs:

So I think we’ll take a broader view of that and participate more in education solutions that meet the needs no matter what the age is. There’ll be a much, much greater convergence between K-12 and post-secondary (A-8).

Also envisioned is using online learning to connect students with more technical and trade opportunities, if that is the path that interests them:

There are a number of things that we have down on the drawing board that I think might redefine how career pathways are taught as industries can come into our schools, not like your typical wood shop or auto mechanic shop, or whatever. What would that look like if we actually start to have like in the European system, like the gymnasium? How would it look like if we started to move things into sophomore year and had multiple tracks, using as the fundamental core basis the online site, to make sure that they can graduate with a diploma to go to college. But have opportunities to make them the next navigators of the ocean, or next electrical engineers, and stuff like that (A-7).
This is similar to what was previously discussed in this chapter, namely that online learning can be seen as providing options for students. What is different about what these two administrators emphasized, however, is that the future holds more post-secondary choices among those offered to high school students.
CHAPTER 6: SUMMARY, DISCUSSION, AND IMPLICATIONS

This chapter begins with a review of the proposal. The summary and discussion of the study findings includes implications for students and families, leaders of virtual schools, trainers of K-12 school administrators, and researchers.

Review of the Proposal

The purpose of this study was to investigate the emerging world of virtual high schools and the people who lead them to better understand virtual schooling’s purpose and potential, particularly within the context of public education in the United States. The first literature base examined, which was primarily in the form of technical reports, provided school-level information about virtual schools and programs operating in the United States, including the types of schools, the programs offered, and enrollment data. A second related set of research literature was then used to identify what people perceive the purpose and potential of virtual schooling to be, but because of limited studies, only did so from the perspective of virtual school teachers, students, and parents and brick-and-mortar school administrators. The third part of the literature review attempted to gather information about the leaders of K-12 virtual schools and programs; there was only minimal research found on profile information about these leaders and no studies examining school level issues specifically from their perspective. The fourth and final base of literature was used to develop a conceptual framework to present the historical and current context in which the virtual high schools are emerging.

From this review of the literature the following four research questions were developed and refined:
1. What are the basic features of K-12 virtual schools and programs nationwide?

2. What are the stated purposes and potential of K-12 virtual schools and programs?

3. Who are the leaders of K-12 virtual schools and programs?

4. What do leaders of virtual high schools and programs believe about the purpose and potential of virtual schooling?

Given that the field of K-12 virtual schools is still in an emergent phase of development and so, is a little-known phenomenon, a qualitative research approach was at the heart of this study. Because so little is known about both the virtual schools and the head administrators, quantitative methods were also used to provide descriptive data about them. The mixed-methods study used three sequential phases designed developmentally to allow results from one method to inform subsequent ones. The first phase used document analysis of virtual school Web sites to identify key characteristics of the schools and programs listed on the NACOL Clearinghouse List. Results from this analysis were used to develop the instrument for the second phase, an online survey of virtual school head administrators. The third phase, semi-structured interviews of selected survey respondents, used data from the previous phases to shape the interview guide and sought expert opinion on patterns or issues that emerged from the document analysis and survey. Most importantly, the interviews addressed exploratory questions about administrators’ beliefs about virtual schooling.

Findings, Discussion, Implications

Examination of the three data sets—the document analysis of virtual school Web sites, the survey of the head administrators, and the interviews of a sub-set of survey
respondents—resulted in nine key findings, presented in three sections. The first set of findings focuses on the characteristics of the virtual schools and programs while the second set delves into the purpose and potential of them. The third set of findings relate to the head administrators. The discussion of the findings will include implications, when appropriate, for four distinct audiences: students and families, leaders of virtual schools and programs, people who provide training and professional development to K-12 administrators, and educational researchers.

K-12 Virtual Schools and Programs

Finding #1: In terms of basic characteristics of the virtual schools, there appear to be some patterns emerging, particularly by virtual school type. For the 2004-2005 school year, K-12 virtual schooling was predominantly a high school phenomenon, with 137,073 high school level students reported by survey respondents, compared to 27,713 middle and 12,068 elementary level students. Private, charter and public virtual schools were more numerous, accounting for 80% of the schools nationwide. Although there were fewer state and university-based programs (each nearly 10%), these typically large programs together enrolled 50% of the total K-12 online students in the sample. This may in part because two of the school types with the largest enrollments, state and university-based, focused on high school audiences. Elementary age online students were served primarily by private schools (7,225) and charter schools (3,743) in a K-8 model while all middle level students were served either in a K-8 online school or a secondary (7-12) one.

A majority of the schools fell in the mid-size category (56.4%), a pattern that seemed to hold for most of the school types except for the university-based programs,
which had more large schools (50%). Similarly, all the state and “other” schools were either mid-size or large while district, public, and charter schools were all predominantly small and mid-sized. True to their names, most of the “schools” (private, public, and charter) offered full time school programs, with charters doing so almost exclusively and public and private schools including a high degree of supplemental course offerings as well. State, district, and university-sponsored virtual schools mostly provided supplemental course offerings and could more precisely be labeled “programs.”

Finding #2: Virtual school administrators believed that K-12 virtual schools will continue to expand and that online learning will become a mainstream component of K-12 students’ education. Many of the administrators seemed very aware of and focused on the technologically rich world in which their students were living. They argued that online schools should engage with such technology both to connect with students and to prepare them for the future. This technology rich environment was also cited to support predictions of continued virtual school enrollment growth, with the expectation that students and families would want technologies ubiquitous in their personal lives to be included in their school lives. It was also predicted that all three levels of online learning—virtual schools, online courses, and online instructional practices—would become mainstream, with students selecting online learning as one option among a variety of educational choices. Virtual schools, by providing “solutions” for brick-and-mortar schools rather than competing with them, could help further the mainstream nature of such programming, argued some administrators.
Finding #3: It is not yet clear which schools and school types will be most successful over time. Many of the administrators described the culture in which they were competing for students as deeply impacted by recent or potential legislation and by the need for funding mechanisms that support innovation. They also voiced concern that some of the newer companies and organizations entering the K-12 online market were “fly-by-nights” that were expanding too quickly without understanding the complexity of K-12 education. Amidst these concerns was confidence in the continued growth of their own schools and an expectation that rapid and continuous change and improvement would continue, both for their own school and for others.

Implications for students and families.

When a person shopping at a mall finds an item they want to buy in a different size or color, often now they can order the item online directly through the store’s Web site. Similarly, for students attending a brick-and-mortar high school, the expansion of online learning options within their school program fits within the model of the “shopping mall high school” described by Powell et al. (1985) as a place where students are consumers in their own school, faced with an array of course options, some of which are now online. To continue with the metaphor, some consumers have stopped going to the malls and instead shop online from home, a library, or a coffee shop; similarly, students now can complete a full educational program online without ever going to their local school.

In essence, the expansion of virtual schools and programs has not altered the metaphor of the student as consumer but has increased students’ access to more goods
and services, i.e., curriculum and instruction. With that access comes additional responsibility for students and parents to be informed consumers, aware of the differences among the increasing number of options and selecting those that meet the student’s needs and quality standards. This responsibility extends to others who make programmatic and funding decisions regarding online learning options, including administrators and policy makers at the school, district, state, and federal levels.

Implications for virtual schools.

For years, the first question about online learning has been to ask how it compares to face-to-face learning experiences. As the field continues to grow and various models of virtual schooling solidify, it is important to examine as well the differences among the various virtual schools and classrooms. In order to support the informed-consumerism discussed above, leaders of virtual schools and programs would be well-served to explain to their various audiences—students and families, administrators and policy makers at the school, district, state, and federal levels—about the characteristics and strengths of their particular model of online learning and virtual school structure.

Given the administrators’ concern about the “fly by night” online learning providers entering the field, those with shared values of quality and access over profit should support (or, continue to support) efforts assess their work using standards for online learning such as the National Standards for Quality Online Teaching published by NACOL (North American Council for Online Learning, 2008). In addition, virtual schools should seek accreditation from The Commission on International and Trans-Regional Accreditation (http://www.citaschools.org/) or the appropriate regional
accreditation agency (e.g., North Central Association Commission on Accreditation and School Improvement) to demonstrate their commitment to quality.

Finally, virtual schools can use the descriptive data presented in this study to identify potential areas of enrollment growth or programmatic focus. For example, those currently serving only high school students might consider developing elementary and/or middle level programs, tapping into the current low level of enrollment in these two areas. Or a school that currently provides supplemental course offerings might explore the potential to expand to a full-time program. Conversely, school leaders might look at the variety of programming available nationwide and decide to focus on their school’s niche within the system, presenting themselves as an expert in that particular type of programming. Either way, the data can help schools place themselves within the larger context in which they are operating.

Implications for the professional development of school administrators.

Some of the students in administrative licensure programs today may well be headed for a career as a virtual school leader. Others will lead brick-and-mortar schools but will see many of their students taking courses online from other schools and providers or within their own school or district program. They may be responsible for supervising teachers who teach online and address discipline issues of students who are off-site. They will solve scheduling problems with online courses and will manage a budget with online course expenses and, possibly, income. Online learning is being woven into the fabric of K-12 education and school leaders need to be prepared for it.
Because of this, people who teach, license, and provide professional development in school administration need to be aware of the options and issues in virtual schooling and include them in their programming. The first component would be to integrate an awareness of virtual school issues within the existing curriculum, weaving the following questions throughout all the current courses: “How might this be different in a virtual school setting?” and “How might this work with online learning?” A second would be to include courses focused on virtual schooling, allowing for a wide overview of the online learning options available as well as focused attention on school management and leadership issues as they apply specifically in virtual school settings. Finally, a third component would be to use virtual school settings for observation and internship hours. For example, the Florida Virtual School (www.flvs.net/) has a program for pre-service teachers in which students can complete observation and internship requirements in the FLVS online classrooms; this model could be used and similar partnerships created for administrative licensure programs with pre-service administrators experiencing virtual school leadership directly.

Implications for further research.

As the field of virtual schools continues to expand, almost all of the current and pressing educational research questions could be examined in this new context. From this study’s findings about the K-12 virtual schools and programs, however, three specific research areas of interest emerged. First, the patterns between and among the virtual schools could be used to identify variables of interest for quantitative studies in which relationships could be analyzed for significance and findings could be generalized to the
larger population. Second, longitudinal and national studies of student and course enrollment numbers within these virtual schools and programs, using a solid mechanism for collecting and analyzing such data over time, would help identify the scope of virtual schooling and online learning nationwide, particularly if it expands as predicted. Third, there was a surprisingly high enrollment in the private virtual schools (29.6% of students), particularly when compared to the 11.6% of students in private schools nationwide reported by the NCES (Snyder & Tan, 2005) in the same year. There is much to learn about these private schools, including more detail about their enrollment numbers, programs offered, and cost.

Purpose and Potential of K-12 Virtual Schools and Programs

Finding # 4: Virtual schools have the potential to individualize students’ educational experience, both in terms of increasing course options and for personalizing instruction. In a survey of public school districts nationwide (Setzer and Lewis, 2005), 91% of the administrators identified “offering courses not otherwise available to students” as a somewhat or very important reason for them to look to online programming. The virtual school administrators surveyed in this study agreed that this was an important purpose of their virtual school (83.1%). Other of the survey’s purpose statements rated as important also spoke to the wider goal of increasing options for students, such as “reducing scheduling conflicts for students” (86.4%), “meeting the needs of specific groups of students” (94.9%), “customizing a program for individual students” (82.8%), and allowing students to take courses “from any place” (100%) and at any time (94.9%). This focus on providing options was reiterated in the interviews in
which the head administrators further emphasized that their virtual schools presented options in terms of course offerings, scheduling flexibility, learning environment and structure, and social environment.

In addition, however, many administrators also spoke highly of the individualized instruction and teacher attention that their virtual schools and programs provided. They argued that the one-on-one attention made possible within an online course delivery allowed the teacher and student to focus on the student’s learning and results. Similarly, in the survey the head administrators indicated that “permitting students to get ahead” (83.1%) or “catch up (91.2%) in their coursework” and “allowing students to work at their own pace” (89.9%) were somewhat or very important in their school. This emphasis on flexible pacing, based on the needs and progress of the student, can also be seen in the high number of administrators (44.8%) identifying an independent study interaction model as the used by the majority of their school’s courses. It is important to note, however, that the other two instructional interaction models—classroom (37.9%) or a peer-focused (17.2%)—could also allow for and encourage more personalized instruction between the teacher and student in an online setting, through use of email, video conferencing, discussion boards and other technologies. Many of the head administrators interviewed placed teachers at the core of the online instruction, a finding that was also reflected in the survey in which 96.6% of the respondents said that an important purpose of their virtual school was “providing students with access to qualified teachers.”
Finding #5. Administrators believed that virtual schools could expand access to high quality educational experiences for students and, although the target audience for such schools was more expansive than they first thought, schools could still keep focused on such a goal. This belief in virtual schools’ potential to expand access for students was framed as an equity agenda for many, as they focused on serving students who were underserved or at risk of dropping out of high school. They spoke with pride of how the virtual schools were changing the lives of their students, engaging them with learning, and helping them envision and create new options for themselves. Many of the administrators expressed surprise at how the target audience served by their schools had expanded, in some cases describing the student body as comparable to a typical urban school district, in terms of their academic needs and interests. Even with the expansion to serve a wider range of students, administrators argued the schools could still keep their focus on serving underserved student populations.

Finding #6. Head administrators of the publicly funded virtual schools (state, charter and district/school) believe an important purpose of virtual schools is to reform and transform the traditional, existing systems of education. They argued that the potential for change was not just through small modifications but as a full scale transformation that created organizations focused on learning instead of teaching and that had schedules and structures based what is best for the students, not just the adults. They by no means saw the work as done, framing it instead as a rapidly changing and continually developing process that would create models and strategies that both brick-and-mortar and virtual schools could use.
Implications for virtual schools.

If the personalization of instruction is a key benefit of online learning, more could be done to document and publicize this by virtual schools. Only 19% of the virtual school Web sites used in the document analysis used this benefit as a marketing appeal, yet it was of clear and deep importance to the head administrators interviewed. The discrepancy may be because of the time lag between the two phases of data collection. Even so, virtual schools would be well served to document, study, and publicize information about how their particular online instructional model uses personalized instruction to improve student learning.

Similarly, virtual schools should be documenting their successes in expanding student access to learning opportunities, particularly providing quantitative evidence that they are serving students from typically underserved populations or who were underperforming in other academic settings. Students who take only supplemental courses from a virtual school are counted in state and local data systems as being of their primary school of enrollment (traditional brick-and-mortar, alternative, home school, charter, or private) and so demographic and achievement data from them are hard to collect and analyze. Virtual schools should work together to collect data nationwide that includes both student and course enrollment in order to get a more complete picture of the impact of virtual schooling in this area.

Implications for further research.

The discussion above about gathering and analyzing course and student enrollment data applies to the research field as well. It would be valuable to test the head
administrators’ claims about virtual schools’ potential for and success at improving student access to high quality educational opportunities and to meeting the needs of underserved populations. If found to be true, there could be profound policy implications for using virtual schooling as a strategy to close the achievement gaps that exist among student groups and to better meet individual students’ needs.

Another avenue of research related to these findings is on virtual schooling’s role in the school reform movement. It was interesting that this purported purpose of virtual schools emerged only in the exploratory interviews, but not in the document analysis of the virtual Web sites or in previous research (Picciano and Seaman, 2007; Picciano and Seaman, 2009; Setzer and Lewis, 2005). Given it emerged after the survey was conducted, and so was not included in the list of purpose statements presented in the survey, it is not clear how important this purpose was to the full survey sample of head administrators. Also not yet clear is whether the reform, if it takes place, will be transferring components of virtual schooling into a brick-and-mortar settings or if there would be a fundamental shift in the educational model and philosophy, based on the developments in virtual schools.

**Leaders of K-12 Virtual Schools**

*Finding # 7: While there are a variety of titles and roles used by the head leaders of virtual schools and programs, the head administrators in the sample shared a variety of characteristics, education, and previous work experiences. The sample was primarily Caucasian (93.1%), included slightly more men than women (55.2% and 44.8% respectively), and had a mean age of 48 years (75.7% between the ages of 36-55). They*
were a highly educated group, with vast majority (91.5%) having had some post-baccalaureate coursework, resulting in masters (71%), specialist (25%), and doctorate (25%) degrees and teaching (52%), school counseling (5%) and administrative (45%) licenses. The vast majority of head administrators (93.1%) had taught face-to-face while 60% reported online teaching experience.

The head administrators had worked in a variety of settings, with the most often cited settings being public secondary (66%), colleges and universities (49%) and public elementary (41%). Many administrators also had worked in business and/or had been self-employed (37% and 35% respectively), possibly reflecting the entrepreneurial nature of leading a virtual school in this time of initial development and growth. Seventy-six percent of the head administrators reported having head administrative experience before beginning work in their current role; those “cutting their teeth” in administration were primarily in the district and public schools (41%) and the university based schools (29%).

Finding #8: The head administrators described themselves as doing the work of regular school administration, with a focus on instructional leadership and public relations. The head administrators emphasized how similar their work was to the administration of a brick-and-mortar high school. Many of them voiced relief that they avoided disciplinary situations common in traditional schools but also noted that discipline issues did still arise, particularly in schools with asynchronous classrooms and other online spaces in which students interact. In addition, however, these head administrators spoke of two areas that required additional attention of them. While there was no agreement on an instructional approach or online curriculum and instruction
model best used in virtual schools, the administrators were all focused on and intentional about the instructional decisions made in their school, particularly for issues unique to online teaching environments. The head administrators also spoke about their extensive work in outreach, public relations, and marketing and saw this work as necessary to convince other educators and policy makers of the viability and quality of virtual schooling.

Finding #9: The head administrators in the study were of the first generation of virtual school leaders and came to their roles as experienced educators who had a desire to innovate and to transform education. Not one of the administrators interviewed described their path to virtual school administration as planned, which is not surprising given that all but the university-based leaders were with their school at its founding. Through the leadership of virtual schools, they found an opportunity to merge interests from their previous work (educational technology, school reform, school leadership, curriculum and instruction) in a new medium. They saw themselves as pioneers, school reformers, education transformers, and problem solvers and had a role in shaping the emerging virtual school movement. As one noted, “… there’s not a day that goes by that I don’t kinda pinch myself that this is really [happening] – because I think it’ll be in history books” (A-6).

Implications for virtual schools.

One key implication for virtual schools is that founding leaders will eventually leave their role; hence, some kind of succession planning may be in order, particularly for virtual schools in which the identity of the school and its leader are closely entwined. Are
virtual school leaders searching through their teaching ranks and “grooming” their next
generation of leaders? And if so, would someone whose professional career centered on
virtual school work, i.e., who has gone from online teaching to virtual school
administration, have the same breadth of experience held by the current head
administrators? Virtual schools would be well served to examine the characteristics that
they value in their administrators to ensure that future leaders have qualifications needed
to succeed.

A second implication relates to the racial and ethnic composition identified in this
sample. It is not possible to generalize from this study to the larger population of virtual
school head administrators. Nor do the data address the racial and ethnic backgrounds of
other administrators in the schools. However, the data do raise the question of whether or
not the current group of virtual school leaders reflects the communities they serve,
particularly in terms of race and ethnicity.

Implications for the professional development of school administrators.

The findings on the virtual school administrators’ perception of their work
suggests that those who provide training and professional development of school
administrators could consider adding or increasing an emphasis on instructional
leadership and public relations work, particularly with a focus on their application with
current instructional and communication technologies. Whether someone is leading a
brick-and-mortar school or an online one, familiarity with curriculum and instruction
issues unique to online teaching environments will be needed to inform decision-making
about curriculum options provided to students. Similarly, school administrators in any
environment may find the current communication technologies and strategies helpful for communicating with various school constituencies.

The findings also suggest that there may be an audience for administrative coursework and licensure programs among the leaders of virtual schools, particularly for those working in district or public school based programs. Another audience to consider targeting is virtual school teachers. Given their familiarity with online learning, both of these audiences would likely welcome administrative coursework that is also delivered online. In addition, as mentioned previously, allowing them to conduct observation and internship requirements in virtual school settings would be beneficial.

Implications for further research.

While most any educational research question studied in brick-and-mortar school world could be examined within a virtual school one, these findings indicate three research areas related to virtual school leadership that seem most pressing. The first would be to examine what leadership, broadly defined, looks like in a virtual school world and how is it different or similar to that of a traditional school setting. Second, and more specifically, would be a focus on instructional leadership and the kinds of issues that arise when curriculum and instruction are delivered online. Third, would be the communication technologies and strategies being used in virtual schools. In each of these areas of study, the point would be to: 1) compare the phenomenon in the two different types of settings, 2) test research-based theories and relationships that have been established in traditional educational settings to see if they hold true in the new online environment, and 3) see what leadership strategies, approaches, and theories developed in
the virtual school environment could be used to inform and transform the traditional school one.

**Conclusion**

In conclusion, let us return to the featured debate at the ISTE conference, not to address the question of whether or not “bricks and mortar schools are detrimental to the future of education,” but to explore how the choice of an Oxford-style debate to address the question illuminates issues raised in this study. “Oxford-style” typically refers to the format used by debating societies worldwide. The format of the ISTE debate was Oxford-style in that formal arguments to a proposed motion were presented by three speakers on the opposing side and three on the affirmative. The audience then posed questions to the speakers and, after hearing their responses, voted for or against the motion (International Society for Technology in Education, 2009).

For me, the term Oxford-style also conjures images of the Oxford Union, a debating society that has been holding such debates since 1823 in its beautiful brick and mortar building, located in the heart of Oxford. The founding ideals of freedom of speech, diversity of perspectives, and reasoned debate are championed and practiced by members of this society, many of whom have gone on to be influential leaders and cultural figures in their time (The Oxford Union, 2007). Every Thursday night there is a debate featuring prominent guests and current members of the society. These events are open only to members of the Oxford Union, meaning students of one of the Oxford University Colleges who have joined the society. I had the opportunity to be an Oxford Union member as an exchange student for one semester. Having had the honor to be in
that debate chamber, watching the spirited arguments unfold there, I can attest to the power of this place and its traditions. However, I also know that my access was a privilege not available to most.

This is why it was delightful to see the debate at the ISTE conference apply the Oxford tradition with an ISTE twist. They enacted those Oxford-style values of free speech, diversity of perspectives, and reasoned debate, yet enhanced and extended the experience with some of the technologies used in virtual schools. Many audience members were in the room, but thousands more participated by watching a live video streamed online. All the audience members, on-site and off, could also participate in the final vote, not by walking out one door or the other (the tradition at the Oxford Union) but by using an online survey tool that tabulated results immediately. Finally, anyone who missed the debate or who would like to see it again might do so any time and any place through the video archived online (Intelligence Squared U.S., 2009). The format was similar and the underlying values the same, yet technology tools were used to widen access to the experience and to allow for individual choices in how to participate.

This is, in essence, how the virtual school administrators in this study seemed to frame their work. For them, it seemed not about whether the walls of a school are made of brick or air, but about how their virtual schools can enact many of the same purposes and principles woven throughout our nation’s history of public education. Within their virtual schools, they carry forward much of the format and tradition from the brick and mortar school history, yet, they also apply the power of emerging technologies to better
enact underlying values they see as yet unmet in the old system, such as widening access to learning opportunities and supporting individualization. It is an interesting proposition.
REFERENCES


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United States Department of Education. (2007). *Connecting students to advanced courses*
http://www.qualitycharter.org/

http://www.govhs.org/Pages/AboutUs-ParticipatingSchools


http://www.learningpt.org/


http://kpk12.com/

APPENDICES

Appendix A: Document Analysis Codes

Structure
• Start date [year]
• Publicly funded tuition (directly funded) [yes, no]
• Type (who has primary oversight) [state, district, county, charter, charter network, school, separate district – LEA, consortium, education service center, university, private school, vendor]
• Management structure (similar to what type of organization; how is head administrator defined) [district (superintendent), school (principal), private school (head, headmaster), business (CEO), program (manager/coordinator), non-profit organization (director), 3rd party vendor (redirect to a company)]
• Board members / advisory group (if and how are they described) [text]
• Development / history [text; e.g., university to secondary, middle to high, correspondence to online, intermediate district, consortium to charter school, state pilot program, community/local school to virtual school, district developed charter, state program, U.S. government funded program to independent non-profit, district developed program, county developed program]
• Notes [text]

Technical
• Delivery system / course management system [text; e.g., WebCT, Blackboard, proprietary system]

Grade Levels
• Elementary level [yes, no]
• Middle level [yes, no]
• High school level [yes, no]
• College level [yes, no]

Program
• Supplemental (students may take single classes) [yes, no]
• Full program (degree granting or grade advancing) [yes, no]
• Targets home school market [yes, no]
• Test prep (as separate courses) [yes, no]
• Basic skills / remediation (as separate course) [yes, no]
• Notes [text]

Curriculum
• Core courses (e.g., math, English, social studies, science) [yes, no]
• Electives (e.g., foreign languages, computer programming, specialized English, etc.) [yes, no]
• AP (advanced placement courses) [yes, no]
• # of course titles [approximate count of either semester or full-year courses]
• Curriculum source [created within, single vendor, multi-vendor, created within and single vendor, created within and multiple vendor]
• Curriculum provider(s) [e.g., Class.com, Keystone, Calvert School, FVS, created within system, etc.]
• Notes [text]

Stated goals / marketing pitch
• Running list added to as new items emerge through the coding process [y]
Appendix B: Survey Questions

Introduction and Enrollment Information
Section 1 of 6

1. What is your name? (In any reports I publish, I will not include any information that will make it possible to identify you personally.) OPEN FIELD FOR TEXT

   First name
   Last name

2. What is the name of your virtual school or program? (This information is necessary for me to align data from three different phases of the study. Your school/program will not be identified by name in any reports I publish, unless your permission is given at the end of the survey.) OPEN FIELD FOR TEXT

3. In the 2004-2005 (12 month) school year, how many students were enrolled in your online courses in each of the following grade level categories? OPEN FIELD FOR NUMBER

   Elementary
   Middle or junior high school
   High school
   Post-secondary

4. How many total online course enrollments did your school/program have in the 2004-2005 (12 month) school year? OPEN FIELD FOR NUMBER

   Middle or junior high
   High school semester
   Post-secondary

Mission and Purpose
Section 2 of 6

5. For each of the statements listed below, please state how important each is to the mission and purpose of your school/program. CHOICES: Very important, Somewhat important, Not important, Does not apply

   Offering courses not otherwise available at other schools
   Offering Advanced Placement or college-level courses
   Permitting students to get ahead in their coursework
   Permitting students who failed a course to take it again
Permitting students to catch up in their coursework
Providing tutoring or remediation
Meeting the needs of specific groups of students

6. For each of the statements listed below, please state how important each is to the mission and purpose of your school/program. CHOICES: Very important, Somewhat important, Not important, Does not apply

Reducing scheduling conflicts for students
Allowing students to take courses at any time
Allowing students to take courses from any place
Allowing students to work at their own pace
Customizing a program for individual students
Supporting home school families
Providing education from a particular religious or ethical perspective

7. For each of the statements listed below, please state how important each is to the mission and purpose of your school/program. CHOICES: Very important, Somewhat important, Not important, Does not apply

Encouraging parental involvement in their child’s education
Providing students with an online learning experience
Providing students with a particular curriculum and instruction methods
Creating an alternative, non-traditional learning environment for students
Addressing growing populations and limited space
Providing students with access to qualified teachers
Retaining students within the school system
Generating revenue

Curriculum and Instruction
Section 3 of 6

8. Which statement(s) below best describes curriculum development for your online courses?

A. School/program faculty create it “from scratch” using a variety of resources
B. School/program faculty create it based on textbooks (hard copy or electronic)
C. We purchase the curriculum from a 3rd party/vendor that allows teachers to modify it.
D. We purchase a fixed curriculum from a 3rd party/vendor

9. If you selected more than one response to the question above, please briefly describe the combination you use. For example, someone might write, “We started with all 3rd party vendor courses but now write our own for a third of our courses.”
10. For most of your online courses, which best describes the interactions they are designed to support? Please select the one used for the majority of your courses.

The student interacts with content independently.
The student interacts with content; a teacher monitors progress.
The student interacts with content; a teacher provides instructional help as needed.
A teacher leads instruction; the student interacts with content and the teacher.
A teacher leads instruction; the student interacts with content, the teacher, and sometimes other students.
Student to student interaction is emphasized. A student interacts with content, the teacher, and other students.

School Management and Leadership
Section 4 of 6

11. Who do you consider to be members of your school/program community? Please select all that apply.

Students
Teachers – full time staff
Teachers – adjunct, contract-workers
School/program administrators
Other administrators to whom you report
Partner organization’s staff or administration
Advisory committee
Board of directors/trustees
School founder(s)
College or university
Parents
Local community members
State board of education
State legislature
Accreditation board or organization
External curriculum provider(s)
External course management software provider
Other, please specify - OPEN ENDED

12. Who are the three people / groups with the most influence on policy development for your school / program? Please select one person/group from the list below. (A second and third person will be asked for in the following two questions.) See list after #17.

13. Who are the three people / groups with the most influence on policy development for your school / program? Please select a second person/group from the list below. See list after #17.
14. Who are the three people/groups with the most influence on **policy development** for your school/program? Please select a third person/group from the list below. See list after #17.

15. Who are the three people/groups with the most influence on **day-to-day operations** for your school/program? Please select one person/group from the list below. (A second and third person will be asked for in the following two questions.) See list after #17.

16. Who are the three people/groups with the most influence on **day-to-day operations** for your school/program? Please select a second person/group from the list below. See list after #17.

17. Who are the three people/groups with the most influence on **day-to-day operations** for your school/program? Please select a third person/group from the list below.

- Students
- Teachers – full time staff
- Teachers – adjunct, contract-workers
- School/program administrators
- Other administrators to whom you report
- Partner organization’s staff or administration
- Advisory committee
- Board of directors/trustees
- School founder(s)
- College or university
- Parents
- Local community members
- State board of education
- State legislature
- Accreditation board or organization
- External curriculum provider(s)
- External course management software provider

18. Does your school/program have a board of directors/trustees?

   - Yes
   - No

19. If you answered yes to the question above, which of the following characteristics apply to your board of directors/trustees? Please check all that apply. If you answered no to the question above, please skip this question and continue on to the next.
They are appointed. They are elected from with a group defined by membership (for example, a church board). They are elected from within a community defined by location (for example, a local district school board).

Head administrator – Personal and Professional Characteristics
Section 5 of 6

20. What is your sex?

   Male
   Female

21. How old are you? OPEN FIELD FOR NUMBER

22. What is your race/ethnicity?

   American Indian or Alaska Native
   Asian or Pacific Islander
   Black or African American
   Hispanic or Latino
   White
   Other, please specify OPEN ENDED

23. What degrees or licenses do you hold? Please check all that apply.

   Bachelors
   Masters
   Specialist
   Doctorate
   Teaching license
   School counselor license
   School administrative license
   Other, please specify OPEN ENDED

13. Have you worked in any of the following places? Please check all that apply.

   Public elementary schools
   Public secondary schools
   Public district offices
   Regional, state, or federal education agencies
   Other governmental agencies
   Private elementary schools
Private secondary schools
Technical or trade schools
Colleges or universities
Business
Non-profit organizations (non school or government)
Self-employed
Other, please specify OPEN ENDED

25. Have you ever taught in a face-to-face setting?
   Yes
   No

26. If you answered yes to the question above, how many years have you taught in any of the settings listed below? Please list the number of years for each. If you answered no to the question above, please skip this question and continue on to the next.
   Public elementary schools
   Public secondary schools
   Private elementary schools
   Private secondary schools
   Technical or trade schools
   College or universities
   Business
   Non-profit organizations (non school or government)
   Other, please specify OPEN ENDED

27. Please count the number of times you have taught an online class, by course and by total number of classes taught. For example, if you had taught Geometry online 5 times, you would note that as 1 course and 5 classes. OPEN FIELD FOR NUMBER
   Number of courses
   Number of classes

28. Did you have administrative experience prior to your current position?
   Yes
   No

29. If you answered yes to the question above, in what settings did you serve as an administrator (other than your current position)?
   Public elementary schools
   Public secondary schools
Public district level
Regional, state, or federal education agencies
Other governmental agencies
Private elementary schools
Private secondary schools
Colleges or universities
Business
Technology
Non-profit organizations (non school or government)
Other, please specify OPEN ENDED

Follow Up
Section 6 of 6

30. May I use your school’s/ program’s name in any research reports or articles I publish?
   Yes
   No

31. Would you be available for a short follow-up phone interview to discuss your responses and/or issues that arise from the survey data?
   Yes
   No

32. Do you have any additional comments or questions? OPEN FIELD FOR TEXT
Appendix C: Introductory Letter and Consent Process

Rachel Brown  
Department of Educational Policy & Administration  
University of Minnesota, Twin Cities  
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86 Pleasant Street  
Minneapolis, MN 55455  
[phone]  
brow0127@umn.edu

[date]

[name]  
[title]  
[address]

Dear [name],

I am writing to invite you to participate in a research study, “K-12 Virtual Schools and their Head Administrators.” You were selected to be a part of this study because the online school or program you lead is listed on the one national list of K-12 virtual schools, the NACOL Online Learning Clearinghouse List (http://nacol.org). This letter provides introductory information about the study and an overview of what it will mean to be a study participant.

**Some Background**

As you know, online learning for K-12 students is expanding throughout the nation, providing more options for students to learn from a distance than ever before. While research about online learning classrooms has begun to emerge in the literature, there is surprisingly little research about school level issues or about the key players in this great wave of innovation and reform – you who are leading these virtual schools and programs.

The purpose of this research study is to get a national snapshot of K-12 virtual schools (type, purpose, target audience, curriculum and management structure) and learn about the profiles and beliefs of the schools’ head administrators, a group that has been woefully under-studied in the research literature.

The study is being conducted in three phases. In the first phase, I conducted a document analysis of virtual school / program Web sites to identify key characteristics of these schools and programs. Having reviewed and coded all 142 schools on the NACOL Online Learning Clearinghouse list, I am coming up with some interesting findings about...
what virtual schools exist, who they appear to serve, and what courses they offer. But while the Web sites do provide a nice base of information, as a whole, there is really very little about two areas I am most interested in: school leadership and curriculum.

So, I am looking to you and other virtual school and program leaders to help with the next phase of my study, an online survey of virtual school head administrators. (The term “head administrator” is used to reflect the varying titles used to describe the highest-ranking leader of virtual schools and programs, such as principal, director, coordinator, CEO, or manager)

The 30-question survey will be delivered online and should take about 15-20 minutes to complete. Survey questions are organized in the following categories: student enrollment, mission and purpose, curriculum, management, and head administrator personal and professional background. Administrator beliefs about virtual schooling will be addressed in follow-up phone interviews with a small sub-set of the group surveyed.

I am hopeful that you will participate in this study and help me present a national picture of the emerging world of K-12 virtual schooling. Please read the attached Study and Consent Summary document and then watch your email for a message coming soon with a direct link to the online survey.

Sincerely,

Rachel Brown
Study & Consent Summary

K-12 Virtual Schools and their Head Administrators: A National Study
(Human Subjects #0510E76747)

You are invited to be in a research study of K-12 virtual schools and their head administrators. You were selected as a possible participant because the online school or program you lead is listed on the one national list of K-12 virtual schools, the NACOL Online Learning Clearinghouse List (http://nacol.org). The head administrator of each of these schools and programs is being asked to participate in the study.

We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Rachel Brown, doctoral candidate in the Department of Educational Policy and Administration, College of Education and Human Development, University of Minnesota, Twin Cities.

Background Information

Online learning for K-12 students is expanding throughout the nation, providing more options for students to learn from a distance than ever before. While research about online learning classrooms has begun to emerge in the literature, there is surprisingly little research about school level issues or about the key players in this great wave of innovation and reform – the head administrators who are leading these virtual schools and programs.

The purpose of this research study is to get a national snapshot of K-12 virtual schools and learn about the profiles and beliefs of the schools’ head administrators.

The following research questions guide this study:

1. What are the key characteristics of virtual schools and programs available in the United States, in terms of type, purpose, target audience, curriculum (offerings, development, delivery models), and management structure?

2. What patterns / relationships exist among virtual school / program characteristics?

3. Who are the head administrators of virtual schools and programs?

4. What are virtual school / program head administrators’ beliefs regarding a) the purpose and potential of virtual schooling and b) virtual high school curriculum and instruction?
Procedures:

If you agree to be in this study, we would ask you to do the following things:

Complete a 30-question survey, which will be delivered online and should take about 15-20 minutes to complete. Survey questions are organized in the following categories: student enrollment, mission and purpose, curriculum, management, and head administrator personal and professional background.

A sub-set of those who respond to the survey will also be asked to participate in a phone interview to address administrator beliefs about virtual schooling. The interview would be conducted over the phone at a time convenient for participants, take no more than 60 minutes, and, with participant permission, be recorded to allow for transcription and analysis.

Risks and Benefits of being in the Study

The study has no risks to participation.

The benefit to participation is a copy of a summary report of the study, sent to you via email at the completion of the study that will provide a national picture of K-12 virtual schools and summary information about the administrators leading them.

Compensation:

You will not receive payment for participation.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and I and my advisors will have access to the records. Tape recordings of interviews will be made available to a professional transcriber for the purpose of transcription and will be erased three years after the completion of the study.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide
to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Rachel Brown. You may ask any questions you have now. If you have questions later, you are encouraged to contact the researcher or her thesis advisor using the contact information below:

Researcher
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Advisor
Dr. Karen Seashore
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If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher or her advisor, you are encouraged to contact the Research Subjects’ Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

Please keep a copy of this information to keep for your records.
Appendix D: Interview Guide

INTRODUCTION
1. Thank you: Thank you so much for agreeing to speak with me and for helping me with this research project.

2. Time check: Our conversation will take no longer than an hour, and probably will be less than that. Does this time still work for you?

3. Purpose: In my study, I am getting a snapshot of virtual schools and programs throughout the nation. The purpose of the research is to describe key characteristics of virtual schools and the people who lead them and to explore school leaders’ beliefs about virtual schooling.

4. Audio taping: To help me with my note taking, I would like to ask permission to record our conversation. The tape made will be kept confidential and in a safe place. And if at any time you want me to turn the recorder off, please let me know and I will do so right away. The only people who will have access to the transcripts will be my advisors, a professional transcriber, and me. Do I have permission to begin taping our discussion? Thank you.

5. Consent: Do you have any questions for me at this time about the study or the consent process? Would you confirm that you have given permission for me to tape this conversation [if participant has done so]?

6. Interview plan: I have questions in four main areas – about you and your role as a head administrator, about your virtual school, administrative issues you’ve encountered, and looking to the future of virtual schooling.

TOPICS AND QUESTIONS
About you and your role as head administrator
1. Background: Could you tell me a bit about how you got into online learning and into your current position as the head administrator of your virtual school/program?

2. Role: Would you briefly describe your current position and the work you do?

3. Other leaders: Who else provides management and leadership in your school/program?

About your virtual school or program ....
4. Audience: Who do you consider to be the target audience or population for your school/program? Why?
5. **Curriculum and instruction selection/development process**: How do you decide what curriculum or what courses to offer?

6. **Benefit to individuals**: What do you hope individual students gain from their participation in your virtual school? How is this different from students’ experiences in a face-to-face setting?

7. **Benefits to the community**: In what ways do you see your virtual school contributing to the larger community or communities it serves?

**Administrative issues …**

8. **Challenges and surprises**: What have been the biggest challenges or surprises you have dealt in your school as administrator of this online school?

9. **Comparison to F2F**: How is being a school administrator in a virtual school/program different from being one in a face-to-face setting?

**Looking to the future …**

10. **For your school**: Envisioning your school five years from now, what will be better or different than it is now?

11. **For the larger system**: Again looking to the future, what role do you see virtual schools playing within our nation’s system of high school education?

12. **For virtual school administrators**: And back to the issue of school leadership, what challenges and opportunities do you think lie ahead for administrators of virtual schools and programs?

**CLOSING**

1. **Other comments**: Is there anything else you would like to share with me about your school/program or your work in online learning?

2. **Follow-up**: After I look over the transcript of our conversation may I contact you if I have further questions?

3. **Thank you**: Thanks so much for participating in this interview. I really appreciate your help. If you have further questions for me, please contact me.
Appendix E: Interview Data Coding Key

1 Purpose

1.1 Focus on individual students
   1.1.1 Preparation for … civic, work, personal life
   1.1.2 Individualized learning
      1.1.2.1 Options, choices of courses (what everyone talks about)
      1.1.2.2 Instruction (surprising finding, focus on instructional model
                     emphasizing teacher-student interaction)

1.2 Equity agenda—expanding access to quality education
   1.2.1 Drop out population (pride about, emphasis on)
   1.2.2 Expanding target audience (surprise, all expanded from initial
      target audience)

1.3 Providing quality education (different models seemed to define differently)
   1.3.1 Correspondence model = maintaining solid I.S. tradition
   1.3.2 Private school model = providing alternative
   1.3.3 All others, including for-profit = reforming schools

2 Context

2.1 Culture of competition
   2.1.1 Solutions (reply to charge of B & M competition)
   2.1.2 Service (instruction) focus
   2.1.3 Concern about the “fly-by-nights”
   2.1.4 Impact of regulatory environment (centralize, standardize, funding)
   2.1.5 Marketing

2.2 Technology-ready kids (asking kids to “power down” to come to school)

2.3 Results focus—in terms of students, not schools (mastery learning)

3 Administrators

3.1 Pioneers with varied backgrounds
3.2 Focus on instruction leadership (though different opinions on best model)
3.3 “Prove the concept”—selling the idea; convincing of the quality
3.4 No hallway work—discipline
3.5 Regular administrative work
3.6 Professional development

4 Future
4.1 Envisioned growth ahead (current phase of expansion, disruption, over saturation, many entering the market)
   4.1.1 Models in flux
   4.1.2 Financial challenges

4.2 Eventual mainstream nature of OLL
   4.2.1 Seamless option within and outside of schools
   4.2.2 Components (content, platform, student services, instruction, PD)
   4.2.3 Connections to post-secondary
   4.2.4 Social connectivity

4.3 Administrator role to lead more change and development (“pioneer for life”)


**Appendix F: Additional Tables**

Table 1  
*Percentage and Number of Schools’ Grade Level Offerings by School Type (from Document Analysis)*

<table>
<thead>
<tr>
<th>School type</th>
<th>Elementary</th>
<th>Middle / Junior</th>
<th>Senior</th>
<th>Post-Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (n=12)</td>
<td>0% (0)</td>
<td>8.3% (1)</td>
<td>100% (12)</td>
<td>8.3% (1)</td>
</tr>
<tr>
<td>District or county (n=18)</td>
<td>16.7% (3)</td>
<td>22.2% (4)</td>
<td>100% (18)</td>
<td>11.1% (2)</td>
</tr>
<tr>
<td>Charter school (n=30)</td>
<td>80.0% (24)</td>
<td>90.0% (27)</td>
<td>56.7% (17)</td>
<td>10.0% (3)</td>
</tr>
<tr>
<td>Public school (n=12)</td>
<td>41.7% (5)</td>
<td>58.3% (7)</td>
<td>91.7% (11)</td>
<td>8.3% (1)</td>
</tr>
<tr>
<td>Private school (n=34)</td>
<td>38.2% (13)</td>
<td>61.8% (21)</td>
<td>100% (34)</td>
<td>9.1% (3)</td>
</tr>
<tr>
<td>University (n=12)</td>
<td>8.3% (1)</td>
<td>25.0% (3)</td>
<td>100% (12)</td>
<td>91.7% (11)</td>
</tr>
<tr>
<td>Other (n=5)</td>
<td>40.0% (2)</td>
<td>80.0% (4)</td>
<td>80% (4)</td>
<td>20% (1)</td>
</tr>
<tr>
<td>Total (n=123)</td>
<td>39.0% (48)</td>
<td>54.5% (67)</td>
<td>87.8% (108)</td>
<td>18% (22)</td>
</tr>
</tbody>
</table>