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College of Management and Technology

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Stephen Anane-Boakye

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Review Committee

Dr. Danielle Wright-Babb, Committee Chairperson, Management Faculty

Dr. Raghu Korrapati, Committee Member, Management Faculty

Dr. Nikunja Swain, University Reviewer, Management Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2016

Abstract

Comparative Analysis: Successes and Failures of St. Louis

Public Schools' Virtual Learning

by

Stephen Anane-Boakye

MA, Webster University, 2002

BS, Webster University, 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

May 2016

Abstract

The St. Louis School District (SLSD) provided its students with a virtual education program (VEP) but abandoned it following a cut in federal funding, omitting an alternative pathway for students to complete their education. The problem addressed in this study was the effect of technology and management's decision to discontinue the VEP. The purpose of this qualitative study was to determine management's role and the effect of the technology in discontinuing the VEP. Dewey's theory of education and Koskela and Howell's theory of management established the theoretical foundation for the study. A purposeful sampling selection approach was used to recruit 8 administrator and teacher participants who were knowledgeable about the VEP and who worked in their respective districts. An interview questionnaire was created and used to collect data. The data were processed and analyzed using the thematic analysis approach. The results revealed that technology was not a problem for the 3 school districts, but the SLSD did not prioritize the VEP in its budget. The results of this study might help other institutions keep their online program intact in the event a similar situation occurs. The implications for social change could be that securing a VEP could contribute in producing more well-educated citizens to work in higher-level jobs, drive business development, and contribute to community development in society.

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Dedication

I dedicate this to my parents, the late Opanin Kwaku Boakye and Maame Ama Abuyaah, for their unconditional love and support for me since the day I was born. I applaud them for their interest in education and for doing everything they could to make sure I had a fervent foundation in life on which to build my career. God bless them in Jesus's name forever and ever...AMEN.

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To my wife, Ewurakua, I appreciate your prayers, financial support, understanding, endurance, sharing in my anxieties, and celebrating every milestone I crossed throughout this journey. To my sons and daughters—you were my inspiration! I owe a debt of gratitude to my brothers who encouraged me on this journey.

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Chapter 1: Introduction to the Study

The term, *online learning*, is used to describe a range of educational programs and settings in the K-12 grade levels, including (a) distance learning courses, (b) stand-alone virtual schools, (c) Web portals that provide teachers and students with online tools and supplementary education materials (Spellings, Mesecar, & Garnette, 2008, p. 1). Online learning is a relatively new development in K-12 education, but is rapidly expanding in numbers of programs and participants. People all over the world are making use of online learning.

The St. Louis School District (SLSD) is a public school district located in the state of Missouri. In 2007, the SLSD established a virtual education program (VEP). However, due to significant statewide budget cuts in the middle of the 2009-10 academic year, the K-12 online learning landscape in Missouri changed dramatically, which caused a decline in online learning options for students. When the SLSD's VEP closed at the end of the 2009-10 academic year, the Missouri Virtual School Program (MoVip) opened, which gave some, but not all, students a place to go (Watson, Murin, Vashaw, Gemin, & Rapp, 2011, p. 28).

In this study, I determined the factors that led to the discontinuation of the SLSD's VEP, the effect technology had on the decision to discontinue the VEP, and what management could have done to retain the VEP. It was anticipated that the results of this research study would be used in an attempt to prevent other educational institutions from encountering similar problems. Similar VEPs in two other Missouri school districts—the Kearney School District (KSD) and the Rockwood School District (RSD)—were

researched, compared, and analyzed to determine the factors that led to the failure of the SLSD's VEP.

Background of the Study

According to Spellings et al. (2008), "online learning is a relatively new development in K-12 education, but is rapidly expanding in numbers of programs and participants" (p. 1). Online technologies can be used effectively to provide an individual the flexibility to conduct research, as well as reduce the amount of time needed to locate the required resource (Watkins & Corry, 2008, p. 156). Researchers are providing a theoretical foundation and some guidelines for instructional designers and teachers who are interested in developing VEPs that are effective and efficient in meeting the diverse learning needs of students (Anderson, 2003, p. 1).

Online learning continues to grow at a rapid pace. States with VEPs are reporting annual growth rates of 15% to 50%, yet many state policies lag woefully behind this rapid growth rate (Watson & Gemin, 2009, p. 3). According to a study by Williams (2015), online education is becoming commonplace; approximately 5.3 million U.S. students took at least one online course during the fall semester of 2013 (p. 1). Harvard (2015) explained that, "the advantages of online education can become the disadvantages if you are not the right candidate for online education" (p. 1), that is, if you are not a good manager of your time.

Yet, while online education is growing in popularity, myths and misconceptions abound. Educators can separate fact from fiction. For instance, Williams (2015) stated that "cheating is more common in online courses, but experts say that is not more likely

to happen with online courses than with traditional courses” (p. 2). According to Dr. Dani Babb, an online instructor and founder and CEO of The Babb Group (as cited in Williams, 2015),

There are websites that any student can use to have papers written for them. Since online professors have tools to help them spot plagiarism, in some ways we have more defenses against this than traditional education where a student hands in a paper. (p. 2)

Furthermore, evaluations of online learning often occur in the context of a politically-loaded debate about whether such programs are worth the investment, the amount of funding needed to run a high-quality program, whether students are provided with high-quality learning opportunities, and how to compare online learning with traditional approaches (Spellings et al., 2008, p. 2). Spellings et al. (2008) further added,

Some likely challenges faced by online learning program evaluators are:

- meeting the needs of multiple stakeholders;
- building on the existing knowledge base;
- evaluating multifaceted online resources;
- finding appropriate comparison groups;
- solving data collection problems;
- interpreting the impact of program maturity; and
- translating evaluation findings into action. (p. 6)

The most implicated policy is the way in which funding is linked to students.

Many states take the position that only students in a physical classroom can be counted in

the census (Watson & Gemin, 2009, p. 10). With online learning, students are not in a physical classroom and, therefore, are not counted in the census, resulting in a lack of funding for VEPs (Watson & Gemin, 2009, p. 13).

Simonson (2000) introduced the equivalency theory, which expressed the need to find strategies in VEPs equal to those used in the traditional classroom setting. Educators know there are many advantages to VEPs (e.g., learning the culture, traditions, perspectives, and aspirations of others), which can bring change through connectivity, and ultimately lead to collaboration. The equivalency theory has brought improvement to online learning because of its flexibility and equivalence to the traditional classroom (Simonson, p. 29). Online learning is generally more flexible than traditional schools. Students may start their courses at different points during the year and complete the courses at their own pace, depending on their circumstances and interests (Anderson, Annand, & Wark, 2005, p. 222).

In an effort to minimize and overcome the challenges of online learning that emerged from the conflicting priorities of new models of virtual education, researchers have provided social software known as *educational social networks*. The challenges of online learning run the gamut from affording maximum freedom for learners, including the ability to enroll at any time and to pace one's own learning process, to the creation of opportunities to work cooperatively with other students (Anderson, Augenblick, DeCesare, & Conrad, 2006, p. 7). Furthermore, researchers Dalsgaard and Paulsen (2009) elevated the potential of social networking in cooperative online learning, stating that "social networking does not necessarily involve communication, dialogue, or

collaboration, and stressing transparency as a unique feature of social networking services that actually can be an effective support for cooperative learning” (p. 1). The combination of transparency and collaboration simplify the sharing of viable, meaningful information because of the assumed authenticity of the shared information. There are more tools that support cooperative learning in a virtual environment, such as cooperative gating and cooperative learner information profiling. The introduction of more tools is making the online learning world familiar and effective (Paulsen, 2005, p. 1).

The focus of this research study was on the factors that caused the SLSD to discontinue its VEP following a cut in federal funding and what steps could have been taken to continue the VEP. To determine the reason for the discontinuation of the VEP, I explored the following factors:

- The interest of the SLSD in the VEP.
- The effectiveness of the management of the VEP.
- The success and challenges of the VEP.
- Faculty and management interaction regarding the VEP.
- Stakeholders’ participation in the VEP.
- The demographic effects of terminating the VEP.

There is a lack of information regarding the reason why the VEP could not be sustained following a cut in federal funding—this is the gap that was filled by this research study.

Problem Statement

The SLSD is a large urban school district in Missouri and is comparable to other urban school districts where virtual education has become a vital segment of the services

provided (Chatman, 2011). During the economic recession, the SLSD's VEP continued to grow in the number of programs and participants; however, SLSD's VEP was discontinued due to a cut in federal funding. The negative effect of the VEP's discontinuation is that the students lost the opportunity to have a pathway to complete their education, but due to ignorance and misprioritizing the district's responsibilities, the SLSD lost its VEP. If this is not addressed, it will affect the chances of people enrolling at a distance school because they cannot afford to travel back and forth, and will affect students who are seeking the opportunities for flexibility and cost efficiency that online studies offer. The findings of this research study may help other educational institutions to be able to keep their online program intact in the event a similar situation occurs.

Purpose of the Study

The purpose of this qualitative case study was to examine the reason the SLSD discontinued its VEP following a cut in federal funding, with a focus on determining the factors involved and what could have been done to sustain the program. Participants were made up of stakeholders from the three school districts under study: the SLSD, the KSD, and the RSD. The selected participants had the option to choose how they wanted their interview to be conducted (i.e., face-to-face or via email); all the participants chose the email option. The main concept in this study was to focus on such factors as management decisions, technology, the performance of the SLSD's VEP, and the lack of back-up funds that may have been a factor in the SLSD closing its VEP after the cut in federal funding. The results will help determine to what extent any of these factors influenced the closure of SLSD'S VEP.

Research Questions

I used the following research questions (RQ) to provide a framework for data collection and a foundation for future research:

- RQ1: What could the SLSD have done to sustain its successful VEP when it encountered financial difficulties due to a cut in federal funding?
- RQ2: What factors or conditions are necessary to successfully maintain an online learning program?
- RQ3: What did the management do to sustain its VEP?
- RQ4: What did the management do to terminate its VEP?
- RQ5: What influenced the decision of the SLSD to terminate its VEP?
- RQ6: What role did the effect of technology—in terms of cost, acceptance, comfort, technical problems, etc.—have on the SLSD’s decision to sustain or terminate its VEP after a cut in federal funding?
- RQ7: What recommendations can participants offer based on lessons learned from the closure of the SLSD’s VEP?

Theoretical Foundation

For my study, I focused on Dewey’s progressive ideas (as cited in Borade, 2012), with an emphasis on his education theory, and the concepts of Koskela and Howell’s (2002) theory of project management. Under Dewey’s education theory, special attention was given to his ideas and the implementation of those ideas from *Experience and Education* and *Democracy and Education*. In *Experience and Education*, Dewey believed that children or students should be able to understand actual experiences and be a part of

hands-on experiential education (Borade, 2012, p. 1). Dewey believed that people had to be taught by practice rather than simply by theory. In *Democracy and Education*, Dewey strongly advocated for the use of social reconstruction to adopt democracy beyond voting rights and well-defined public opinion (Borade, 2012, p. 1). Therefore, societies must employ fairness and justice in order to promote socioeconomic growth.

Like the concepts of Dewey's education theory, online learning was designed to give people the opportunity to learn, regardless of their distance from the physical learning institution (Northwest Educational Technology Consortium [NETC], 2005, p. 1). Instructors simply need to guide the students and provide the required resources, which initiates the concept of exercising independent learning and doing it in a practical manner (NETC, 2005, p. 1). The independent approach of online learning equates with Dewey's concept of experiential education and how it relates to real-life, practical experiences in that each has the goal of learning by practice (Borade, 2012, p. 1).

Online learning has become effective because it allows students to learn independently, which agrees with Dewey's idea of guiding children to learn about what they like doing best. Dewey's *Democracy and Education* also expressed the idea of freedom of education (Borade, 2012, p. 1). It was quite possible that for some students, because of personal financial constraints, the SLSD's VEP was their only option for an education. Dewey's progressive movement and related concepts indicated that online learning is oriented more toward experience than the traditional classroom and, therefore, gives students more practical experience in their field of study.

Dewey's education theory has been applied as the indirect foundation of online studies (Borade, 2012, p. 1). Researchers believe that children remember best the free play they created because it had meaning for them (Borade, 2012, p. 1). Educators have found that such play will often hold a child's interest far longer than an activity organized and controlled by an adult (Tassoni & Hucker, 2000, p. 2). This idea validates the viability of online learning in that a student is allowed to practice learning independently, which helps the student to better apply that which is being learned. With online learning, students have the freedom to learn in the comfort of their own environment and to choose what they want to learn. Dewey's education theory related to this study in a way that will not only let people know about the viability of online learning, but also promote a sense of awareness of those things that need to be considered in order to determine why the cost of the VEP could not be included in the SLSD's budget (Borade, 2012, pp. 1–2).

Koskela and Howell (2002) set forth theories of project management. The theory of project management involved viewing tasks and operations as a transformation process, which caused change and yielded outputs. Ask.com (2015) stated that:

A project manager is the person who is tasked with leading a project from inception to completion. He is the lead point of contact for a project and is responsible for planning, coordinating, and implementing projects according to the specified requirements and timelines. Moreover, project managers are essential for projects in industries like construction, aerospace, computer technology, and software development. (p. 1)

Because they are the primary point of communication between the production team and the client, project managers tend to be skilled and knowledgeable in the industry expressed (Ask.com, 2015, p. 1). Although they do not personally implement specific product requirements, project managers are the people responsible for accomplishing project goals by defining attainable objectives, creating the project schedule and responsibilities, and managing all aspects of scope, time, and cost. In other words, a required specification is input, the activities begin, and the output of the activities becomes the end result (Ask.com, 2015, p. 2).

Koskela and Howell's (2002) theory of project management has three components: (a) management as planning and organizing, (b) the dispatching model, and (c) the thermostat model. According to the theory, when planning and organizing, management receives all the information about a process, creates a detailed sequence of actions with time and resources assigned, then gives the plan to the operational level, and ensures that the environment contributed to purposeful acting (Koskela & Howell, 2002, p. 2). In the dispatching model, management issues an order that traveled down the chain of command for someone to begin a task and expects a worker to start working on the task immediately without hesitation or problems. With the thermostat model, control is initiated when the anticipated outcome was not emerging as anticipated, and the project had to be adjusted until the outcome reconciled with the plan. That is, the desired project was designed upfront, the temperament of the project was gauged occasionally, and if the required temperament was not reached, the process was corrected until the required temperament was reached (Koskela & Howell, 2002, p. 2).

Nature of the Study

After carefully examining the qualitative and the quantitative methods, I determined that a qualitative approach was best for this research study due to the quality of information required to find a solution to the problem. The qualitative approach was a means for exploring and understanding individuals or groups ascribable to social or human problems (Creswell, 2009, p. 4), and gave me the opportunity to acquire the necessary information from people who are knowledgeable about the case under study. According to Key (1997), “*qualitative research* is a generic term for investigative methodologies described as ethnographic, naturalistic, anthropological, field, or participant observer research, and it emphasizes the importance of looking at variables in the natural setting in which they are found” (p. 1). The Qualitative Research Consultant Association [QRCA] (2015) stated that:

Qualitative research is designed to reveal a target audience’s range of behavior and the perceptions that drive it with reference to specific topics or issues. It uses in-depth studies of small groups of people to guide and support the construction of hypotheses. The results of qualitative research are descriptive rather than predictive. (p. 1)

Interaction between variables is also important to the qualitative approach where detailed data is gathered through open-ended questions that provide direct responses. Qualitative research differs from quantitative research in that the researcher attempts to gather data by objective methods to provide information about relations, comparisons,

and predictions, and attempts to remove the investigator from the investigation (Key, 1997, p. 1). The QRCA (2015) further stated that:

Qualitative research methods originated in the social and behavioral sciences: sociology, anthropology, and psychology. Today, qualitative methods in the field of marketing research include in-depth interviews with individuals; group discussions (from 2 to 10 participants is typical); diary and journal exercises; and in-context observations. Sessions may be conducted in person, by telephone, via videoconferencing, and via the Internet. (p. 1)

It has been expressed that qualitative research is flexible and does not introduce treatments or manipulate variables or impose the researcher's operational definitions of variables on the participants, but rather its meaning emerges from participants and the procedures can be adjusted as the research progresses (Public Policy Administration [PPA] 696; 2015; p. 1). The foregoing indicates that the end results depend largely on the participant. PPA 696 further explained that "qualitative research aims to get a better understanding through firsthand experience, truthful reporting, and quotations of actual conversations, and to understand how the participants derive meaning from their surroundings, and how their meaning influences their behavior" (p. 1). This is an indication that direct information is taken from the participants with confidence.

I also examined various qualitative approaches and decided that the case study approach was the best approach to use in conducting this qualitative research study. The case study approach provided a more in-depth understanding of what was needed to draw a conclusion (Creswell, 2007, p. 78). The focus of a case study is the development of an

in-depth description and analysis of a case, and the design is practiced most commonly in the areas of medicine, political science, law, and psychology (Creswell, 2007, p. 78). A case study is associated with other studies of events, programs, and activities, and allows the collection of information through interviews, observations, documents, and artifacts. An analysis is done through the description of the case (Creswell, 2007, p. 79).

Due to the nature of the research, participants were interviewed using open-ended questions, which allowed me to collect the data and analyze it without bias to draw the necessary inferences. A qualitative approach was employed for this study, which allowed me to send the Interview Questionnaire (Appendix A) via email to the participants and collect data based on their responses. The qualitative method permits this type of approach and it was useful in describing complex situations and phenomena. Using the qualitative method allowed me to study dynamic processes (i.e., documenting sequential patterns and change).

For qualitative research, data are typically collected in a natural setting, which was particularly helpful to this research study for the acquisition of firsthand information from the participants. The qualitative research provides individuals with case information. The qualitative approach has some weaknesses, however. For example, the data collected might be too specific and not applicable to other people or other settings (i.e., might be unique to participants in this study) and might have lower credibility with some program administrators and commissioners. As a result, it was difficult to make quantitative predictions. However, it would have been more difficult to test hypotheses and theories with a large participant pool. In general, a qualitative approach requires

more time for data collection than does a quantitative approach. Data analysis often is time consuming, and results are influenced more easily by personal bias and idiosyncrasies.

Definitions

Throughout the study, the following words appear and are defined as follows:

Case study: A case study is a process or record of research in which detailed consideration is given to the development of a particular person, group, or situation over a period of time (Creswell, 2007, p. 78).

Cooperative gating (COG): COG is a technique that denies students access to information before they have completed prerequisite assignments (Paulsen, 2005, p. 1).

Cooperative learner information profiling (CLIP): CLIP evolved from effective cooperative student catalogues, and is a supporting tool in cooperative learning in the virtual education environment (Paulsen, 2005, p. 1).

Critical path activities: Activities that must be started and completed on time to avoid an ultimate delay in the entire project (Henderson, 2010, pp. 4–5).

Digital divide: A digital divide is caused by low computer literacy rates and lack of access to technology among some learner populations (Koller, Harvey, & Magnotta, 2006, p. 8).

Dispatching model: A dispatching model is when management issued an order that traveled down the chain of command for someone to begin a task and expected a worker to start working on the task immediately without hesitation or problems (Koskela & Howell, 2002, p. 2).

Eisegesis: Eisegesis is the interpretation of a word or passage that expresses the reader's own ideas (Farlex, 2012, p. 1).

Ethnographic: Ethnographic is a branch of anthropology dealing with the scientific description of individual cultures (Key, 1997, p. 1).

Firewall: A firewall is implemented to restrict access to an organization's network and Intranet from discourteous communications over the net by spammers (Long & Long, 2001, p. 1249).

Thermostat model: The thermostat model is where control is initiated when the anticipated outcome was not emerging as anticipated, and the project had to be adjusted until the outcome reconciled with the plan (Koskela & Howell, 2002, p. 2).

Traditional project management: In the project management realm, traditional project management is the approach by which the project manager tries to develop a plan for the project before the project is executed (Henderson, 2010, p. 3).

Assumptions

This study was based on a few basic assumptions. For the first assumption, the study assumed that the cut in federal funding was the sole factor in the SLSD's decision to terminate its VEP. That meant the study assumed that the SLSD was fully dependent on the federal funding for most or all of its VEP. Therefore, when the cut in the federal funding occurred, their program was affected and could no longer be run, and was terminated.

The second assumption was that management failed to take the necessary steps to ensure the success of the SLSD's VEP. This meant that the study assumed that

management lacked knowledge about how to actually run a VEP or that management did not take the program seriously and, perhaps, even ignored some proactive measures that could have helped the VEP to be sustained. It could also be that the management failed to follow the necessary protocols that they should have applied when running a VEP.

The third assumption of my study was that the technology involved in the VEP affected the SLSD's decision to discontinue it. This meant that the study assumed that the involvement of technology in the VEP could have led to the termination of the program after the cut in federal funding. It could also be that cost of technology was high enough that the program managers could not handle the program once the cut in federal funding occurred.

Scope and Delimitations

Delimitations are those characteristics selected by the researcher to define the boundaries of the study (Dusick, 2011, p. 1). This research was focused on the reason the SLSD discontinued its VEP following a cut in federal funding, with the main focus being to determine the factors involved and what could have been done to sustain the program. The SLSD's VEP was succeeding when it was terminated.

For this research study, I did not select a large sample size that would require me to handle huge amounts of data, nor did I take too small of a sample size that would not generate viable results. Even though my initial desire was to get a large sample size that would ensure good results, I sought to select eight participants whom I believed would generate a volume of data that I could process, analyze, and infer about the research with minimal struggle and in the given timeframe. Moreover, because of the nature of the

study, I selected participants who were knowledgeable regarding the problem of the study, were willing to participate, and were ready to be fair and truthful with their forthcoming information.

I did not review literature about the current growth of online education because that data would not help solve the problem under study. In addition, I did not review any literature that was not about management, or how to rescue a project, or did not discuss online education and a child's right to education, like Dewey's theory expresses. I decided to use open-ended interview questions because they tend to get more expressive answers. I notified the participants that if they were found doing anything contrary to the rules and regulations that guided the research, they would be released from the study. The delimitation in this study was the comparison of the SLSD's VEP to the successful VEPs of the KSD and the RSD. Any person found to have contributed to the failure of the SLSD's VEP, either directly or indirectly, would not be identified.

Limitations

Limitations are those characteristics of design or methodology that impacted or influenced the application or interpretation of the results of the study (Labaree, 2013, p. 1). The limitations in this study were in the area of the research over which there was no control, such as the inability to obtain the required information from a participant. Another limitation was full or partial bias on the part of a participant who, perhaps, was not in favor of online learning and might exaggerate or otherwise taint the authenticity of this research study. Bias in research is anything that produced a systematic, but unexpected, variation in a research finding that validated that the goal in research was to

understand the true relationship between the predictor and the outcome (Burge, 2012, p. 1). Participants were advised that truthfulness and quality were important to this research study; therefore, their responses must be factual. If there was any concern about the data received, it would be excluded and I would address the reason for the exclusion with the participant.

Some limitations were in the area of access. I targeted three other school districts that had a population size and other similar characteristics to that of the SLSD that I wanted to use in this research study, but was denied access because I did not work or live in the specific district. Just as finding school districts willing to participate in the research study was difficult, so was finding the actual participants. I would have preferred to use a much larger sample size than was used in the research; however, it was extremely difficult to get people to participate in this research study, let alone trying to find specific participants who had a deep understanding and knowledge in the area of online studies. It took me a long time to get the eight participants I used in this study.

Time was also a factor in my research. I was affected by time constraints due to the nature of my research. It was time consuming because of the nature of the topic and the methodology. I also had to deal with self-reported data, which was limited by the fact that it rarely can be independently verified. In other words, I had to take what people said—whether in interviews, focus groups, or on questionnaires—at face value. I had no control over their responses. There is very little literature about my research, and this limitation serves as an important opportunity to describe the need for further research.

Significance of the Study

This research study was important to the SLSD and other educational institutions in that it revealed what must be done should a similar situation ever arise again. The end result would be an opportunity for people to continue their education regardless of their distance from the physical location of an educational institution and would increase enrollment. Aspillera (2010) stated that “students may be able to save money by not having to physically attend classes. Online courses may help individuals cut down or eliminate costs of transportation, babysitting, and other expenses incurred by attending classes in a traditional setting” (p. 1). In addition to saving money, Aspillera further stated:

No more expensive textbooks: Some web-based classes may not require physical textbooks, as reading materials may be available either through the school’s own library or their partnerships with e-libraries and other digital publishers.

E-textbooks might offer substantial savings for students, adding up to hundreds of dollars a year. (p. 1)

In view of the foregoing, it is clear that it can be economically practicable for students to enroll in online educational programs. The potential to save money is due to the way online education programs are run. Teachers and students do not have to physically be in the classroom, which enables students to have the flexibility to attend class when it is convenient for them. At the same time, students can save a lot of money on transportation and parking costs and by using electronic books. The end results also

would serve as a proactive measure to prevent other institutions from encountering the difficulties that the SLSD experienced, which ultimately led to the closure of its VEP.

Significance to Practice

This study has the potential to make an impact in the area of problem solving, if an occurrence similar to the cut in federal funding that was encountered by the SLSD should ever happen again. The outcome practically can be applied to any similar institution as a guide to running a VEP and will help other institutions to know what to do if they encounter a similar situation while running a VEP. By so doing, this research will serve as a future guide in helping to prevent unexpected closures of VEPs that are so beneficial to K-12 students. The study will ensure that adult online-learning students can benefit from the flexibility of a VEPs schedule. Aspillera (2010) explained that:

Students can access their course at any time, from anywhere they can log on, in most cases. This means that parents, working students, and professionals on the move have the option of attending classes no matter their work schedule. Students only need a computer and Internet access to take online classes. Students will also gain the opportunity to control their time. (p. 1)

It is clear that the flexibility in schedules allow students to gain control of their daily activities. Not only do the students gain control of their daily activities, but they also save time they would spend traveling to a brick-and-mortar school, which can be significant depending on where a student lives in relation to the location of the school. Online education programs can be beneficial to students in savings of time and monetary

amounts. Just as students gain flexibility with online classes, they also gain control of their own time, because they can choose their own best time to study and do class work.

Significance to Theory

The study brings meaning to the two theories guiding this research—Dewey’s theory of education (as cited in Borade, 2012) and Koskela and Howell’s (2002) theory of project management. The results of the study can be used to advocate for children’s rights to an education. Children cannot speak for themselves—someone has to speak for them. The study also brings meaning to the project recovery successes and failures as a matter of the effectiveness of the actions taken to recover the project. To do that, the organization has to meet to put in a corrective method and then enforce it. This is what this study has revealed thus far. The majority of the stakeholders should have been on the same page and implemented a corrective measure, rather than just a few at the top making the ultimate decision to abandon a progressive VEP for the K-12 students in the SLSD. This brings new meaning to how decision making has to be carried out in favor of the people for whom the decision is being made, and not for the interest of the decision makers, so that all of the people can benefit from online learning.

Gainful variables like opportunities for convenience, cost effectiveness, and student benefits are some of the factors that have contributed to online growth and advocates are empowered by the gains to improve the program with their acquired experiences (Aspillera, 2012, p. 1). The foregoing is an indication that online education can be as cost effective as some institutions claim it to be, but it can be contained and controlled depending on the planning and strategies put in place when implementing an

online education program. Looking for quality systems at a cheaper or reasonable cost might not be easy, but project managers must take the time and trouble to shop around to get the best deal.

The interest of the students should always be considered because the institutions are made for the students—not the staff. Dewey’s theory of education (as cited in Borade, 2012) advocates for children’s right to an education. With this in mind, every decision made about an institution should be made with the students’ best interests in mind. Koskela and Howell’s (2002) theory of management also expressed the need for proactive strategies to rescue projects. The theory explained methodologies of managing projects which was very helpful in this research to find out what was not done or fulfilled that led to the closure of the SLSD’s VEP.

Significance to Social Change

In the course of investigating the impact of this research on society, Tanabe (2013) stated that:

Social change (or social development) is a general term which refers to change in the nature, the social institutions, the social behavior or the social relations of a society, community of people, or other social structures, any event or action that affects a group of individuals that have shared values or characteristics, acts of advocacy for the cause of changing society in a normative way. Social change is a topic in sociology and social work, but also involves political science, economics, history, anthropology, and many other social sciences. Among many forms of

creating social change are direct action, protesting, advocacy, community organizing, community practice, revolution, and political activism. (p. 1)

The social change implications for this study are that the lessons learned from the findings of the problems that led to the ultimate closure of the SLSD's VEP will serve as a proactive guide to other institutions who are running VEPs and will ensure that VEPs become an avenue for continued learning for students. The continued growth of online learning programs means that people are striving to take advantage of the benefits of online education. Therefore, there is the need to use any available resources or approaches to prevent what happened to the SLDS's VEP.

In addition, this study has the potential to prevent a premature discontinuance of a VEP. The online programs help people to learn from a distance and take courses that are in line with their own interests and choices. VEPs are adaptive programs and help people who, for various reasons, cannot be in a physical classroom. VEPs are also cost-effective programs for people in that it saves them money from traveling back and forth to a brick-and-mortar classroom, and people can attend classes from any location, which saves them time. Except for the time constraints provided by the course instructor, students can attend VEP classes at a time that fits into their schedule. VEPs also provide interactions with other students who might not have the courage and confidence to engage in social interaction at a brick-and-mortar school. All of these aforementioned facts elevate the socioeconomic level of the students. Moreover, students are able to earn their desired degree and get a good job, which contributes to the building of the economy of the society.

A VEP for K-12 is extremely important because higher institutions are increasingly using online education. The students who took classes in high school through a VEP will not have problems adjusting and adapting to the use of VEPs in college. It takes time for people to adjust to the system; however, once they become accustomed to the online system, they take their courses and graduate. It is not easy to switch from one virtual school to another and can be downright discouraging. To ensure that students enjoy their virtual school, every possible measure should be taken to maintain and improve the system. Closing a VEP will only discourage students who will then have to find another VEP to attend.

The outcome of this study cannot prevent an incident similar to that of the SLSD from happening again. However, it can serve as a guide if a school finds itself in a situation similar to that of the SLSD. The benefits to the students are important and must be protected—that is what this study is all about.

Summary and Transition

Online learning was a relatively new development in K-12 education, but has rapidly expanded in the numbers of programs and participants. The SLSD's VEP was terminated due to significant statewide budget cuts in the middle of the 2009-10 academic year. When the VEP closed, the MoVip opened.

The purpose of this research study was to examine why the SLSD discontinued its VEP following a cut in federal funding, and what could have been done to sustain the program. Dewey's education theory (as cited in Borade, 2012) and Koskela and Howell's (2002) management theory guided the study. After carefully examining the qualitative

and the quantitative methods, I determined that a qualitative case study approach was best for this research study due to the quality of information required to find a solution to the problem. The study assumed that the cut in federal funding was the sole factor in the SLSD's decision to terminate its flourishing VEP. This research study was important to the SLSD and other educational institutions in that it revealed what must be done should a similar situation arise.

The SLSD was studied and compared to similar successful institutions. The list of the aforementioned literature were put in order and elaborated accordingly to explain what they stood for as a literature in Chapter 2. An in-depth literature review, which presents an overview of the failure of a VEP, including the cost, funding, challenges, management, and maintenance of such a program, are discussed in Chapter 2.

Chapter 2: Literature Review

The SLSD is a large urban school district in Missouri and is comparable to other urban school districts where virtual education has become a vital segment of the services provided (Chatman, 2011). During the economic recession, the SLSD's VEP continued to grow in the number of programs and participants; however, SLSD's VEP was discontinued due to a cut in federal funding. The purpose of this research study was to examine the reason the SLSD discontinued its VEP following a cut in federal funding, with a focus on determining the factors involved and what could have been done to sustain the program. To gain a better understanding of the abandonment of the SLSD's VEP following a cut in federal funding, I examined the online learning world, as described by the NETC (2005), and reviewed the strategies and challenges of operating a VEP, as researched by Spellings et al. (2008).

Spellings et al. (2008) expressed the need to measure the success of online learning by comparing it to the traditional classroom setting and explained that online learning programs are often on the cutting edge of education reform and, like any new technology, may require a period of adaptation (p. 1). This literature review will present an overview of the failure of an online learning program, and the cost, funding, challenges, management, and maintenance of such a program. A VEP provides students with an opportunity to attend classes away from a brick-and-mortar facility, operates as a full- or part-time classroom and, occasionally, is supplementary to traditional classrooms. There was a lack of information concerning the maintenance of VEPs in the wake of federal funding cuts and this study aimed to address that gap in the literature.

Literature Search Strategy

I used many different search engines to secure viable information for this research study. I used the Academic Search Complete database and Google Search most of the time. A number of other databases were also searched in an effort to locate the scholarly material used in my review of the literature. Walden University's library was the primary source of material; however, I also used Webster University's library to locate other materials. My searches involved such key words as *management, project management, technology, virtual schools and failure analysis, online education, the effect of technology on running a virtual school, the costs involved in running a virtual school, and the managerial aspect of running a virtual school*. Some of the key phrases I searched for were *the successes and failures of online education, the benefit of online education, the strength and the weaknesses of online education, and the effect of the Internet in the online education world*. I also used the Google Scholar search engine, particularly when articles pertaining to the current online education context were difficult to locate. In an effort to keep track of the current developments and to prepare for the findings in the literature review, I once used the Washington University library to obtain some information that I was unable to obtain elsewhere. It was extremely difficult to locate information about surviving the termination of an online program under any circumstance. There was a lack of information about online education in general because educators still consider the online education platform as new. Not much research has been done on the numerous facets of online education, which made it more difficult to obtain the viable information needed for this study. As a result, I resorted to deriving

information from books, scholarly journals, technical and research reports published by government and nongovernmental agencies, newspapers, archival documents, articles, and other works that had been submitted for publication. When it became difficult to secure certain information and I did not know where to find it, I contacted librarians in the aforementioned libraries either by email or in person.

Theoretical Foundation

The theoretical foundations in a dissertation normally guide a student's research, while also determining what variables need to be measured, and what statistical correlations and relationships should be looked for (Editorial Veramar, 2012). This indicates that the type of theory chosen to guide the research will have an effect on the research. Editorial Veramar (2012) stated that:

Basically, the theory is what will take the researcher from the beginning of their PhD dissertation project all the way to its conclusion. Because of this, it is critical that the theoretical foundation of each project be clear and logical. Bad theory will equate to a bad project—and likely a bad grade, or worse, failure to complete the program and graduate. (p. 1)

In this study, I focused on Dewey's progressive ideas (as cited in Borade, 2012), with an emphasis on his education theory, and the concepts of Koskela and Howell's (2002) theory of project management. Under Dewey's education theory, special attention was given to his ideas and their implementation in *Experience and Education* and *Democracy and Education*. In *Experience and Education*, Dewey believed that children or students should be able to understand actual experiences and be a part of hands-on

experiential education (Borade, 2012, p. 1). Dewey also believed that people had to be taught by practice rather than simply by theory. In *Democracy and Education*, Dewey strongly advocated for the use of social reconstruction to adopt democracy beyond voting rights and well-defined public opinion (Borade, 2012, p. 1). Therefore, societies must employ fairness and justice in order to promote socioeconomic growth.

Like the concepts of Dewey's education theory, online learning was designed to give people the opportunity to learn, regardless of their distance from the physical learning institution (NETC, 2005, p. 1). Instructors simply need to guide the students and provide the required resources, which initiates the concept of exercising independent learning, and doing it in a practical manner (NETC, 2005, p. 1). The independent approach of online learning equates with Dewey's concept of experiential education and how it relates to real-life, practical experiences in that each has the goal of learning by practice (Borade, 2012, p. 1). Online learning has become effective because it allows students to learn independently, which agrees with Dewey's idea of guiding children to learn about what they like doing best. Dewey's *Democracy and Education* also expressed the idea of freedom of education (Borade, 2012, p. 1). It was quite possible that for some students, because of personal financial constraints, the SLSD's VEP was their only option for an education.

Dewey's progressive movement and related concepts indicated that online learning is more oriented toward experience than the traditional classroom and, therefore, gives students more practical experience in their field of study. Dewey's education theory has been applied as the indirect foundation of online studies (Borade, 2012, p. 1).

Educators believe that children remember best the free play they created because it had meaning for them and have found that such play often will hold a child's interest far longer than an activity organized and controlled by an adult (Tassoni & Hucker, 2000, p. 2). This validates the viability of online learning in that a student is allowed to practice learning independently, and helps the student to better apply that which is being learned. With online learning, students have the freedom to learn in the comfort of their own environment, and to choose what they want to learn. Dewey's education theory related to this study in a way that not only will let people know about the viability of online learning, but also will promote a sense of awareness of those things that need to be considered in order to determine why the cost of the VEP could not be included in the SLSD's budget (Borade, 2012, pp. 1–2).

Koskela and Howell (2002) created theories of project management. The theory of project management served as a transformation process by viewing task and operations that resulted in change that brings an output. That means, there was a required specification as input, then the activities were started, and the end results was determined as the output of the activities (Koskela & Howell, 2002, p. 2). There are three components in Koskela and Howell's theory of management: (a) management as planning and organizing, (b) the dispatching model, and (c) the thermostat model. The management receives all of the information about a process when planning and organizing and then creates a detailed order of actions with time and resources assigned. The plan is then given to the operational level, making sure that the environment purposefully contributed to the action (Koskela & Howell, p. 2). In the dispatching model

rather, the management issues an order that initiates a staff to begin a task. This order goes down to a chain of command that will eventually get someone to start the work without further questions. With the thermostat model, control was prompted when the needed outcome was not coming up as anticipated and the job had to be tuned until the outcome met with the plan. That is, the expectancy was designed ahead, the improvement of the project was measured periodically and, if the required temperament was not met, the process was corrected until the expected temperament was acquired (Koskela & Howell, p. 2).

The foregoing theories could be a helpful tool in running institutions with online learning programs, such as the SLSD's VEP that was terminated due to cut in federal funding. If applied diligently, the protocols in managing that were outlined could help administration and management to know what to do at any given time in any situation. The managing steps also would help management to plan ahead by allowing them to see things that are likely to happen in future. Looking ahead would allow management to be proactive so that institutions are not taken by surprise like what happened to the SLSD in the course of running a viable and successful VEP. The management theory and the project theory come together to serve as a guide to running a successful VEP and, if implemented, would be the beacon of light in running VEPs going forward.

Literature Review

This is an exhaustive review of current literature that includes the information regarding the key concepts of the study. The reviewed literature includes the concepts of online education, strategies for managing an online learning program, and project

management skills in handling a project. The collected literatures have been reviewed as follows:

Online Essentials

The literature reviewed was an assessment of courses used in VEPs, that set forth some of the implications of online instruction for learners, and assessed how to determine the quality of online courses. Also addressed was how an online environment accommodated students with special needs. VEPs use the Internet to conduct education from a distance, usually in the form of instructional units or courses (NETC, 2005). The teaching principles and strategies of VEPs were based on the same instructional design principles used in actual classrooms; the only difference being that the teacher and the student were in different physical locations and, perhaps, on different time schedules. Primarily, interaction between students and teachers was through the use of email, websites, and chat rooms, and usually involved special software for presentations, discussions, testing, assignments, resources, records, etc. The student took greater responsibility for maintaining focus, communicating with fellow students and teachers, and making timely progress.

Many public school districts offer VEPs; however, they also are being offered through many private schools, charter schools and, increasingly, through special statewide Internet academies (NETC, 2005). Most of these educational opportunities are for secondary school courses, with some being offered at no cost to residents in certain districts, while others require a tuition fee. In addition, many organizations offered

supplementary educational tools (e.g., virtual field trips or class visits), which usually were scheduled by a teacher to coincide with classroom lesson plans (NETC, 2005).

Evaluating Challenges and Strategies

The topic of how to meet the needs of multiple stakeholders was explored in a study by Spellings et al. (2008), who found the best way to meet this need was to be proactive. Spellings et al. posited that under normal circumstances, evaluators frequently begin by reviewing available research literature. Evaluators may search for a conceptual framework among similar studies or for existing data collection tools that can be borrowed or adapted (e.g., surveys and rubrics) (Spellings et al., 2008, p. 12). Yet, compared to many other topics in K-12 education, the body of literature on K-12 online learning is relatively new and limited (Spellings et al., 2008, p. 12).

According to Spellings et al. (2008), the quality standards of the Southern Regional Education Board (SREB) and the International Association for K-12 Online Learning (iNACOL) provided a basic framework for determining the quality of online courses and teachers. The SREB and iNACOL performed several other studies that evaluators could use to assess the quality of a VEP, with the caution that what works well for one program might not work well for another (Spellings et al., 2008). Spellings et al. (2008) also addressed the task of evaluating multifaceted online resources that could make a difference for evaluators in gauging the effectiveness of a program. However, good evaluators—especially those using multiple, complementary research methods—could identify the circumstances under which a program or resource was likely to succeed or fail, and could generate useful recommendations for strengthening weak

points (Spellings et al., 2008, p. 20). Spellings et al. went on to research appropriate comparison groups. According to the study, when evaluators had questions about the impact of a VEP student achievement, their best strategy for obtaining answers to those questions often was achieved by using an experimental design (e.g., a randomized controlled trial or a quasi-experimental design) that required matched comparison groups (p. 26). These two methods were the most widely-accepted methods for determining the effectiveness of a program (Spellings et al., 2008, p. 27).

There were several important measures to be followed by program leaders who sought an evaluation that would compare the performance of online students to traditional students Spellings et al. (2008). The program leader must work with an evaluator to ensure the comparisons were appropriate, and then articulate the purpose of the comparison. Another measure was solving data collection problems. According to the study, evaluators of any type of program frequently faced resistance to data collection efforts; however, program leaders and evaluators could take proactive steps to avoid and/or address data collection problems (Spellings et al., 2008, pp. 33–34). To ensure the cooperation of study participants, and to boost data collection rates, a proper amount of time should be planned for program leaders to communicate with students participating in evaluation studies by explaining the goals and how the evaluation can benefit them. In addition, program leaders should plan to offer incentives to data collectors and study participants (Spellings et al., 2008, p. 34).

Spellings et al. (2008) also demonstrated the interpretation of the impact of program maturity. A lack of program maturity was not a reason to forego evaluation. On

the contrary, evaluation could be extremely useful in the early phases of program development. Before a program is designed, evaluators could conduct needs assessments to determine how the target population could best be served (Spellings et al., 2008, p. 43).

Another facet of the study by Spellings et al. (2008) was translating the evaluation findings into action. According to the study, as the phases of data collection and analysis wound down, work of another sort began. Evaluators presented their findings and, frequently, their recommendations. Then, program leaders began the task of responding to the findings (Spellings et al., 2008, p. 43). Whether and how evaluation findings led to program improvements were a function not only of the quality of the evaluation, but also of many other contextual and organizational factors (e.g. the strength of the findings, the clarity and specificity of the recommendations, how the findings are disseminated, and to whom) (Spellings et al., 2008, p. 44).

The relationship between the evaluators and program leaders was a key factor (Spellings et al., 2008, p. 44). When internal and external evaluators had ongoing opportunities to discuss and work on improvement with program staff, there was greater support for change. Conversely, if evaluators were fairly isolated from program leaders, and left the process after presenting their recommendations, there was less support and, perhaps, a reduced sense of accountability among program staff. Program leaders could facilitate program change by working from the beginning to create an ongoing relationship between the evaluators and the program staff (Spellings et al., 2008, p. 44). Spellings et al. (2008) explained that:

Online program evaluators need to keep these kinds of practical challenges in mind when formulating recommendations and should consider ranking their suggestions both in order of importance and feasibility. Program leaders should develop a plan for addressing the highest priority recommendations first. In situations where program funds are running low, evaluators can provide a much-needed external perspective, reminding stakeholders of the project's goals and helping them identify the most critical program elements to keep, even if it means serving fewer participants. More broadly, communication and persistence are essential when attempting to translate evaluation findings into action. (p. 48)

According to Spellings et al., throughout the evaluation process there should be opportunities for staff members to discuss the evaluation, its findings, and its implications for improving the program (2008, p. 48). The following are six overarching recommendations provided by Spellings et al.:

- Begin with a clear vision for the evaluation, and determine what the evaluation was meant to accomplish and what questions should be answered.
- Consider different types of evaluations to determine the most appropriate evaluation methods for meeting goals.
- Budget to meet evaluation needs. Limited budgets were a common barrier to evaluators. When designing an evaluation, consider whether there are funds available to cover all planned data collection and analysis activities, plus the costs of any needed background research.

- Develop a program culture that supports the evaluation and discuss the evaluation with staff members by clearly explaining the value of the evaluation and their roles in collecting and analyzing data.
- Communicate early and often with anyone who will be affected by the evaluation.
- Dedicate adequate time and money during all phases of the evaluation to communicate with internal and external stakeholders. However, be sensitive to program concerns regarding confidentiality and media scrutiny. (2008, p. 49)

Evaluating technology-based learning: Strategies and challenges. In 2000, the U.S. Secretary of Education held a conference entitled, *Evaluating the Effectiveness of Technology in Education*. The purpose of the conference was to explore ways in which educators could better answer calls for accountability by policymakers, and to better understand ways of providing feedback to practitioners attempting to integrate technology into teaching and learning (Davis, Hawkes, Heineke, & Veen, 2000, p. 1). This was a better move to bridge the gap between the educators and the policy makers and will promote knowledge and understanding between the two parties for mutual benefit.

Distance learning is a technology-based learning (TBL) program that runs parallel with the traditional face-to-face method of learning. TBL constitutes learning via electronic technology, including the Internet, Intranets, satellite broadcasts, audio and video conferencing, bulletin boards, chat rooms, Webcasts, and CD-ROM (Koller et al.,

2006, p. 12). The foregoing indicates that online learning was operating at a higher percentage of an information technology system that runs as a new form of learning program, which is quite different from the traditional face-to-face method of learning. Therefore, an online learning program is technology-based and involves facilities like the Internet, computer software and hardware, Internet program builders, and service providers as the core of an elearning program. The computer can play a role in several forms of assessment, including diagnostic and self-testing, continuous assessment, and grading assessment (Beevers, Fiddes, McGuire, & Youngson, 1999, p. 1). Even economic analysts from the National Institute of Standards and Technology have indicated that technologically-stagnant sectors experienced slow productivity growth and, as a result, above-average costs and price increases. The rising prices actually increased the sectors' measured share of nominal gross domestic product, thereby lowering national productivity growth (Tassey, 2009, p. 2). The presence of technology in the office makes a great impact on the socioeconomic environment. Additionally, evidence from a 2009 meta-analysis by the U.S. Department of Education showed that hybrid models that combined online curriculum with face-to-face teacher time, produced better outcomes than either face-to-face time alone, or online learning alone (Adams, 2010, p. 2). In other words, the introduction of online learning has added strength to the traditional face-to-face system, making the general education system stronger and more viable. Higher-attaining students benefit most from computer-based assessment relative to higher-attaining students under paper-based testing (Clariana & Wallace, 2002, p. 593). Educators determined that computer-based assessment (CBA) methods have increased

students' performance and boosted correct responses in examinations (Constantine, 2000, p. 1). The CBA is a clear indication of the impact of technology on institutions.

TBL encompassed related terms (e.g., online learning, web-based learning) includes only learning that occurs via the Internet and computer-based learning, which is restricted to learning through the use of computers (Koller et al., 2006, p. 4). Technology, therefore, is what holds an online learning program together. The instructional design, the section that looks at how well the lesson was constructed, must be simultaneously and properly integrated with the use of available technological tools for maximum application of the technology (Murdock & Desberg, 1994, p. 346).

E-learning is synonymous with TBL and has largely replaced it in scholarships and industry as the term of choice (Koller et al., 2006). A VEP allows educational classes to be offered any place at any time. According to Koller et al. (2006), TBL holds the promise of substantially transforming the way learning takes place because of its numerous advantages. Among the advantages are:

- TBL fosters greater accessibility to learning via the Internet.
- The technology involved makes the entire elearning program flexible to operate.
- It is readily scalable to both large and small groups because it can accommodate a larger group of learners at minimal cost, and small groups of learners who otherwise would not be able to participate in a traditional classroom setting.

- The technology involved with elearning makes it cost effective to adjust the program to be comparable to the traditional classroom setting. Further, the content of TBL courses, especially those delivered online, can be centrally developed and updated when necessary. Therefore, the cost of replacing outdated course materials, and retraining teachers and instructors, drops significantly. (Koller et al., 2006, p. iii)

The design of a TBL program should enable the program users to be independent. From the learners' standpoint, TBL can be self-paced and matched to their individual needs. Building on pedagogy that emphasizes the merits of discovery learning offers the prospect of promoting greater comprehension and retention, particularly for complex materials, because of its clear opportunities for hands-on manipulation of course materials, and the use of simulations and game playing (Koller et al., 2006, p. iii).

Technology is continually growing and, perhaps, for this reason, TBL has witnessed a marked growth in the training marketplace in government, industry, and education (Koller et al., 2006, p. 11). The principle of connectivism denoted that knowledge may reside in nonhuman appliances because learning was enabled and facilitated by technology (Siemens, 2006, p. 31). In other words, technology has enhanced the learning process in society. Although TBL has its benefits, it is not without challenges. Among the most important of these is the *digital divide*, which is caused by low computer literacy rates and lack of access to technology among some learner populations (Koller et al., 2006, p. 8).

With the Internet service industry rapidly growing, security is an important issue; therefore, firewalls are being implemented to restrict access to an organization's network and Intranet from discourteous communications over the net by spammers (Long & Long, 2001, p. 1249). Network security gives rise to *access control*, which determines the entity (i.e., person, program, or machine) that can use a network resource legitimately (Turban et al., 2008, p. 527). As program development advanced, more challenges were encountered. Additional challenges include *social loafing*, which is characterized by students who work less diligently than they otherwise might, or who become frustrated by course material or technology and, as a result, are less engaged. The relative absence of instructor-to-learner and learner-to-learner interaction also was a factor (Koller et al., 2006, p. 8). This means that the advantage of creating an elearning program that could become an independent learning program for one person could be a disadvantage to another.

The design of a TBL program should enable the program users to be independent. From the learners' standpoint, TBL can be self-paced and matched to their individual needs. Building on pedagogy that emphasizes the merits of discovery learning offers the prospect of promoting greater comprehension and retention, particularly for complex materials because of its clear opportunities for hands-on manipulation of course materials, and the use of simulations and game playing (Koller et al., 2006, p. iii).

Course developers face their own challenges as they grapple with problems related to technological incompatibility, and must make appropriate accommodations to promote access for learners with disabilities. TBL lacks credibility that readily limits the

potential of the effectiveness of the technology in the world of elearning. TBL is an umbrella term that encompasses multiple delivery modes and methods, each having particular strengths given certain contexts and learning objectives. Examples of TBL methods include tutorials, Web conferences, online forums, simulations, and gaming.

Learning can be synchronous, which means that it occurs with instructors and learners meeting together at a specific time in a physical or virtual classroom.

Conversely, learning can be asynchronous, which means that it does not occur at a prespecified time and can be self-paced (Koller et al., 2006, p. 16). Furthermore, different applications can be predominately instructor-centric, which have an expert at the core who delivers a lecture, either synchronously or as an asynchronous narrated tutor.

Applications can be content centric where learners interact with content embedded in a learning system, and experience little instructor-to-learner or learner-to-learner interaction. Alternatively, they can be learner-centric where the learning environment is open, the learner is the navigator, and the learner's interests and needs drive the learning (Koller et al., 2006, pp. 18–19).

Interpreting the Impact of Program Maturity

Spellings et al. (2008) provided that VEPs often are on the cutting edge of education reform and, like any new technology, may require a period of adaptation. New programs must be given some time to be adapted by the user, which is the case with elearning programs. For example, a district might try creating a new online course and not discover technical glitches until students actually begin to use it (Spellings et al., 2008, p. 40). An adjustment period may be necessary for many different areas before

users are able to use the program comfortably. In addition, course creators may need to fine tune the content, adjusting how it is presented or explained, and students who are new to elearning may need some time to get used to the format (Spellings et al., 2008, p. 40). Students may need to learn new ways of studying and/or interacting with the teacher in order to be successful (Spellings et al., 2008, p. 40). If a program is evaluated before all the bugs are worked out, the results may have more to do with the program's newness than its quality or effectiveness.

All of these findings are so because most of the technological tools are new, and the user needs to become familiarized with the new program and be able to master it in due course. The creators of e-learning programs often made adjustments to policies and practices while perfecting their model, so it is ideal to wait until the program has had a chance to mature before using it but, at the same time, elearning programs often are under pressure to demonstrate a program's effectiveness right away (Spellings et al., 2008, pp. 40-41). To this end, it is clear that elearning programs, and users of elearning programs, need time to mature. Although early evaluation efforts can provide valuable formative information for program improvement, they sometimes can be premature for generating reliable findings about effectiveness and quality (Spellings et al., 2008, p. 41). Therefore, staff and students have to take the time to adapt to the system gradually and meaningfully.

Spellings et al. (2008) stated that:

Teachers needed time to learn how to integrate a new learning tool into their classrooms. Although not successful at first, the teachers who got past the initial

learning curve eventually became very effective in using field trips to deliver content to students. (p. 42)

This finding was important for two reasons:

- It suggested an area for program improvement, and
- It countered the problem of teacher inexperience with the tool. (Spellings et al., 2008, p. 42)

Balanced Perspective

Teachers are not the only ones who need time to adapt to a new learning technology—students need time, too (Spellings et al., 2008, p. 42). The idea of users needing more time to adapt indicated that evaluators needed to take time in evaluating new elearning programs in order to get a correct representation of the evaluation. The reason is that a new program becomes a new tool for users and, as time goes on, users become familiar with the program. Evaluators need to keep in mind that students' inexperience or discomfort with a new online course or tool can cloud evaluation efforts, especially if an evaluation is undertaken early in the program's implementation (Spellings et al., 2008, p. 42).

The Effect of Technology on Education

Technology has become a vital part of the ongoing development of the educational system, and is rapidly changing the dynamics of education in a positive way (Valenzuela, 2013, p. 1). It is not uncommon to tour a school campus and see students on cell phones, tablet PCs, and laptop computers surfing the Internet, updating social network sites, or downloading music and videos. This is representative of how gradually

technology has changed the manner in which teachers run their classrooms, and that our society definitely has moved toward a more technical and computerized age (Valenzuela, 2013, p. 1). Duncan (2010) stated that:

The National Education Technology Plan (NETP) recognizes that technology is at the core of virtually every aspect of our daily lives and work, and we must leverage it to provide engaging and powerful learning experiences and content, as well as resources and assessments that measure student achievement in more complete, authentic, and meaningful ways. (p. 1)

Technology plays a role everywhere in society. Every technical innovation has a technology effect in place. For example, the chalkboard has been replaced by a Smart Board and K-12 students' school journals are typed on computers rather than handwritten in a notebook. The Internet is a mixed blessing for libraries and librarians. For example, the Internet provides opportunities to add services and expand collections (Block, 2003, p. 1). Technology ushers in fundamental structural changes that can be integral to achieving significant improvements in productivity. Used to support teaching and learning, technology infuses classrooms with digital learning tools, such as computers and handheld devices; expands course offerings; experiences; learning materials; supports learning 24/7; builds 21st century skills; increases student engagement and motivation; and accelerates learning (Duncan, 2010, p. 1).

There certainly are benefits to integrating technology into the classroom; however, technology alone will not improve the quality of education. But, when technology is integrated with curriculum and instruction, it can be a powerful educational

tool that can stimulate the development of higher-order thinking and problem-solving skills, and can support collaborative, globalized learning (McNergney & Reed, 2000, p. 1). Unfortunately, most veteran teachers were from a much different, less connected generation than the students with whom they work (Valenzuela, 2013, p. 1). The generational effect is related to the ever-changing technological world, which makes things harder for the older generation. Therefore, it is not unusual to see students who are more technologically savvy than their mentors who are four or five times their age (Valenzuela, 2013, p. 1). This is a constant problem for older instructors.

There are challenges faced by teachers when trying to integrate technology into the classroom. As a result, there needs to be training and workshops for teachers to learn how to integrate technology into the classroom. However, many school districts do not have the resources necessary to hold training classes on technological instruction, which makes it difficult to integrate the technology necessary to be a fully functioning classroom (Valenzuela, 2013, p. 1).

Computers and software licenses are not readily available to every teacher on every campus. It can be difficult to make technology utilization a campus-wide initiative if there is not sufficient funding for resources or training. There are always other project-based teachings and learning opportunities involving technology, but the demands on the teacher are usually heavy in the beginning, especially if this type of instruction is foreign to them (Valenzuela, 2013, p. 1).

Learning new things can sometimes be hard for teachers who are set in their ways and have used the same teaching techniques for years. To suddenly change the way

teachers do things, and incorporate techniques they have never used, can be challenging for them (Valenzuela, 2013, p. 1). Often, these situations are characterized by discomfort and loss of interest in accepting and diligently applying the technology, as anticipated in the teaching and learning environment, which may make teachers feel uncomfortable and unsure of their teaching abilities (Valenzuela, 2013, p. 1). Valenzuela (2013) explained how technology can affect teachers in the following ways:

- Teachers may lack confidence when using computers or programs they have no experience with.
- Teachers can build on their skill and teaching repertoire with staff development and technology training.
- Teachers will gain confidence and effectiveness in instruction with increased computer experience. (p. 1)

Valenzuela (2013) further explained how technology can benefit students in the following ways:

- Studies show that computer-trained teachers maintain classrooms that score higher in math than their peers who did not have such training.
- When teachers have a positive attitude about using technology, they often excite students' interest in technology.
- Students are able to learn skills related to technology, which will add to their utilizable skills in the future. (p. 1)

Technology can have a profound effect on education because it can equip students with skills that are necessary for their future. This is not to say that certain proven

successful instruction strategies will be replaced and forgotten, it simply means that the proven ideas will be incorporated into the new technological advancement (Valenzuela, 2013, p. 2). With the successful implementation of technology in the classroom, students are able to receive a modern and comprehensive education from which they can benefit. Their education will be more suited to their generation and to the direction in which our society is moving (Valenzuela, 2013, p. 2). Technology is changing society and students must change with it if they are to meet the technological challenges in the business world of the future. PriceWaterhouseCoopers, LLP (1999) explained that “increasingly, business users are relying on handheld computers to maintain the day-to-day information that normally would fall outside of the domain of enterprise data—contact lists, schedules, personal information, to-do lists, etc.” (p. 277).

There are some hurdles involved in obtaining resources for the funding and training required to streamline technology into every classroom in the United States, but it appears that education is on a straight and steady path to getting there. The funding of technology in schools is still a difficult obstacle to the development of the technology in the classroom. The growing number of VEPs continues to challenge educators, not only because they have to adapt to the latest technological enhancement in the traditional classroom to the *distance learners*, but also must discover additional ways of improving their educational strategies overall (Evanouski, 2009, p. 1).

Educators found that electronic databases and the Internet offer information access that traditional classroom tests and institutional assessment instruments cannot (Erwin & DeMars, 2002, p. 1). The electronic database and the Internet denote the

viability of the online learning world. Online learning is orchestrated by network services; network services are either built into or layered on top of an operating system, and provide the service interface for applications seeking to communicate across a computer network (Price Waterhouse, 1997, p. 142). Several types of management software are available to aid network managers in enforcing the proper and legal use of software on the network. The network manager can instruct the software to lock out of the application any users who will create a potential legal conflict, thereby creating a secure online environment for providers and users (Beheler, Ramos, & Schroeder, 1996, p. 188).

As teachers progress through the ever-changing and dynamic environment of technology, those who have the capacity and knowledge to successfully teach online need to be able to transmit knowledge and culture to those who are being taught (Evanouski, 2009, p. 1). This is not an easy task since it involves hard work and commitment. Educators suggested that a well-planned, proactive distance training and support program will result in distance instructors feeling confident and hopeful in the possibilities for teaching and learning that lie ahead of them (Clay, 1999, p. 1). A proactive plan will empower instructors in the expectation of their confidence to teach. Educators have recommended Librarianaut (2012), which is a practical, frequently-updated Website full of library resources that often are technology focused, and can be useful for information technology professionals looking for tools to perform specific tasks (p. 4). Librarianaut also assists instructors and students in searches for their educational needs.

Accepting these challenges is a great feat; however, some teachers still are unwilling or afraid to learn new technology. Technology is scary to many adults who did not grow up during any part of the technology era, and have to learn it as a student in the classroom; however, in order for students to be successful, technology must be incorporated in the classroom and used in academics (Evanouski, 2009, p. 1). O'Hara & Pritchard (2014) explained that research literature throughout the past decade has shown that technology can enhance literacy development, impact language acquisition, provide greater access to information, support learning, motivate students, and enhance their self-esteem. O'Hara & Pritchard stated "indeed, researchers have affirmed that computer technology provides abundant opportunities for students to build or modify their personal knowledge through the rich experiences that technology affords" (p. 1).

Management and Operations of Online Programs

Watson and Garmin (2009) explained that "online learning for K-12 education is increasing in access and equity by making high-quality courses and highly-qualified teachers available to students" (p. 2). Watson and Garmin further explained that "online learning programs offer courses, academic credits, and support toward a diploma, all of which vary in structure and may be managed by a state, district, university, charter school, not-for-profit, or other institution" (p. 2). This is an indication that online learning is making progress and state non-profit and for profit institutions are courageously running the program.

According to Attner and Plunkett (1997), "management needs to create a proper blend of information and control systems that make use of policies, procedures, rules,

incentives, budget and other financial statements to support the implementation phase” (p. 161). Furthermore, a project cannot be successful unless it is recognized as a project and gains the support of top-level management (Kerzner, 2001, p. 1043). In six papers released during the 2008 and 2009 academic years, Watson and Gemin (2009) explored some of the approaches used by practitioners and policymakers in response to key issues regarding VEPs:

- *Blended Learner: The Convergence of Online and Face-To-Face Education.*
- *Using Online Learning for Credit Recovery and At-Risk Students.*
- *Management and Operations of Online Programs: Ensuring Quality and Accountability.*
- *Socialization in Online Programs.*
- *A Parents' Guide to Choosing the Right Online Program.* (p. 2)

Watson and Gemin (2009) indicated that “online learning is growing rapidly as states and districts are creating new online schools, and existing programs are adding new courses and students” (p. 3). The growth reflects the increasing understanding that online courses and programs can serve a wide variety of students and their needs, which include the following:

- Creating opportunities for small and rural school districts to offer varied course subjects and highly-qualified teachers to their students.
- Allowing students to blend high school and post-secondary learning options.
- Reducing class size.
- Helping students recover credits in an alternative learning environment.

- Providing individualized instruction and unique learning options.
- Allowing students the opportunity to interact with students far beyond their school or town boundaries.
- Meeting the needs and expectations of today's millennial students. (Watson & Gemin, 2009, p. 3)

Watson and Gemin (2009) posited that online learning programs promised cost-effective solutions to the many challenges faced by educational leaders, particularly in difficult economic times. Increasingly, states and districts are turning to online learning programs to expand educational opportunities, equity, and access, while individualizing learning options for students. Such growth in the online learning world required that school managers be able to effectively operate and assess their programs (Watson & Gemin, 2009, p. 4). One of the challenges in managing VEPs is to stay current (Watson & Gemin, 2009, p. 22). In their study of the management and operations of VEPs, Watson and Gemin (2009) stated that:

Online learning is already improving student outcomes and has the capability of becoming a truly transformative element of education. Programs that can demonstrate a sensible approach to ensuring quality content in their courses, highly-qualified and well-trained teachers, comprehensive student support services, and forward-looking technology systems can help guide constructive policy and regulatory oversight. (pp. 22–23)

Computers and the Internet are vital components of online learning. With the efficiency of the Ethernet, which is the ratio of the number of packets transmitted

successfully as a proportion of the theoretical maximum number that could be transmitted without collisions, the probability of transferring messages from one point to another through the Internet becomes high (Coulouris, Dollimore, & Kindberg, 1994, p. 80). The high probability of Ethernet efficiency boosts its effective function which, in turn, benefits online learning. According to Shelly, Cashman, and Serwatka (2001), “the Internet is one of the fastest growing areas of data communication, with millions of users accessing information from commercial organizations, universities, and individuals” (p. 10.30). The effective functioning power of the Internet strengthens the viability of online learning.

Cost and funding of online learning programs. According to a study by Anderson et al. (2006), 24 states offered some form of statewide virtual education classes to supplement regular classes, and provided for special needs; over half of the United States had significant online learning programs at the state or district level (Rivera-Batiz and Rivera-Batiz, 1994, p. 4). It is explained that rational outcomes accentuate the idea that individuals do not persist in making systematic predicting errors and that forecasts about the future should be free of systematic and easily correctable biases (Rivera-Batiz and Rivera-Batiz, 1994, p. 160). The reason is that no one can predict the future with precision, yet it is regular with rational expectations to recognize that individuals may have to know their economic environment and acquire information over a certain period of time so that they can eliminate systematic forecasting errors (Rivera-Batiz and Rivera-Batiz, 1994, p. 160).

Brigham and Ehrhardt (2002) stated “the acquisition of information would give at

least some ideas in regard to predicting future activities. Furthermore, when evaluating a potential acquisition, it is vital to have a reliable estimate of the company's value" (p. 420). In response to questions about the funding of virtual schools, Anderson et al. (2006) embarked on a year-long project to examine issues related to the cost of operating virtual schools, and the funding mechanisms used to support such schools. Costs fall into two categories: startup and ongoing (p. 4).

The *professional judgment* approach was the primary data gathering method used for this research study, and declared that five broad categories of costs existed for online programs: management, instruction, course development, technology setup, and technology personnel (Anderson et al., 2006, p. 4). According to Anderson et al. (2006), the cost of operating online programs can vary based on numerous factors, including:

- program governance;
- student to teacher ratio;
- student population;
- degree of at-home vs. on-site computing;
- course completion rates;
- quality assurance, research, and development; and
- program size, growth, and economies of scale (p. 4).

Anderson et al. (2006) further provided that, "states have five primary options for funding virtual schools:

1. state appropriation;
2. funding formula tied to full-time enrollment (FTE);

3. course fees;
4. no state role; and
5. a combination approach” (p. 5).

Funding and policy frameworks for online learning. According to Watson and Gemin (2009), “studies indicated that online learning continues to grow at a rapid pace, with programs and states reporting annual growth rates of 15% to 50%” (p. 3). Yet, many policies are woefully behind this rapid growth. For example, one typical policy with wide-ranging implications is the way in which funding is linked to student attendance. Watson and Gemin stated that:

Most states predicate student counts based on the idea that the student is in a physical classroom and can be counted in a census-like fashion. In the online world, students most often are not in a physical classroom and, therefore, the language in such census exercises does not fit virtual learning, resulting in a lack of funding for online programs or the need to change accounting practices. (2009, p. 3)

There is little policy tied directly to student achievement and such policies are behind the learning realities. Online learning creates the challenge to update policies to address a new and exciting form of learning.

Study of Education Resources and Federal Funding

The Study of Education Resources and Federal Funding [SERFF] (Chambers et al., 2000) was an “examination of the allocation and use of funds provided to school districts through the six largest programs resulting from the Elementary and Secondary

Education Act (ESEA) of 1965 for the 1997 fiscal year, which corresponded to the 1997-1998 academic year” (Abstract). (Note: The No Child Left Behind Act of 2002 was a revision to the ESEA of 1965.) The six federal programs included in the study were:

- Title I. Part A: Helping Disadvantaged Children Meet High Standards, Grants to LEAS;
- Title II: Eisenhower Professional Development Program, Elementary and Secondary Programs;
- Title III. Section 3132: Technology Literacy Challenge Fund;
- Title IV: Safe and Drug-Free Schools and Communities, State and Local Agency Programs;
- Title VI: Innovative Education Program Strategies; and
- Goals 2000: Educate America Act, State and Local Systemic Improvement (Chambers et al., 2000).

According to Chambers et al. (2000), SERFF was an examination of the extent to which program funds were used for various strategies in improving student achievement, including professional development, technology, extended learning time, and school-wide reform and improvement (p. 1). SERFF was also an examination of the targeting of federal program funds at the district and school levels, in comparison to the distribution of state and local funds. Regarding the distribution of federal, state, and local revenues among high and low poverty districts, it was found that federal education funds, in general, were targeted more to high-poverty districts than were state and local funds (Chambers, 2000, p. 3).

Research Project Management Key Concepts

Henderson (2010) stated that “the successful management of a research project depends on the researcher’s ability to plan, coordinate, and perform the research” (p. 1). Some project managers speak of projects as if they are wars, using such terminology as *marching orders* and *the troops*. When a project manager uses war as a metaphor, he is seeing the project as a mixture of friends and foes, allies and enemies, and one is either with him or against him, and such a view will make it difficult for him to collaborate with others (de Baar, 2013, p. 1). Conversely, positive metaphors shape how complex projects are viewed, and can influence an amicable result. In other words project management is the application of knowledge, skills, and techniques to execute projects effectively and efficiently (Project Management Institute, 2013, p. 7).

Even though some researchers do not manage their research, the unplanned aspect has an effect on the staff participating in the project, and can lead to stress in members of the research team, crises management when deadlines are not effectively managed, and the lack of research time required in reaching an effective solution (Henderson, 2010, p. 1); this does not mean they would not complete the project successfully. According to Henderson (2010), the components for successful project management are:

1. stakeholder planning and management; (p. 1)
2. developing timelines—a rolling wave approach to planning; (p. 3)
3. managing risk; (p. 5)
4. managing the project; (p. 7)
5. managing the budget; (p. 8)

6. finding time to manage the project; (p. 8), and
7. Understanding what success means for the project (p. 1).

The starting point for managing a project effectively is to have a clear understanding of what the achieved result will be. The difference between outputs and outcomes is that outputs are the physical deliverables of the project, while the outcomes are what happen as a result of the outputs (Henderson, p. 1). In the opinion of Kerzner (2001), “in organizations that manage their projects successfully, project managers are considered professionals and have distinct job descriptions” (p. 1044). That is, the project manager manages the project. In project scheduling, the project manager must know the duration of each activity, the order in which the activities will be performed, the start and end times for each activity, and who will be assigned to each specific task (Shelly, Cashman, & Rosenblatt, 1998, p. 33).

Stakeholder planning and management. Stakeholders are those who have an interest and/or involvement in a project. Effective management requires proactive and ongoing stakeholder engagement, including identification, communication, risk planning, and active collaboration throughout the project’s life cycle (Kangas, 2011, p. 1). When an individual stakeholder’s objectives compete for priority in a project, communication issues and conflict between stakeholders can occur, which can result in poor management decisions (Henderson, 2010, p. 1).

The Winstanley stakeholder model is a recommended tool used to examine stakeholders’ objectives and influence, and allowed me to examine the stakeholders, as well as their relationships with other stakeholders (Henderson, 2010, p. 1). The first step

was to identify the key stakeholders by separating them into small groups—large groups tend to impact the value of the information needed. The key stakeholders must have an understanding of the transactions involved in the interaction with the other stakeholders (Henderson, 2010, p. 1). Once the key stakeholders were identified, a two-phase mapping process was used to examine the power of all stakeholders. The first phase was to determine the ability of a stakeholder to influence the project's outcome. The second phase determined a stakeholder's ability to influence how the outcome will be met (Henderson, 2010, p. 2). The stakeholder analysis process provided an understanding of how the stakeholders impacted the project, as well as provided an understanding of the dynamics of the stakeholders, all of which can be taken into account when determining the scope of a project (Henderson, 2010, p. 2).

Developing timelines. Too much information can lead to confusion, especially when working with multiple dates. According to Martin (2013), utilizing a timeline helps to alleviate these concerns, and offers a graphic representation to the data, as opposed to a laundry list (p. 1). Timelines can help with many different types of projects, and are an excellent way to review events and see how they affected each other. Timelines also can help in creating a guide for events or future goals, and can add the extra touches for a science or history fair project (Miriam, 2013, p. 1).

In traditional project management, the approach would be to try to plan as much of the project as possible in the beginning. However, in a research environment, preplanning is difficult because the project will evolve significantly as the research progresses (Henderson, 2010, p. 3). The management approach in a research environment

is to develop a rolling wave plan in which an understanding of the overall project is presented without much detail, and then present the detail on a rolling basis (Henderson, 2010, p. 4). Some of the benefits of using a work breakdown structure (WBS), which is the basis for creating a timeline, include “understanding exactly what is involved in managing the project, identifying key tasks, creating a framework for delegation and resource identification, providing a method to manage and measure progress, and building a basis for developing cost estimates” (Henderson, 2010, p. 3). Another benefit of using this approach is the ability to drive delivery of the project by having many deadlines and more flexibility in the arrangement of activities in the project (Henderson, 2010, p. 4).

According to Henderson (2010):

Following the creation of the WBS, the length of time required for development of the project can be determined by (a) understanding that a task that usually takes a short amount of time may take a new researcher a significantly longer amount of time to accomplish, (b) timing typical instances of repetitive tasks in order to develop a realistic time scale for completion of the task, and (c) recognizing that better results often are obtained by requiring researchers to estimate the time required to complete a task. (p. 4)

A reality check has to be done when timing a task because the biggest problem is that people tend to underestimate how long specific tasks will take to complete (Henderson, p. 4).

Once the WBS and durations of the tasks are in place, the Gantt chart can be developed and the critical path activities can be identified. The Gantt chart reflects a plan for a project, and will change and adapt as the project progresses. Critical path activities are those that must start and finish on time to avoid an adverse effect on the duration of the project (Henderson, 2010, pp. 4–5).

Managing risk. The risks associated with ineffective, destructive, or underperforming management are those that hurt shareholders and the company or fund being managed. The main risks are those that result in a situation in which the company and shareholders would have been better off without the choices made by management. Every project has risks that can impact the success of the project if they occur. According to Henderson (2010), some examples of potential risks are:

- A member of the research team leaving before completing their contract.
- Obtaining poor quality data.
- The breakdown of key pieces of equipment.
- A similar project is completed and published first (p. 5).

The key to managing risk well is to have a clear understanding of possible risks, and then develop strategies to manage them. Henderson (2010) provided two such ideas to help identify key risks: (a) hold a brainstorming session in which all of the risks are identified and (b) decide how these risks might affect the project. To assess the possible effects, consider reputation, costs, and schedule, and give each risk a likelihood score between 1 and 5 (Henderson, 2010, pp. 5–6).

Managing the project. Once the planning process has been completed, a decision

must be made regarding management of the project. Two key elements to consider are: (a) understand how the project is progressing and (b) make the decisions necessary to keep the project on track. To understand how the project is progressing, it is useful to think about the methods utilized to gain information about its progression. According to Henderson (2010), if it is determined that the project is not progressing as planned, then some type of action will be needed to get the project back on schedule (p. 7).

Henderson (2010) posited that one of the challenges faced when trying to manage the research project was the failure to realize that certain management elements is useful work (e.g., project planning). If an activity adds value to the project, then it is useful work. An element of planning is likely to move the research project toward a successful outcome. The challenge for the research manager is to find a recipe for project management that works in the context of the research (Henderson, p. 8).

Managing the project budget. If a project goes wildly over budget—as is often the case—it will not be considered a success even if it is delivered on time and meets end users’ needs, which is why project managers need to meticulously manage their budgets (Westland, 2011, p. 1). The first step in managing a project budget is to understand which budgets are to be managed and their respective expense commitments, which include necessary future expenditures. For example, if an individual was employed on a 1-year contract, then all monies related to paying that individual (including pension and national insurance costs) are committed for that period of time, and become part of the budget. In an effort to clarify the employee and employer contract in terms of managing a project budget, Henderson (2010) stated that “After you have employed someone on a research

contract the likelihood is that you will not need to directly manage the budget attached to that salary once the contract has been put in place” (p. 8). Managing the project budget involves tracking spending by revealing what was charged to each main budget heading, showing management the amount received, the amount committed to each item, expenditures made, the amount remaining and realistically understanding the expenditure commitments (Henderson, 2010, p. 8).

Strategies for Project Recovery

According to Crossan, Fry, and Killing (2005):

The tools for forming strategies in business are those that provide a number of models for analyzing the forces with which the manager will have to deal. These tools must present the manager with clear goals to identify, define, compare, and take the proper action to get things done. (p. 3)

In terms of strategies for project recovery, because project strategies primarily provide common-sense advice, better choices could be made to begin and complete projects (Carson, Carson, & Phillips, 1995, p. 1). In the world of project management, many methodologies are utilized and, consequently, the determination of whether or not a project is worth saving often relies on what method is being used (Scheid, 2010, p. 1).

The strategies for project recovery were researched by PM Solutions (2011), which found that whether a troubled project ultimately succeeds or fails, depends on the effectiveness of the actions taken to recover the project. Organizations need to be able to recognize problems and prepare to take appropriate corrective measures (PM Solutions, 2011, p. 2). PM Solutions provided benchmarks of practices used in recovering troubled

projects to help identify factors that may lead to the development of strategies for successful project recovery:

- Can troubled projects be recovered or are they doomed to fail?
- What is the root cause of troubled projects?
- What is the cost to organizations?
- What do firms do, exactly, to successfully recover troubled projects? (PM Solutions, 2011, p. 2)

According to a survey conducted by PM Solutions (2011), firms manage \$200M in projects, on average, over the course of each year. These organizations realize that more than one-third of their projects—approximately \$74M—are at risk of failing, and that jobs, and possibly the business itself, are in jeopardy if nothing is done to mitigate the risks and actively attempt to recover these troubled projects (p. 3). PM Solutions advised that “when an organization takes actions to recover troubled projects, they are highly successful” (p. 3). The survey also indicated that the project manager is one of the most important factors in the success of project recovery efforts (PM Solutions, 2011, p. 3). According to PM Solutions (2011), other important factors involved in project recovery efforts are:

- How much money an organization might lose if they do not incorporate the practices of more successful firms?
- Practices the organization needs to focus the effort on improving.
- Application of what is working for other organizations (p. 3).

Project at Risk

According to research by PM Solutions (2011), organizations spend a lot of money on projects. In 2010, the average firm closed projects valued at \$200M (PM Solutions, 2011, p. 4). More than one-third of these projects were troubled. The research also revealed significant factors that affected the likelihood of successfully recovering troubled projects, including whether the firm had a standard project management methodology or a project recovery process, the size of the firm, and the industry (p. 4). PM Solutions (2011) reported:

The good news is that project recoveries are common, and 72% of the firms surveyed had a project recovery intervention. Information firms (90%) were more likely to have had a project recovery intervention than financial firms (75%), manufacturing companies (71%), and professional service organizations (62%). (p. 4)

The positive influence of processes. Of the firms surveyed by PM Solutions (2011), 22% had no standard project management methodology in place. Thirty-two percent of the firms surveyed had no formal or informal process for recovering troubled projects (p. 5). This is an indication that most of the work performed in the project management realm is performed using common sense and practical experience.

Causes of troubled projects. According to PM Solutions (2011), the common thread in addressing the major causes of troubled projects is the failure of the project manager to deal effectively with the issues, to mitigate some of the risk, and to stand up to senior management while managing the expectations of the employees. It was

expressed that the five top causes of troubled projects are requirements, resources, schedules, planning, and risk (PM Solution, 2011, p. 5). This indicates that any of the mentioned factors are likely to cause trouble on a project if not addressed and handled well. The five mentioned factors can be explained as lack of responsibility, lack of resources, overly optimistic with poor planning, and bad assumptions in taking risks (PM Solution, 2011, p. 5).

Project recovery. In the management of a project, there are likely to be issues or contentions that may significantly affect the purposes that the project was intended to fulfill and, most important, how the project should be managed (Cleland, 2007, p. 10). In most cases, there was an intervention to save a failing project. Although senior management generally makes the decision to actively intervene and recover a troubled project, the project manager typically leads the execution of the recovery process (PM Solutions, 2011, p. 6). In fact, the original project manager often is replaced with someone more experienced to head the recovery effort—a new project manager or consultant. In any case, project recoveries are highly successful once a firm decides to focus on addressing the issues that caused the project to become troubled (PM Solutions, 2011, p. 6).

Key Success Factors

To be successful, a project must deliver the outcomes and benefits required by the organization, its delivery partners, and other stakeholder organizations (Carr, 2010, p. 1). Clearly, the project manager is one of the most important factors in the success of project recovery efforts. Of all organizations surveyed, 92% rated the skill and knowledge of the

project manager as being very important to the success of the recovery project (PM Solutions, 2011, p. 7). In order to prevent a project failure or revive a project recovery, a successful project manager must manage simultaneously the four basic elements of a project: resources, time, money, and, most important, the scope of the interrelationship of all of the elements (Reh, 2013, p. 1).

Survive and Thrive

I also reviewed literature on the success of California's San Mateo County Community College in maintaining its online learning program. Luan (2011) expressed the need to "exercise a positive attitude and deploy strategies to not simply survive, but to thrive in a given situation" (p. 1). Luan was the coordinator of overall development, and implementation of the instructional and student support programs of the three colleges in the district: Canada College, College of San Mateo, and Skyline College. Luan further expressed that, "despite the fiscal crises faced by his institution, directors should maintain a positive attitude and deploy strategies to not simply survive the crisis, but to thrive in it" (2011, p. 1). Luan outlined ideas to handle the fiscal crisis including: (a) Tell Our Story, (b) Unity, (c) Focus on Student Needs, (d) Seek Local Revenue, (e) Negotiate/Renew Service Contracts, (f) Hold on to Redirect, (g) Marketing, and (h) Continue With Planning at All Levels (2011, p. 1).

Tell our story. *Tell Our Story* expressed the tendency to remain optimistic that every appeal for funding will result in a rescue. People have already passed through the institution and have become prosperous, so the chances of getting responses to the appeal for funding during a time of funding cuts and economic crisis should be the benchmark to

stop the end of a program or a project (Luan, 2011, p. 4). This is just like appealing to the stakeholders to act to raise the institution's finances to the appropriate level to be able to continue its programs.

Unity. *Unity* was tough during times of difficulty when all sectors of the institution (i.e., faculty, administration, staff, and students) could come together and make meaningful decisions (e.g., march for support, community meetings). It is only through unity that a demonstration of support of public education can be displayed. As Luan (2011) expressed, “there are no fundamental differences among various constituent groups, except those who need the most help: students” (p. 4).

Focus on student needs. A focus on student needs is vital for a successful online education program. It was revealed that while institutions are trying to save money by reducing their budget, they still must focus on students' needs, which are essential because it is the students who will benefit from the effort being made to save the project (Luan, 2011, p. 4). Therefore, in an effort to maintain the project in favor of students, the students' needs should be among the top priorities.

Energize student service. Luan (2011) advised that “the overall administration growth has been stunted and decreased, and student services departments have been especially devastated by budget cuts in our system” (p. 3). Even though the administration growth has decreased and student services have been devastated by budget cuts, the consummate professionals are still able to put smiles on their faces when it comes to their students. Practically, student services offices are overloaded and stretched thin (Luan, 2011, p. 3). Student services were affected by the budget cut at a time when

technology was being used to its maximum and was depended on to render many services.

Seek local revenue. The sentiments of community residents can be strong toward local control, which opens the door for possible funding streams (e.g., parcel tax or a general obligation bond) (Luan, 2011, p. 6). When institutions connect with communities, it benefits the institutions seeking local support. The local residents may become more interested than before to support students through many of the organizations and institutions in their communities that play a significant role in society (e.g., K-12 schools). It becomes essential to ask for local assistance when necessary (Luan, 2011, p. 6).

Negotiate/renew service contracts. According to Luan (2011), in the investment world contrarians tend to make the biggest gain because they seek opportunities not typically presented by a thriving economy. A time of crisis is the best time to consider going against the grain and aggressively negotiating service contracts with vendors to get good offers and possibly save a project from exhausting funds (Luan, 2011, p. 6). **This is accomplished** when an existing program **makes** good negotiations to bring economic gains.

Student retention. *Student retention* and providing quality education in times of difficulty is essential. Students provided with a quality education, as well as quality support services, will realize that they need not go elsewhere to continue their education. This could be a challenge to many students in their decision making whether to stay at their current institution or go to another institution. The difficult part is many students

like to finish at the same school at which they started.

Marketing. Luan (2011) expressed that, “ethical marketing should be used to continue branding ourselves, so students will remember us” (p. 6). Luan also expressed that, “getting the word out and brand/name recognition was of the utmost importance” (p. 6). Luan (2011) further expressed that, “A New York Times article recently described how for-profit trade schools have lured students who are paying up to \$40,000 for a 2-year degree through questionable marketing and recruitment tactics” (p. 5). The foregoing is an indication that ethical marketing strategies should be used. According to Luan (2011), “institutions have to brand themselves and be able to provide reader-friendly information with career programs that have been matched against local jobs and earning power” (pp. 6–7).

Planning. It was revealed that the best plans are laid during a crisis situation. Luan (2011) explained that a crisis can (a) help in identifying visions, (b) determine if those visions are sharper than before the crisis, (c) determine whether the bad economy makes it easier to link budget to planning, (d) determine whether those goals are more easily developed, and (e) understand how to avoid the next economic bump in the road (p. 4). In other words, plans are redefined during times of crisis, which subsequently leads to adjustment in the budget for the project.

Gaps and Deficiencies in Prior Research

In addition to gaps and deficiencies found in prior research, I found no research that indicated a clear method and/or procedure to save a VEP from closing down when affected by cuts in federal funding. The reviewed literature revealed some advancement

in the encouragement of VEPs through funding and services in the form of researching areas needing improvement. However, there was no research regarding how a VEP could be adjusted to cope with a cut in funding, similar to what occurred with SLSD. I found no step-by-step methodology that would give interested institutions guidance regarding how to continue to operate a VEP following a cut in federal funding.

Summary and Conclusions

The literature review explained the concept of online education and its future potential for children all over the world. The literature also explained the effect of technology on the virtual education and how to manage online education. The concept of managing online education also brings in the theory of project management when referring to the virtual school as an entity of a project in the school district, and how to rescue a project in trouble. The literature expressed how to manage and how to rescue a project in trouble, but could not rectify a solution to the SLSD's VEP that was affected by a cut in federal funding and, as a result, terminated the progressing virtual school program that benefitted the K-12 students. The literature provided so far reflected on what knowledge was needed to understand the concept of online education and its management as a whole. Overall, the literature painted a picture of what online education is about, as well as the role of management in educational institutions. The literature also provided some strategies that project managers could use to rescue projects that are encountering problems.

The gap in this research study was the means to rescue the SLSD from the situation it was in when the cut in federal funding occurred and they closed the VEP. The

SLSD was researched and compared to two other school districts in the state of Missouri that had successful online programs. Chapter 3 contains an explanation of the research method and addresses the research methodology in detail.

Chapter 3: Research Method

The purpose of this research study was to examine the reason the SLSD discontinued its VEP following a cut in federal funding, with a focus on determining the factors involved and what could have been done to sustain the program. After carefully examining the qualitative and the quantitative methods, I determined that a qualitative approach was best for this research study due to the quality of information required to find a solution to the problem. Using the qualitative approach, I applied the case study with the purposeful sampling method.

This section provides the research design and the rationale for choosing the type of study to guide the research. It will also show the researcher's role and the methodology that guided the study. The methodology laid emphasis on the participant's selection logic, instrumentation, and the procedures for recruitment, participation, data analysis, and data collection. Then I cover the issue of trustworthiness within which is embedded credibility, transferability, confirmability, dependability, and ethical concerns. Finally presented is a summary of the entire section and the transition to the next chapter.

Research Design and Rationale

I used the following research questions (RQ) to provide a framework for data collection and a foundation for future research:

- RQ1: What could the SLSD have done to sustain its successful VEP when it encountered financial difficulties due to a cut in federal funding?
- RQ2: What factors or conditions are necessary to successfully maintain an online learning program?

RQ3: What did the management do to sustain its VEP?

RQ4: What did the management do to terminate its VEP?

RQ5: What influenced the decision of the SLSD to terminate its VEP?

RQ6: What role did the effect of technology—in terms of cost, acceptance, comfort, technical problems, etc.—have on the SLSD's decision to sustain or terminate its VEP after a cut in federal funding?

RQ7: What recommendations can participants offer based on lessons learned from the closure of the SLSD's VEP?

Deciding on which of the two research approaches is best—qualitative or quantitative, I finally decided to use the qualitative approach. I chose the qualitative approach because of the quality of information needed to find an answer to the problem. The qualitative approach requires exploring and understanding individuals or groups who are knowledgeable in situations about social or human problems (Creswell, 2009, p. 4). Out of this, the qualitative approach rendered me the chance to obtain the required information from participants who are knowledgeable about my research. From another point of view; *qualitative research* is expressed as a generic term for investigative purposes and methodologies (Key, 1997, p. 1). This is done by prompting individuals or groups to acquire the necessary information needed to make decisions. Qualitative research differs from quantitative research. The qualitative researcher gathers data by objective methods to provide information about relations, comparisons, and predictions, and attempts to remove the investigator from the investigation while the quantitative researcher uses substantive methods (Key, 1997, p. 1).

I looked at various qualitative approaches and determined that the case study approach was the best approach to use in guiding this qualitative research study. The case study approach produced a more in-depth meaning of what was needed to draw inferences (Creswell, 2007, p. 78). The motive of a case study is the advancement of an in-depth description and analysis of a case, which is practiced in many professional areas like the areas of medicine and law. A case study allows the collection of information through interviews, observations, documents, and artifacts. The reason is that the case study is associated with other studies of events, programs, and activities. With the case study too an analysis is done through the description and the meaning deduced from the case (Creswell, 2007, p. 79).

Role of the Researcher

The researcher typically plays a vital role in qualitative research in that the researcher serves as the instrument through which observations, descriptions, and interpretations are noted. As stated in Creswell (2007), “the qualitative researchers collect data themselves through examining documents; observing behavior; and collecting data, but the researchers are the ones who actually gather the information” (p. 38). In the course of acquiring data for the research, Simon (2015) stated that “this means that data are mediated through this human instrument rather than through inventories, questionnaires or machines. For this role to come through, the consumers of the research need to know about the researcher” (p. 1). The qualitative researcher also would have to describe themselves and their stance on the research in terms of bias, experience, expectations, and assumptions to determine if they are actually qualified to perform the

research. Qualitative researchers tend to not use or rely on questionnaires or instruments developed by other researchers. I developed the Interview Questionnaire (Appendix A), as well as performed the participant selection process. I also interpreted and analyzed the data and made the findings meaningful to the RQs. I was responsible for keeping the identity of the participants and the original research data confidential to protect the participants. Like Simon (2015) stated “a good qualitative researcher will ask a lot of probing questions, then listens, then thinks, then asks more probing question to get to deeper levels of the conversation” (p. 1). This is exactly what I did with the participants who took part in my research study. Even though we conducted the interviews via email correspondence, I made sure to ask questions again to get deeper than anticipated responses in order to make the research more viable. Simon (2015) also expressed that “it is useful for a qualitative researcher to keep a research journal explicating personal reactions and reflections, insights into self and past in a separate journal and how bracketing takes place” (p. 1). I kept a simple journal throughout the dissertation process to keep me balanced.

Methodology

After careful consideration, I decided that the nature of this research study demanded the qualitative analysis approach because of the quality of information needed to draw the necessary inference. Qualitative studies have become increasingly popular in recent years, even in some disciplines that historically have placed heavy emphasis on quantitative approaches, even though this approach required as much effort and rigor as quantitative studies (Leedy & Ormrod, 2005, p. 106). A qualitative approach generally

yields quality analysis and has unique characteristics that will best fit this research study. A qualitative approach provides a quality report to determine the authenticity of the research (Creswell, 2007). This research study was characterized by using the following three strategies: design, data collection, and analysis.

A qualitative approach allowed me to study real-world situations with openness and without manipulation or control, so as to not compromise the validity of the research. I chose the case study for this qualitative approach in which I explored a case over time, through detailed data collection via email correspondence (Creswell, 2007). Purposeful samples of people, communities, cultures, organizations, and events were sources of information for this research study. The participants provided useful information as to what actually was involved in the SLSD making the decision to discontinue its VEP.

Qualitative data were collected by sending an Interview Questionnaire (Appendix A) via email to participants to obtain their perceptions of the information required to complete this study. I made adjustments to the data collection process on an as-needed basis. Under the analysis strategies, I had the opportunity to collect unique data that could be analyzed to ensure reliability. All these characteristics of a qualitative approach ensured that valid and relevant information was gathered.

Because my goal was to showcase a variety of evaluations, the SLSD, the KSD, and the RSD were coded to allow additional characteristics (i.e., internal vs. external evaluator, type of evaluation design, type of online learning program, organization unit [district or state], and stage of maturity). The final selection was made from as wide a range of these characteristics as possible, while keeping the quality criteria high. All of

these analytical strategies were included to strengthen the viability of the qualitative analysis.

According to Henderson (2010), if a project does not appear to be progressing as planned, then a cause must be determined and the appropriate action must be taken. It is imperative that action be taken at the cause level and not the symptom level. A classic example of this is working harder to solve a problem only to discover that no matter how hard one works, the problem does not go away (Henderson, 2010, p. 1).

Participant Selection Logic

Selecting participants for a qualitative research study can be quite challenging because the researcher must make sure that the participants are knowledgeable about the study topic and that they are ready to comply with the rules and regulations, such as bias and ethnic issues, before the participant is recruited. Sargeant (2012) stated that:

Quantitative research requires standardization of procedures and random selection of participants to remove the potential influence of external variables and ensure generalizability of results. In contrast, subject selection in qualitative research is purposeful; participants are selected who can best inform the research questions and enhance understanding of the phenomenon under study. Hence, one of the most important tasks in the study design phase is to identify appropriate participants. Decisions regarding selection are based on the research questions, theoretical perspectives, and evidence informing the study. (p. 1)

The foregoing indicates that participant selection largely depends on the kind of research at stake. Since a quantitative approach depends on getting responses from many people,

qualitative research needs less quality information to get results, making the latter dig deeper to get the anticipated results. In consideration of the sample size, Sargeant (2012) further stated that:

The second consideration is sample size. Quantitative research requires statistical calculation of sample size a priori [*sic*] to ensure sufficient power to confirm that the outcome can indeed be attributed to the intervention. In qualitative research, however, the sample size is not generally predetermined. The number of participants depends upon the number required to inform fully all important elements of the phenomenon being studied. (p. 1)

I researched the issue of why the SLSD's VEP, which was established in 2007, was discontinued in 2010 as a result of a cut in federal funding. I used the purposeful sampling approach for qualitative research, which consisted of selecting participants who desired to contribute to the understanding of the problem under study, and not how different sectors in the population experienced it (Creswell, 2007). The purpose of this study was to develop a deeper understanding of the way people understand themselves, and to determine how to build a consensus to help manage their functioning, as well as how change in an organization can be managed for the purpose of development in society (Scheid, 2010, p. 1).

The purposeful sampling approach enabled me to select individuals for the study because the participants were able to purposefully explain their understanding of the research problem in the study (Creswell, 2007, p. 76). I selected eight participants in order to gain more in-depth, quality information. The qualitative inquiry sample seemed

small in comparison to the representative sample needed for a quantitative inquiry, when the purpose of the inquiry was to generalize from a sample of the population of which it was a part. In addition, Morse (2013) expressed that “sampling is the deliberate selection of the most appropriate participants to be included in the study, according to the way that the theoretical needs of the study may be met by the characteristics of the participants” (p. 1). That means the researcher has to make sure the participant is knowledgeable enough to provide the required information. Morse further expressed that “convenience sampling is selecting the sample by including participants who are readily available and who meet the study criteria” (p. 1). It is best to use the convenience sampling when the researcher does not know the pertinent characteristics for criteria sample selection (Morse, 2013).

To begin with, I built a community of partners within the various school districts that I was going to include in my research and took advantage of the opportunity that I had with the research directors at the various schools. I asked each of them to help me recruit the participants that they believed could best help the nature of my study. I did this because I knew that they know their people well, and I trusted their judgment when it came to the depth of information the potential participants could provide for the type of study I undertook. Each research director provided me with the contact information for each person on their list of possible participants. I compiled the names and found a strategy to contact them according to how I had been instructed. I contacted potential participants via telephone, email and/or letter and explained the importance and purpose of the study, as well as why they were selected. I also guaranteed the participants

anonymity and confidentiality and advised them that they would have the option to withdraw from the study at any time without penalty of any kind. Interaction with the participants built a rapport, which was important in the quest to obtain the needed data.

Instrumentation

This research study was conducted with a qualitative method approach because of the nature of the research and the qualitative instrument used in conducting the research. Qualitative instruments are used in investigative qualitative research. This type of research is different from quantitative research because the researcher is a large part of the process and can be considered one of the qualitative instruments (Leigh, 2015, p. 1). Other types of qualitative instruments include focus groups, interviews, and documentary analysis. In this research study, a standardized, open-ended interview protocol was developed for use in the data collection process, primarily because it facilitated data analysis by making it possible to quickly locate answers to the same question, and to categorize similar questions and responses during the analysis phase (Patton, 2002). Patton (2002) stated that, “the standardized instrument could be made available for inspection exactly as it was used, and interviews could be focused to allow for more efficient use of time during sessions” (p. 344). Patton further stated that:

Other formats such as the conversational and interview guide approaches may offer greater individualization and flexibility, but are at the same time susceptible to greater subjectivity and judgment on the part of the researcher given the likelihood of qualitative variance as a result of differences in the breadth and depth of information collected from the interviewees. (p. 348)

According to Patton (2002), credibility issues are less likely to arise with the standardized format since the same information is collected in each case, and each interviewee is regarded as a unique source with a singular perspective (p. 348). Patton also explained the given limitations of the standardized approach, in that it does not allow for spontaneous exploring of issues or topics not included at the time the interview questions were prepared, and provides little opportunity for querying individual differences and peculiar circumstances. Follow-up sessions were proposed as a means of clarifying or validating issues arising from the interviews, where necessary. In an attempt to address my research problem adequately, I decided to treat all the cases with due respect and seriousness so as to achieve a viable result for the study. To do this required that the data collected reflected on the RQs developed for the study. To accomplish this, I collected my data from one source: in-depth interviews. In order to do that, I designed and implemented a structured interview guide to obtain the required information about the problems of interest, and the thoughts and perceptions of the respondents. Validity is the thoughts containing premises from which the conclusion may logically be derived (Patton, 2000, p. 348). An example is a valid argument, whereas reliability is the ability to be relied on, or depended on, for accuracy, honesty, or achievement (Patton, 2000, p. 348). In other words, reliability is the degree to which an assessment tool produces stable and consistent information, while validity refers to how well a test measures what it is purported to measure. To ensure the validity and reliability of this instrument and determine if it is in line with my RQs, I sought professional help from educators who have worked in this area of study. These educators were professors of information

systems, professors in management, and a manager who previously had attempted a doctorate degree and has vast knowledge of ways to research.

The designed interview guide that I prepared was comprised of structured, open-ended questions that enabled me to obtain each participant's unique descriptions and explanations of beliefs, values, and experiences related to the problems under study. To construct literally means to assemble or build something, or put together different parts to form something whole. With the help of Janesick (2011), I constructed this tool, which included basic, broad, and descriptive questions; follow-up and amplification inquiries; probing; and comparison and contrast questions. When asking respondents to describe an ideal situation, information and attitudes are important. Just as the interpretive questions serve several purposes, they also confirm the investigator's understanding of the respondent's experiences and interpretations, and they extract additional information, ideas, and views. As a qualitative method of research, a standardized open-ended interview protocol was developed for use in the data collection process with the notion that it would make data analysis easy, and make it possible to quickly obtain answers to the same question. The open-ended interview protocol also created an easy pathway to categorize answers to similar questions and the analysis phase. Due to the nature of the research, participants were interviewed via questionnaire in order to collect data that were analyzed without bias to draw the necessary inference. A qualitative approach was employed for this study, which allowed me to send the Interview Questionnaire (Appendix A) via email to the participants and collect data based on their responses. The qualitative method permitted this type of approach and was useful in describing a

complex situation or phenomenon. Using the qualitative method allowed me to study dynamic processes (i.e., documenting sequential patterns and change).

For qualitative research, data typically are collected in a natural setting, which was particularly helpful to this research study for the acquisition of firsthand information from the participants. The qualitative research provided individual case information. Qualitative researchers are especially responsive to changes that occurred during the time a study is being conducted, especially during extended fieldwork and, as a result, may shift the focus of their studies (Creswell, 2007, p. 39). Putting all of the aforementioned strategies together and incorporating them into the design of my interview guide, I felt confident that my RQs would get to the core issues that were relative to the problems under study. Literally, flexibility is the tendency to be able to change or being able to be changed according to the situation. I really benefitted from the flexibility of the design that enabled me to change direction at any time and pursue evolving issues.

Procedures for Recruitment, Participation, and Data Collection

There are five approaches to qualitative analysis: narrative research, phenomenology, grounded theory, ethnography, and case study. These approaches have distinct similarities and distinct differences (Creswell, 2007, p. 2). My analytical tools and the procedures applied to each set of data collected, was the approach used in this study and the thematic analysis. I chose the case study for this qualitative approach in which I explored a case over time through detailed data collection (Creswell, 2007, p. 10). The art of interviewing has taken on a new tone with the advent of Internet inquiry and the interviewing of individuals virtually (Janesick, 2011, p. 99).

Participants who were knowledgeable in the area of virtual education were selected from among the staff members and administrators in the three school districts. The participants answered interview-type questions to determine their perceptions regarding the functionality of their respective district's VEP. Participants were cautioned about bias in their responses regarding the abuse of culture and tradition.

From a quantitative perspective, generally, the larger the sample size—the better the results. For this study, the quality of the information was more important than the quantity of information. In other words, having a large number of participants was not as important as getting the information from several knowledgeable people. Also considered was the time required for completing the Interview Questionnaire (Appendix A) and whether participants were to be paid for their time.

Furthermore, qualitative researchers often were described as being the research instrument because the bulk of their data collection was dependent on personal involvement. Rather than sampling a large number of people with the intent of making generalizations, qualitative researchers tend to select only a few participants who can best shed light on the subject under investigation (Leedy & Ormrod, 2001, p. 102). This enables researchers to find out in depth what they need to know from their participants.

To ensure the quality of the research, it was important that there be no bias in the participants' responses. I planned to create a participant pool of approximately eight individuals, all of whom were stakeholders in the three participating school districts. The participants were able to provide firsthand information about the discontinuation of the SLSD's VEP and the successes of the KSD's and the RSD's VEP.

There were two types of data collection that I believed would be useful and relevant to this qualitative research study—observation and interviews. I chose the interview approach (i.e., a questionnaire was sent to participants via email). This type of data required the interviewing of staff members, administrators, and board members; all participants were stakeholders in their respective school district. My wish was to implement a pilot study prior to the actual study, which often is beneficial to the researcher in addressing the substance of the data, as well as adjusting various aspects of the research process such as the development of interview questions, concept clarification, elements of data collection and analysis, and the honing of procedures (Janesick, 2011). However, because of the difficulties encountered in getting participants, I decided to not conduct a pilot study, but instead, proceed with the main study with the participants that I had. I asked a former professor and former manager, who are experts in their field, to assess my interview questions for appropriateness, and to determine if there was bias in any of the questions.

In this research study, the procedures for recruitment, participation, and data collection were discussed in relation to the protocols that were used for each data source. The data sources included the individual interviews with the participants. The relationships that I established with the participants were the essential part of my methodology. Initially, I tried gaining access to the school district that I decided to research. It was not easy because each individual school district had their own rules and regulations regarding research studies. After obtaining approval from the URR to conduct my research study (Approval Code: 04-17-14-0079670), I contacted the three school

districts. First, I built a community of partners by sending a Research Request (Appendix B) to the three school districts to obtain permission to conduct my research. I enclosed a copy of the approval letter from the Walden University URR, which granted me permission to conduct the research. I also enclosed a copy of the Letter of Cooperation (Appendix C), which they were asked to sign and return if they authorized me to conduct my research study. All three districts responded affirmatively.

Once I was granted approval to perform my research in the participating school districts, I then requested assistance from the research directors in each district to help me select participants for the study. Once my list was complete, I contacted the potential participants via telephone, email and/or letter and explained the importance and purpose of the study, as well as why they were selected. I also guaranteed the participants anonymity and confidentiality and advised them that they would have the option to withdraw from the study at any time without penalty. I contacted them individually until I had the number of participants required for my study. I gave them the option of a face-to-face interview or a questionnaire sent via email; all eight participants chose the email option. The participants were informed about the purpose of the research, and allowed to refrain from answering any question that they did not feel comfortable answering, without providing an explanation. A consent form was sent to each participant via email. Once I received a participant's signed form, I emailed the Interview Questionnaire (Appendix A) to them. In addition, every participant had the opportunity to ask questions prior to receiving the Interview Questionnaire (Appendix A).

I prepared the Interview Questionnaire (Appendix A) using open-ended questions, which allowed me to formulate the questions to the participants in a different way, if necessary. The steps that I provided for the face-to-face interviews provided much flexibility to the participants and provided for safekeeping and proper retrieval whenever possible. I emailed the Interview Questionnaire (Appendix A) to the participants since each had chosen the option of receiving their questionnaire via email; each participant responded at different times. I kept in contact with the participants and promised them anonymity to protect them from any unforeseen act that might arise against them out of this research. The raw data collected were then processed for further activities (i.e., coding, categories, themes, and analysis). I expressed my gratitude to the participants for taking part in my research study.

Data Analysis Plan

In qualitative research, data is normally collected and processed, and the researcher brings meaning into the project by analyzing the collected data (Sargeant, 2012). Sargeant (2012) explained that:

The purpose of qualitative analysis is to interpret the data and the resulting themes, to facilitate understanding of the phenomenon being studied. It is often confused with content analysis, which is conducted to identify and describe results. In the professionalism intervention example, content analysis of responses might report that residents identified the positive elements of the innovation to be integration with real patient cases, opportunity to hear the views of others, and time to reflect on one's own professionalism. (p. 1)

Data for this research study were collected through a completed Interview Questionnaire (Appendix A) that the participant emailed to the researcher upon completion. Once the resulting data were coded, they were categorized and put to themes for each analysis. Following a thorough analysis of the data, the necessary inference was drawn for the purpose of this research study. The strategies of data collection and analysis appeared to be sequential, but they were ongoing throughout the study. Analysis of a system has a broad interpretation, which includes a total life cycle of defining a problem, developing an effective solution for the problem, and implementing that solution as a new system (Semprevivo, 1989, p. 42).

The system analysis indicated that procedures for stages have to be developed and followed to achieve the required solution. For example, the researcher might evaluate the format, timing, volume, quality of input, and outcome of activities or data (O'Brien, 1998, p. 96). When analyzing the data, I employed the philosophical hermeneutics case study which focused on developing an in-depth description and analysis of a case (or multiple cases) approach, and was concerned with the correct interpretation of human expression (Polkinghorne, 1983, p. 4). The most important role I played during the analysis phase was performing a detailed review of each requirement, and approving the analysis by signing off on the requirements (Haag, 2008, p. 320).

Using the aforementioned approach, the first step was to record what had been communicated into a permanent written record, which became the basis for the study; the analysis occurred in the hermeneutic circle (Arunachalam, 2006, p. 31). There was no starting point using this approach, nor were there specific elements that had to be present

for understanding to occur. In other words, the information was clear, concise, and immediately understandable. The hermeneutic interpretation was possible because the text was providing meaning to a reader (Arunachalam, 2006, p. 32).

Each response on the Interview Questionnaire (Appendix A) was coded and the necessary data compared to the saved interviews for accuracy. Just as Sargeant (2012) explained, “an interpretive analysis, on the other hand, would seek to understand these responses by asking questions such as, ‘were there conditions that most frequently elicited these positive responses?’”(p. 1). In addition, Sargeant expressed that:

Further interpretive analysis might show that faculty engagement influenced the positive responses, with more positive features being described by residents who had faculty who openly reflected upon their own professionalism or who asked probing questions about the cases. This interpretation can lead to a deeper understanding of the results and to new ideas or theories about relationships and/or about how and why the innovation was or was not effective. (p. 1)

Sargeant (2012) explained that the three stages prepare the data for analysis, after transcription of the interviews and verification of the transcripts with the recording (p. 1). Specifically, the three common stages are:

1. *Deconstruction* refers to breaking down data into component parts in order to see what is included. It is similar to content analysis mentioned above. It requires reading and rereading interview or focus group transcripts, and then breaking down data into categories or codes that describe the content.

2. *Interpretation* follows deconstruction and refers to making sense of and understanding the coded data. It involves comparing data codes and categories within and across transcripts, and across variables deemed important to the study (e.g., year of residency, discipline, and engagement of faculty). Techniques for interpreting data and findings include discussion and comparison of codes among research team members while purposefully looking for similarities and differences among themes, comparing findings with those of other studies, exploring theories which might explain relationships among themes, and exploring negative results (those that do not confirm the dominant themes) in more detail.
3. *Reconstruction* refers to recreating or repackaging the prominent codes and themes in a manner that shows the relationships and insights derived in the interpretation phase, and that explains them more broadly in light of existing knowledge and theoretical perspectives. Generally, one or two central concepts will emerge as central or overarching, and others will appear as subthemes that further contribute to the central concepts. Reconstruction requires contextualizing the findings (i.e., positioning and framing them within existing theory, evidence, and practice). (Sargeant, 2012, p. 2)

With all possible approaches considered, the thematic analysis was used to answer the specific aims and was based on recommendations. The text was read and reread to verify an accurate representation of the experience. The transcripts were then coded. The thematic analysis was based on a step-by-step process in a nonlinear way, as follows:

1. Responses from the Interview Questionnaire (Appendix A) were grouped into categories—teachers, administrators, and other related staff.
2. Line-by-line coding was used labeling phrases with code names.
3. All like codes were categorized.
4. Categories were gathered for further analysis to draw interrelationships among categories (i.e., themes).
5. Exemplars were chosen to represent the themes and were connected throughout the study to signify the role of change over time, as people improve their understanding of online learning. (Cohen, 2000, pp. 71–83)

Issues of Trustworthiness

Trustworthiness normally is the quality of a person or thing that inspires reliability, and as a result, the quality and trustworthiness of the study were assessed by its credibility, transferability, dependability and confirmability. To this end, in the planning of the study, I took into consideration the aforementioned factors to obtain a quality result for the study (Guba & Lincoln, 1989, p. 32). The quality and trustworthiness of the study were assessed by its credibility, transferability, dependability and confirmability (Guba & Lincoln, 1989, p. 32). Therefore, I framed my research in the realm of the aforementioned factors (credibility; transferability; dependability and confirmability). It was upon the implementation of these factors that the research was credibly conducted.

Credibility

The credibility criterion involves ensuring that the constructed realities of the participants match those represented by the researcher and attributed to the participants (Creswell, 2007, p. 38). Therefore, anything outside the researched conceptual framework should not be employed in the study. The credibility is involved in establishing that the results of the research are believable. The researcher and the participants, therefore, should comply with the protocol to the best of their ability. This is a classic example of quality over quantity. It depends more on the richness of the information gathered, rather than the amount of data gathered. There are many techniques to gauge the accuracy of the findings, such as data triangulation, triangulation through multiple analysts, and member checking. The credibility criterion of this study ensured that the information received from the participants matched those represented by the researcher and attributed to the participants. The criterion was manifested through member checking, which is a critical technique for enhancing the credibility of qualitative research (Creswell, 2007, p. 38).

Transferability

Transferability refers to the degree that the research can be transferred to other contexts; this section is defined by readers of the research (Creswell, 2007, p. 38). The reader notes the specific details of the research situation and methods, and compares them to a similar situation that they are more familiar with. If the specifics are comparable, the original research would be deemed more credible. It is essential that the original researcher supplies a highly-detailed description of their situation and methods. In

qualitative research, detailed information is required to make a viable decision; the information gathered was very detailed, which ensured the quality of the information and the viability to transfer the judgment and applicability of the study to other contexts.

Dependability

Dependability ensures that the research findings are consistent and able to be repeated (Creswell, 2007, p. 38). This is measured by the standard of which the research was conducted, analyzed, and presented. Each process in the study should be reported in detail to enable an external researcher to repeat the inquiry and achieve similar results. This also enables researchers to understand the methods and their effectiveness. The research methods and protocols were made to ensure that the study could be depended on at any time by avoiding bias and unknowledgeable participants.

Confirmability

Confirmability questions how the research findings are supported by the data collected (Creswell, 2007, p. 39). This is a process to establish whether the researcher has been biased during the study; this is due to the assumption that qualitative research allows the researcher to bring a unique perspective to the study (Guba & Lincoln, 1989). On this basis, I used the utmost caution to depend solely on the data provided by the participants to obtain accurate results. An external researcher can judge whether this was the case by studying the data collected during the original inquiry. To enhance the confirmability of the initial conclusion, an audit trail can be completed throughout the study to demonstrate how each decision was made. Confirmability was acquired when the study

was carefully constructed, that there was a pathway to trace the origin of the source, and that the assertions made were clearly defined.

Ethical Procedures

According to dictionary.com:

Ethical is defined as (a) pertaining to or dealing with morals or the principles of morality; pertaining to right and wrong in conduct; and (b) being in accordance with the rules or standards for right conduct or practice, especially the standards of a profession. Ethical literally means doing what is right, treating people fairly, and not intentionally hurting anyone.

By considering all connotations associated with research ethics, there should be a reasonable expectation by those participating in a research study that they will not be involved in any situation in which they might possibly be harmed (Aurelius, 2008, p. 54). In the wake of the research, I requested permission from the Walden University Institutional Review Board (IRB) to collect data after the approval of the research proposal. The IRB granted permission to conduct the proposed research by providing the researcher a consent letter. The researcher then began building a partnership with the institutions where the research was to be conducted. All IRB ethical instructions were followed. According to Swazey, Anderson, and Louis (1993), the National Academy of Sciences has grouped ethical problems into three categories to delineate behaviors in the research environment that require attention. The categories are: (a) misconduct in science, including fabrication and falsification; (b) questionable research practices, such as keeping poor records; and (c) behaviors such as improper touching (sexual

harassment), and violations of government regulations, which are not unique to the conduct of research. (Swazey, 1993, p. 1)

Based on the participants' preference, the interviews were conducted online via email. In advance, I provided the participants with the instructions for the study and an overview of the process. In order to create an atmosphere conducive to obtaining the information necessary for the research, I also made sure that the participants were made to feel comfortable.

Summary

The termination of a progressive VEP due to cuts in federal funding can be a difficult situation for students and educational institutions. Little, if any, research was conducted to find solutions to the problems that arise when funding is lost, or how institutions can financially prepare so they can continue their VEPs when difficult times arise. A case study research approach enabled the proper people to be interviewed and the necessary information acquired. The information was analyzed and interpreted in order to draw the necessary conclusions needed to prevent the same occurrence if and when a similar situation may arise. This could bring a change to the way other educational institutions run their VEPs and prevent future closures of progressing programs. Such a change could benefit not only similar institutions, but also those people whose sole means of furthering their education is through a VEP.

After the research was completed, I worked on the analysis and findings for Chapter 4. Once the data collection was finished, I transcribed the data and used the iterative approach to code the data to simplify it for reading. In Chapter 4, the iterated

coded data were categorized and subsequently put into themes to make the data meaningful to the research.

Chapter 4: Results

The essence of my study was to provide an understanding of the reason the SLSD discontinued its VEP following a cut in federal funding, with a focus on determining the factors involved and what could have been done to sustain it. This was done by examining the protocols used by the three school districts that participated in the study: the SLSD, the KSD, and the RSD.

The following research questions (RQ) guided the study:

- RQ1: What could the SLSD have done to sustain its successful VEP when it encountered financial difficulties due to a cut in federal funding?
- RQ2: What factors or conditions are necessary to successfully sustain a VEP?
- RQ3: What did the management do to sustain its VEP?
- RQ4: What did the management do to terminate its VEP?
- RQ5: What influenced the decision of the SLSD to terminate its VEP?
- RQ6: What role did the effect of technology—in terms of cost, acceptance, comfort, technical problems, etc.—have on the SLSD’s decision to sustain or terminate its VEP after a cut in federal funding?
- RQ7: What recommendations can participants offer based on lessons learned from the closure of the SLSD’s VEP?

The research setting, demographics, data collection, data analysis, evidence of trustworthiness, and results of the study will be presented in this chapter.

Research Setting

Seven of the eight participants who took part in this study still work for their respective school district. One participant changed jobs and works for another school district in Missouri; that school is not part of this study. All participants are residents of Missouri. The inclusion of the different categories of stakeholders in the interview process produced a range of perspectives on the issue of the cut in federal funding during the 2009-10 academic year. In the case of the participants from the SLSD, two of the participants lost their key positions when the SLSD terminated its VEP. They held higher positions in their respective districts, so there was the possibility that they would say things to influence the interpretation of the study, even though I had cautioned all participants to be fair.

Demographics

Demographics is defined as studies of a population based on such factors as age, race, sex, economic status, level of education, income level, and employment, among others (Investopedia, 2015, p. 1). The Association for Qualitative Research (2015) stated that:

Properties of an individual or sample that can be regarded as factual, often used to structure a research sample. These include for example age, sex, social class, working status and geographic location. For qualitative research especially, these are likely to be supplemented (or even replaced) by recruitment criteria that reflect the specific concerns of the project, such as product or brand user ship, attitudes to particular issues, or life stage. (p. 1)

I selected participants based on their level of knowledge in the area under study. All of the selected participants were age appropriate, and there were no gender issues in the quest for selecting the participants. The nature of the research required that the selection of the participants had to be focused on the individual school district that the participant would represent. In addition, because of the nature of the research and the sample size of eight participants for the three school districts participating in the research, participants who were extremely knowledgeable in the subject matter needed to be considered for the study in order to obtain authentic information. This made the selection process even more challenging in that I had to look across all areas within each of the three school districts to select the right participants.

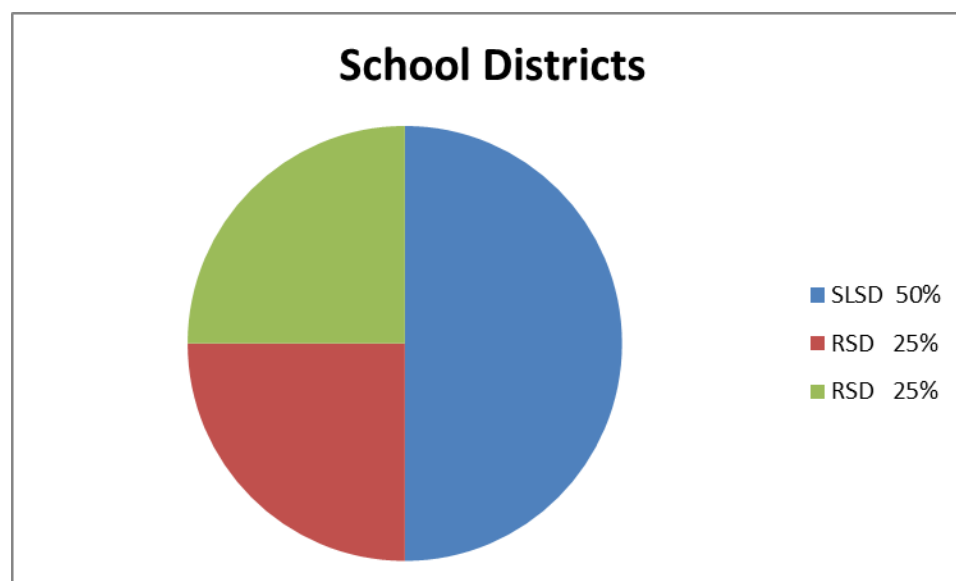


Figure 1. School Districts. Representation of participants interviewed according to the school district they represent.

The participants in the study either worked, or used to work, at the school district they represented. All the school districts participating in the study were in middle-class

areas. Arranging the various categories of stakeholders in the interview process produced a range of perspectives on the issue under study. After using the research protocols to recruit the participants, the participants agreed to use a structured interview, which is a form of interview that the researcher had already prepared. The structured interviews were termed as formal, while the unstructured interview was characterized by asking any question at any time and were termed as informal. The Interview Questionnaire (Appendix A) was emailed to participants upon receipt of a signed consent form, and all participants completed the questionnaire to the best of their ability.

Data Collection

The case study approach was used because it was thought it to be the best methodology to provide an in-depth perception on the subject matter of this research study. This section consists of the findings of analyses of three sets of data documented from interviews with participants from the participating school districts. During the 2013-14 academic year, I contacted the three school districts and requested permission to conduct a comparative research study to find out why the SLSD did not continue its VEP after a cut in federal funding during the 2009-10 academic year. I sent a Research Request (Appendix B), along with a Letter of Cooperation (Appendix C) to each school district. The Research Request (Appendix B) explained the research and sought permission from each school district. If the school districts agreed to participate in the study, they were asked to sign the Letter of Cooperation (Appendix C) and return it to me. Once the executed Letter of Cooperation (Appendix C) was received from each school district, I began the process of selecting participants.

Participants were recruited based on their experience in the district in which they worked; this was a good example of using selection criteria. The participants were current and former employees of the three participating school districts. I telephoned the research director for the SLSD who assisted me by providing recommendations of potential participants whom she believed to be knowledgeable in the field being researched. I selected four names from the list, which consisted of current and former administrators and computer technologists. The same approach was used with the research director for the KSD, who provided me with a list of potential participants whom he believed to be knowledgeable in the field being researched. I selected two names from the list of current and former employees and chose two technology administrators for the study.

Once again, the same approach was used with the research director for the RSD, who provided me with email addresses and phone numbers of potential participants whom he believed to be knowledgeable in the field being researched. I selected two names from the list of current and former employees and chose two technology administrators for the study.

After the selection process, I contacted each participant via telephone to introduce myself and explain the study. A consent form was sent to each participant via email, and the participants emailed the executed forms back to me. Once the executed consent form was obtained, the Interview Questionnaire (Appendix A) was emailed to the participants. I continued to send gentle reminders to the participants until all completed interviews had been returned. I felt this was important because, in the event a participant was unable to fulfill their commitment at any point during the interview process, I could find a

replacement. Moreover, I believed that building trust with the participants was important to obtain their cooperation.

The study participants were not the least bit curious about my identity, but were more concerned with the purpose of the study. In general, participants considered the study necessary and were cooperative and eager to share their experiences. In one case, a participant could not answer all the questions, but was able to provide enough information relevant to the study. The Interview Questionnaire (Appendix A) was prepared by me and was structured using open-ended questions. The responses were provided by participants according to their own experiences.

Data Analysis

In a quest to process data, Responsible Conduct of Research (RCR) stated that “data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data” (2005, p. 1). This means that analysis of data is a process of inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making (RCR, 2005, p. 1). The information gathered for the study related to the decision made by the SLSD, the KSD, and the RSD on whether to continue or terminate their respective VEP after the cut in federal funding during the 2009-10 academic year. Data were analyzed through detailed description, category, direct interpretation, establishment of matches and patterns, and development of common-sense meaning. I provided a detailed description of the data and the meanings that emerged. Through the process of *categorical aggregation*, instances, impressions, and ideas were

put together to form a meaning. In doing this, I coded the records, and similar ideas and impressions were put together in a single class to form a meaning. The process of *direct interpretation* allowed me to identify meaning as a finding from an answer provided by a participant.

The data integrity was strongly considered, and it was a concern because the results and the findings of the research largely depended on the information collected. RCR (2005) expressed that “an essential component of ensuring data integrity is the accurate and appropriate analysis of research findings” (p. 1). RCR also stated that “improper statistical analyses distort scientific findings, mislead casual readers and may negatively influence the public perception of research” (p. 1). Since information was gathered through questionnaires, I coded the transcripts and aggregated how often an idea appeared in a particular manner to show patterns. By so doing, I made assertions and conclusions based on my understanding deduced from the data. Therefore, the analysis and findings do not consist only of facts, but also of my interpretation of the data to make the case understandable. This is how a researcher of a case study should strategically function (Stake, 1995, p. 46).

The notion of doing common-sense interpretation is that the researcher provided detailed facts to allow readers to make their own assertions, interpretations, and/or conclusions. Please note that the findings were based on an analysis derived from the comprehensive approaches to qualitative interpretation. The findings of the research were validated through the use of multiple sources of data, description, and peer review.

Participants were assured of anonymity and confidentiality concerning the information they provided during the interview process.

Coding

The interview transcripts were analyzed through detailed description, category, direct interpretation, use of patterns, and common-sense generalization. I applied the comparative analysis approach to iteratively code the emerging ideas. Study participants cannot be identified in any way due to the privacy and security rules of Walden University. The names of the school districts and the participants were coded in letters and numbers to prevent identification of the participants. Participants for the SLSD were coded as *SLSD* and the first name on the list, as indicated above, was identified as *SLSD1*, and so on. Likewise, the participants from the KSD and the RSD were coded as *KSD* and *RSD*, respectively, and the first name on the list was identified as *KS1* and *RS1*, respectively.

Raw data were collected from the Interview Questionnaire (Appendix A) and processed. The data were summarized, coded, categorized, and analyzed to give resolution to the research. The responses to the Interview Questionnaire (Appendix A) were iteratively coded after a careful summary of the data were collected and retained the core value of the data. The iterative coded transcripts for the three school districts participating in the study were carefully aligned in order.

These processes were ideas derived from the data in abstraction through the iterative process. The initial codes were further regrouped with similar ideas combined to form categories. In this case, *SLSD1*, *SLSD2*, etc. became *SLSD*. The same was done for

KS1 and RS1—they became RSD and KSD. All answers to the questions were grouped into categories.

The List of Questions and Derived Themes (Appendix D) displays how the categories were applied to the RQs to form themes and create an understanding of the criteria used to decide whether to continue or terminate the respective VEPs. Codes were developed from the abstraction of the data. I combined all of the coded like terms to develop the categories that were put into themes. The categories helped in creating the themes and the questions in the List of Questions and Derived Themes (Appendix D) which, in turn, helped in the understanding of the effect that the cut in funding had on the Missouri school districts as a whole.

Evidence of Trustworthiness

Credibility

As proposed, steps were put in place to ensure the credibility of the findings, and that the representations that I put in the transcripts of the interviews matched the constructed realities of the participants (Guba & Lincoln, 1989); this was addressed primarily through member checking. In each instance, the interview transcripts were returned to participants for review as a means of ensuring that their ideas and expressions were accurately captured (Creswell, 2007; Guba & Lincoln, 1989; Stake, 2010). The developing construct was monitored throughout the process, and analytical 99 memos were kept as a means of recording thoughts and observations as they occurred (Guba & Lincoln, 1989). This process of progressive subjectivity, as described by Guba and Lincoln (1989), was a way of ensuring that the constructions articulated by participants

were integrated and represented into the findings, and that the conclusions drawn at the end of the process were, indeed, the result of a collaborative effort between the researcher and the participants (Guba & Lincoln, 1989).

Transferability

As indicated in Chapter 3, transferability refers to the degree in which the research can be transferred to other contexts. This section is defined by readers of the research study. The solutions to the study are simplified in a way that when a reader notes the specific details of the research situation and methods, and compares them to a similar situation that they are more familiar with, they can be more easily compared. This was done so that if the specifics were comparable, then the original research would be deemed more credible. It is essential that the original researcher supplies a highly-detailed description of their situation and methods. As far as the transferability criterion is concerned, efforts were made to make the research viable (Guba & Lincoln, 1989).

Dependability

The research process was characterized by careful documentation and recording of constructions as the study continued. The option of choices, decisions made with respect to the participants, the interviews, challenges and opportunities were documented as a means of ensuring dependability (Guba & Lincoln, 1989). Attention was given to ensuring that the building of the study was grounded in an original source, and that clear links were established between the conclusion drawn and the data sources.

Confirmability

The research process was characterized by careful documentation and recording of events as they continued to unfold. Methodological choices, decisions made with respect to the participants, the interview settings, challenges, and opportunities were documented as a means of ensuring dependability (Guba & Lincoln, 1989). Attention was also paid to ensuring that the constructs developed in the study were developed from an original source, and that there were clear links between the conclusion drawn and the data sources. In this way, the confirmability criterion was addressed (Guba & Lincoln, 1989). As indicated previously, data were collected in the form of the responses given by the participants through email correspondence.

Study Results

Research Question 1

The purpose of RQ1 was to find out what the SLSD could have done to sustain its successful VEP when it encountered the cut in federal funding during the 2009-10 academic year and compare it to two other Missouri school districts that were equally affected by the cut, yet were able to sustain their VEPs. RQ1 sought the reaction of the three participating school districts, as well as their ultimate decisions. The analyses of the data collected indicated that each of the three school districts took action, had a different approach, and ended with a decision that either enhanced or affected their particular VEP. The SLSD responded as follows:

In the wake of the cut in federal funding, the SLSD proposed to adjust its VEP to cut costs. Discussions included serving fewer students, discontinuing the full-time

program, and discontinuing the face-to-face component of its VEP model. Stakeholders were not pleased with the modification and wanted to sustain the VEP; however, the VEP was terminated 3-4 months before concerned parents of high school students started to comment about the closure, due to the limited options to students for a make-up and credit recovery program.

The KSD reacted as follows:

The KSD implemented a salary and hiring freeze in order to minimize budget impacts. Their VEP was maintained by the administration as it provided a cost-effective way for students to obtain additional semester credits. The KSD also belonged to a consortium that allowed students from other districts to take online courses offered in the KSD, which provided the district with an additional revenue stream. As a result, the KSD's VEP remained in place. The students' respective district paid the tuition for each student enrolled. Teachers were offered a stipend for developing an online course that would be offered to the consortium.

The RSD reacted as follows:

The RSD did not receive significant federal funding; therefore, the funding cut did not have an impact on their VEP. The RSD's continuation of its program was not driven by federal funding but, rather, by a curricular need. There were students who were required to take courses that the RSD was unable to offer. Asking students to travel created a significant hardship for students because they could possibly miss significant time in other classes as a result. The RSD has continued to offer online courses when the situation makes the most sense to do so, including courses for Algebra II, Trigonometry,

and German to middle-school students. There are students who take Calculus II and Calculus III through a local junior college. The RSD's VEP continued despite the cut in federal funding, and the district worked out a plan to utilize the least expensive technical solution possible and still meet the needs of its students.

Research Question 2

The purpose of RQ2 was to determine what factors or conditions were needed to run a sustainable VEP, and whether the participating school districts met the application of those factors. The analysis of the data collected indicated that all three school districts outlined the factors needed to run a sustainable VEP, and expressed their concerns as to the factors involved in maintaining the program. The SLSD responded that the factors needed to run a sustainable VEP were the following:

There is the need for money, students, staff, resources, technology, and a location for a face-to-face component. The SLSD used a blended model for its VEP, which means that students and families were required to meet face-to-face with their instructors three or more times a week. Therefore, the SLSD needed a location in order to accommodate the face-to-face meetings. The SLSD needed its student information system to be able to talk to its virtual course providers' student information center regarding grades and attendance. The SLSD needed their staff to market the program. The biggest challenge to maintaining the VEP was having the support of the superintendent.

The KSD responded that the factors necessary to run a sustainable VEP included an effective learning management system; rigorous course content; cost-effective, but easy-to-use, online learning platform; student support; and constant review of course

content. The KSD met all of the foregoing factors, and did not experience challenges in applying these factors as they were requirements that were put in place when it implemented the VEP and developed courses. By setting rigorous expectations prior to embarking on the VEP, it was an easy decision to sustain the program after the cut in federal funding because it was a cost-effective way to support learning and benefit the students.

The RSD mentioned that the key to success in a VEP was to have the support of the administration. The resources utilized were software applications that were operational and already in place in the district. They believed one of the keys to a sustainable program was using resources that were already in place and funded. The application originally utilized was Microsoft Communicator and was free. They have since transitioned to Microsoft Lync, which is used across the RSD for a variety of other applications. The RSD went for specialized programs, which are conducted only online and, since the resources utilized were not funded through federal programs, there was no issue with sustaining its VEP.

Research Question 3

The purpose of RQ3 was to find out what steps the management of the respective district took to sustain its VEP. The three participating districts each had their own way of dealing with the situation. The data collected from the districts were individually analyzed as follows:

The SLSD expressed that it was difficult to get support from managers outside of its VEP. Some administrators were traditional and did not support virtual schools;

however, it was certain that they clearly understood the benefit to the students who, for whatever reason, had not been successful in a traditional brick-and-mortar school. The superintendent made the decision to terminate the VEP based on the budget.

The KSD reported that it had high expectations for its VEP, and the administration was a vital part in continuing the funding for the program. They saw the value and benefit of the program, ensured that the budget was available, and made the decision to sustain its VEP. The RSD expressed that its curriculum department and administration supported its VEP because they saw the need to provide online learning opportunities for students. The management showed interest in sustaining the program because it provided additional opportunities for students.

Research Question 4

The purpose of RQ4 was to find out what the three participating school districts did to either terminate or sustain their respective VEP, while considering all possible options to sustain the program. Each district made a different decision based on how its management handled the cut in federal funding. The management decision from the SLSD was as follows: The superintendent made the decision, based on the budget, to terminate the VEP—there was no back-up plan. The main purpose for this was the lack of an additional funding option. Missouri offered a virtual school (MoVip), to provide students with an alternative, although at the time, unaccredited districts had to pay for students to attend MoVip.

According to the data collected, the KSD indicated that the administration did not terminate its VEP because it already considered it to be a viable program that benefitted

students, and would do so in the future, as well. As a result, it was included in the district's budget. The RSD decided not to terminate its VEP and has continued to run their program. They felt it was important to sustain the program as it provided opportunities for students.

Research Question 5

The purpose of RQ5 was to find out what influenced the decision of the SLSD to terminate or abandon its VEP by comparing it to the KSD and the RSD. This section explains the factors that influenced the decision by the various school districts to either abandon or terminate their respective VEP after a cut in federal funding. The data collected from the participating school districts indicated that each district's decision was different. The following is the analyzed data from the participating school districts:

The SLSD explained their factors as follows: The budget to sustain the program currently and in the future, coupled with the quick growth of the program, seemed very expensive to the district to handle. In addition, Missouri provided MoVip, which made it quite reasonable for the SLSD to terminate its VEP. In other words, it was believed that the district could not afford the budget required to sustain the program based on the quick growth it had experienced. Meanwhile, Missouri offered another option—MoVip. Most stakeholders were very disappointed that the VEP was terminated.

The data from the KSD indicated that, with their shift toward more rigorous learning, the district saw the opportunities a VEP could provide. The factors necessary to run a sustainable program included an effective learning management system; rigorous course content; a cost-effective, but easy-to-use, online learning platform; student

support; and constant review of course content. The KSD met its requirement and sustained its VEP because of the benefits and prospects to students. The analyzed data indicated that the success of the KSD's program has been great. Students, teachers, counselors, administrators, and parents are happy with the program.

The analyzed data from the RSD indicated that the key factor was having support from administration. The resources they utilized were software applications that were already in place. The RSD believed that one of the keys to a sustainable VEP was using resources that were already in place and funded. The original application used by the RSD was Microsoft Communicator and was free. They have since transitioned to Microsoft Lync, which is used across the district for a variety of applications. VEPs are in high demand when districts offer specialized programs (e.g., German language). The majority of stakeholders were supportive of the VEP; however, there were stakeholders who would like to move to a different platform with both synchronous and asynchronous capabilities, and are looking at Google Apps for Education with Google Hangouts to support this type of program.

Research Question 6

The purpose of RQ6 was to find out the role technology had on the decision to terminate or sustain the SLSD's VEP after a cut in federal funding, by comparing it to the KSD and the RSD. According to the data collected, the three school districts indicated different approaches and effects on the use of technology in their particular VEP. Even though the three school districts had different approaches and effects from the use of technology, they all embraced technology as an essential part of their respective VEP.

The findings regarding the effect of technology on the SLSD's VEP is explained as follows: The technology was certainly an integral part of the program. The district's tech department was supportive, and provided all the technology needed; cost was not a factor. They obtained plenty of technology through a grant. The cost per pupil was expensive. Although it was a beneficial option for many students, the SLSD believed it was too expensive. There were no technological issues. In the district's brick-and-mortar locations, they were able to use the district's Wi-Fi. The SLSD loaned laptops to students, and the virtual course provider paid for Internet access at the homes of students who could not otherwise afford it.

According to the data analysis, the KSD used the virtual environment that Blackboard provides, which is an ideal environment for online learning. It was an easy decision to go with Blackboard and sustain the online program. The KSD incurred some additional cost by switching to Blackboard; however, the benefits outweighed the cost. The implementation of technology was not a problem since the online environment can be accessed at any time (i.e., there are no set class times). Internet service failure is not an issue as it can be accessed later. From a user standpoint, there have been few technological issues that hindered the VEP. The participants from the KSD were interested in technology.

The RSD did not receive federal funding; therefore, the effects of the cuts on the district were nonexistent. Technology incentives were no problem. They were using technologies that were part of our normal district technology portfolio. Because their VEP utilized technologies that were not part of a specialized VEP, cost was not a factor

in the decision-making process. For the most part, technological tools were not a problem. They did incur a few problems in certain years because the design of the course locations required computers and cameras to be moved and set up every day.

One of their biggest issues dealt with scheduling. Because courses were mostly offered in a synchronous plan, schedules for multiple schools had to remain the same. At times, principals would choose to modify their schedule, making a synchronous program impossible or, at best, difficult. They had people involved in the decision-making process who were not concerned about technology in any way, but who wanted only to see additional course offerings available to students. This can be problematic because they were making decisions that the current technology could not accommodate. It is crucial that the decision makers at least be willing to talk through the capabilities of the technology being used in order to ensure that it will meet the requirements of the program.

Research Question 7

The purpose of RQ7 was to obtain recommendations from participants based on lessons learned from the closure of the SLSD's VEP. The answers consisted of the necessary recommendations as to how the participating school districts were under contentions and went through with the effect of the cut in federal spending, and helped to determine what to do in the world of online education should a similar situation ensue.

The analyses from the data collected from the three school districts are below.

The following is the data analysis from the SLSD:

- The district recommends that you have support from the superintendent and several cabinet members.
- Make sure the program can be sustained regardless of who is in power.
- Make sure you have high-level support from the district.
- Make sure the funding is in place.
- Do a 5-year and 10-year projection.
- Take 1 year to just plan.
- Survey your audience to determine needs.
- Market your program.
- Do your research regarding virtual school course providers; some are better than others.

The following recommendations from the KSD were taken from the analyzed data:

- Ensure that the learning environment is easy to use for the teachers and the students.
- Ensure that the course content goes through a rigorous evaluation process before being published for enrollment.
- Ensure that students know what is expected of them from an online course in terms of rigor and time commitment.
- Rigorous course content is a make-or-break for sustaining a VEP. The course cannot be too easy for students, or the program will eventually fail.

- Online learning is the key to preparing students for 21st century learning. The online and blended learning formats will be promoted to prepare students.
- In 2014, our Personal Finance class switched to a blended format. This is a class required for all students, so all students will now take part in online learning.

The following recommendations from the RSD were taken from the analyzed data:

- Make sure those involved in the VEP understand the capabilities and limitations of the technology being used, and should also understand the implications of implementing synchronous and asynchronous programs; this is paramount to the effective implementation of a VEP.
- Ensure that the technology department is not the driver of the program; this should be done by the curriculum department or administration. The capabilities and limitations of technologies have a direct impact on programs, and can cause them to succeed or fail. An online program can be implemented utilizing free online resources. There is still a requirement for putting a basic network infrastructure in place; however, an infrastructure needs to be put in place for other resources.
- The main issue would be how the content will be presented. If the content will be distributed through a synchronous teacher working in a fairly traditional program, appropriate camera and audio capabilities must be utilized. If the content is going to be stored online in a saved video or text format, there must

be a plan in place as to who will develop the content or where the content will be purchased.

Summary

The answers to the RQs largely reflected the purpose of the study. The purpose of this research study was to find out what the SLSD could have done to sustain its successful VEP when it encountered the cut in federal funding during the 2009-10 academic year and compare it to two other Missouri school districts that were equally affected by the cut, yet were able to sustain their VEPs. The research sought the reaction of the three participating school districts, as well as their ultimate decisions. In the wake of the cut in federal funding, the SLSD proposed to adjust its VEP to cut costs. Discussions included serving fewer students, discontinuing the full-time program, and discontinuing the face-to-face component of its VEP model. Stakeholders were not pleased with the modification and wanted to sustain the VEP; however, despite everything, the VEP was terminated. The KSD implemented a salary and hiring freeze in order to minimize budget impacts. The online learning program was maintained by the administration as it provided a cost-effective way for students to obtain additional semester credits. The RSD did not receive significant federal funding; therefore, the funding cut did not have an impact on their VEP. The RSD's continuation of its program was not driven by federal funding but, rather, by a curricular need. The RSD and the KSD survived; however, the SLSD did not survive. Chapter 5 entails my discussions, conclusions, and recommendations formed through carrying out this study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to find out why the SLSD could not maintain their VEP when there was a cut in federal funding during the 2009-10 academic year. The nature of the study needed a qualitative approach, which involves the researcher going to great lengths to find out what actually happened. The study was conducted to find a resolution to what went wrong, so that the resolution will be the beacon of light to save a program, should a similar situation happen again. The key finding in this study was that the SLSD tried many approaches to maintain its VEP, including applying some of the strategies recommended in the literature review, but still did not have the budget necessary to sustain the VEP. As a result, the SLSD's VEP was terminated. The KSD, on the other hand, made the VEP a priority and cut costs from other areas to get sufficient funds to maintain the program. The RSD did not depend solely on the federal funding to run its VEP. The RSD saw the benefit of the VEP to the student and put it in their budget. The SLSD closed its VEP, while the VEP in the KSD and the RSD survived.

Interpretation of Findings

Interpretation can be termed as an explanation or conceptualization by a critic of a work of literature, painting, music, or other art form (Farlex, 2012, p. 1). This can be done by using logic as an allocation of significance to the terms of a purely formal system, by specifying ranges for the variables and denotations for the individual constants (Farlex, 2012, p. 1). In the course of the funding cuts, the participating school districts reacted in different ways and obtained the results according to their reactions. The SLSD tried to remold their VEP by removing some of the activities, such as face-to-

face meetings, in order to cut down costs so that the program could continue, but that did not work. The SLSD terminated its VEP. The KSD put a freeze on hiring in order to have a positive impact on the budget—and it worked—their program continued. The RSD felt no effects from the funding cuts because its program was not dependent on federal funding. The RSD ran its VEP regardless, because it felt the program was for the benefit of the students. This clearly indicated that all three school districts were running a similar VEP; each simply had a different source of funding.

The participating school districts presented their views on how to run a sustainable VEP. Interestingly, their views were quite similar. The facts and thoughts of the SLSD indicated that there was the need for money, students, staff, resources, technology, and a location for a face-to-face component. The SLSD also applied a blended method that resulted in students and parents meeting the course instructor. The blended system was necessary for them, as well as the classrooms and meeting places. The SLSD needed a student information system to communicate with the information systems of the course providers about grades and attendance. The SLSD also needed to market its VEP to attract more participants.

The KSD asserted that running a sustainable VEP required an effective learning management system; effective course content and student support; a cost-effective, but user-friendly, online learning platform; and continued review of course content. The RSD indicated that having support from administration was a key factor. The resources they used were typically software applications that were operational and already built into the district.

The three participating districts each had their own way of funding their programming. The SLSD explained that it was difficult to get support from managers outside of its VEP because some administrators were traditional in their thinking and did not support the concept of virtual schools, even though they clearly understood the benefit to the students. The KSD reported that the high expectations it had of its VEP were upheld. The administration played a vital role in continuing the funding for the program because they saw the value and benefit to the students. The RSD expressed that its curriculum department and administration supported its VEP because they saw the need to provide online learning opportunities for students. The management showed the support necessary to sustain the RSD's VEP.

The superintendent of the SLSD made the decision based on the budget available to terminate the program because it was growing at a rapid pace—there was no back-up plan. The state of Missouri offered a virtual school (MoVip) although, at the time, unaccredited districts had to pay for their students to attend. The KSD indicated that its administration did not terminate or abandon its VEP because it had already seen the program as being viable and of great benefit to the students. As a result, it was included in the district's budget. The RSD continued to run its VEP, which was made possible because of the support from the management and the administration. The RSD saw the benefit and the need to run its VEP for the sake of the students, so the management and the administration supported it.

The SLSD indicated that the budget to sustain the VEP, based on the rapid growth of the program, would be expensive. The fact that Missouri also provided MoVip made it

convenient for the district to terminate its VEP. It was felt that the SLSD could not afford the budget necessary to sustain its VEP. This was disappointing news to the stakeholders because they were not part of the final action taken by the district. The KSD expressed that data indicated a shift toward more rigorous learning, which were opportunities a VEP could provide. The KSD met all the factors needed to run a sustainable VEP. The RSD asserted that one of the keys to a sustainable program was using resources already in place and funded. Support from administration was a huge factor, and having a built-in system that was operational and already in place was also important.

The SLSD felt that their technology department provided the technology that was needed and were supportive. They had no technology issues. The cost of technology was not a factor because they received plenty of money for technology through a grant. The cost per pupil was expensive; however, it was a beneficial option for many students. The district felt it was too expensive. The data analysis for the KSD indicated that the virtual environment provided by Blackboard is an ideal environment for online learning. It was an easy decision to go with Blackboard and sustain the VEP. The KSD incurred some additional costs by switching to Blackboard; however, they believed the benefits of running the VEP in the school district outweighed the cost. The RSD asserted, again, that by not having to rely on federal funding, the effects of the cut were nonexistent. They were using technologies that were part of their normal district technology portfolio.

Based on the data analyzed, the SLSD had the following recommendations:

- Ensure that an online education program has total support from the superintendent and several cabinet members.

- Ensure that the online education program can be sustained, regardless of who is in power.
- Make sure you have high-level support from the district.
- Make sure the funding is in place.
- Do 5-year and 10-year projections.
- Take 1 year to plan the program.
- Survey your audience to determine needs.
- Market your program well.

The KSD offered some recommendations which will ensure that the learning environment is easy to use for teachers and students. The course content should go through a rigorous evaluation process before being published for enrollment, so that students know the expectations of an online course, both in rigor and time commitment. The support from the management and administration should be very encouraging. The RSD recommended ensuring that the people involved in the VEP understand the capabilities and limitations of the technology being used. Everyone involved should understand the implications of implementing synchronous and asynchronous programs; this is paramount to the effective implementation of an online learning program. In addition, ensure that the technology department is not the driver of the VEP, personnel from the curriculum department or district administration should be the drivers.

Limitations of the Study

Limitations are those characteristics of design or methodology that impacted or influenced the application or interpretation of the results of the study (Labaree, 2013, p. 1). The study's limitations were in the area of the research over which there was no control, such as the inability to obtain the required information from a participant.

Limitations are the constraints on generalizability and utility of findings that are the result of the design of the study and/or the method used to establish internal and external validity (Labaree, 2013, p. 1). This study was built on objectivity rather than subjectivity, thereby focusing more on the quality rather than the generalization. I cautioned the participants to provide accurate responses to the best of their ability because they were the chosen few, and the quality of the findings of the research would be dependent on their answers.

Another limitation would be full or partial bias on the part of a participating teacher or administrator who was not in favor of online learning and might have exaggerated or otherwise tainted the authenticity of this research study. Participants were advised that truthfulness and quality were important to this research study; therefore, their responses must be factual. If there was any concern about the data received, it would be excluded and I would address the reason for the exclusion with the participant. The data collected were consistent with participants from the same school district.

Recommendations

Priority in Running an Institution

Running an institution is a challenging task in and of itself; prioritizing the activities and affairs of the institution can make it even more challenging. Programs and activities are placed in order according to preferences and are executed in that same order. Sela (2005) stated that:

To the extent that the president of any institution of higher learning (but, in particular, of a center of scientific research) takes upon himself the responsibility not only for maintaining but also for accelerating the rate of his institution's progress, I would say that after nearly a decade of such experience that three main ingredients are involved: the right people, enough space, and adequate funds.

(p. 1)

The way the SLSD looked into the future through the eyes of online education was totally different from that of the other two school districts. The KSD and the RSD made online education their priority, while the SLSD had different priorities. In the future, before an educational institution sets up a VEP, it should make sure that there are sufficient funds to run the program and devise ways to make the online program financially successful so that dependency on government funds is not a factor. Or, if government funds are necessary, there should be sufficient cash reserves that would sustain the program in the event of a cut in funding.

Back-up Plan

In any project or establishment where there will be an ongoing program, there is a need to have a back-up plan in case problems ensue. Darter (2014) stated that:

In the project manager's life, 'backing up' has many different meanings—and making sure that you do them well can help your project and your project team succeed. Here are three different kinds of 'backups' that you need to keep in mind during a project. Make sure that you know the best practices and the best processes so that you can back up successfully in all the different ways you need to. Everyone on the project should have a backup resource, especially the project manager. (p. 1)

The KSD and the RSD had already made the decision to continue to offer their respective VEP, regardless of the cost. Their focus was on the future of the students, so they were prepared to do everything in their power to sustain their respective VEP. That was not so with the SLSD, as it depended solely on the federal funds to run its VEP and had no back-up plan of any type in place. A contingency plan is necessary when running *any* business. Because the SLSD did not have a contingency plan, when they were hit by the sudden cut in federal funding there was no way their VEP could continue because there was no safety net in place. The flourishing program had to be terminated because there was no other option of funding available. This is a huge lesson for institutions and businesses. There should always be a contingency plan in place so that when the first means fail, the second option can kick in.

Interest of Decision Makers

Psychologists find evidence about decision making that is not true. People act in their own best interests, according to traditional views of how and why people make the decisions they do; however, psychologists have recently found evidence that this assumption is not necessarily true (Colman, Pulford, & Ross, 2008, p. 1). Colman et al. (2008) stated that: “most of us will act in the best interest of our team—often at our own expense” (p. 1). The contingency theory asserts that when managers make a decision, they must take into account all aspects of the situation at hand and act on those aspects that are relevant and key to the situation at hand (McNamara, 2013, p. 3). The SLSD was already affected by the cut in federal funding, and some of its administration did not fancy the VEP; so terminating its VEP was an easy fix. However, the KSD and the RSD adjusted and made up their minds to continue their respective VEP at all costs, because they felt it was beneficial to the students. The interest of the stakeholders must be researched before implementing any program. If the members of the team implementing a program are not like-minded in their vision, no program will ever work and the decision-making process can become extremely difficult.

Stakeholders’ Involvement in Decision Making

Stakeholders’ involvement in the decision-making process is vitally necessary to any organization. Team reasoning is a familiar process and it predicts decision making more powerfully than experimental game theory in some games (EurekAlert, 2008, p. 1). Unlike the KSD and the RSD, which had already decided to continue their respective VEP, the SLSD had only a select group consisting of a few top-ranking administrators to

participate in the decision-making process with the new superintendent. One outcome of the SLSD's decision to terminate its VEP was a lot of extremely disappointed parents who realized that their best option to speed up and accelerate their child's education was no longer an option at all. A study should be done because it is important to determine how the stakeholders' involvement in the decision-making process could have turned the final decision around.

Superintendent/Cabinet Deliberate Before Decision Making

For safety reasons, in the event a similar incident should occur in the future, a study should be done to find out how the superintendent and cabinet's debate and voting on issues can have positive effects on the ultimate decision. Stakeholders should be part of the decision-making process so that there are no surprises. However, stakeholders must be educated about what is going on, and they must be subjected into debate followed by voting, if necessary.

Feasibility Study Before Implementation

A feasibility study should be performed before a program is implemented. The analyst might recognize many potential issues, pass on recommendations, or caution the authorities about certain problems that possibly could arise before the program is implemented. The analyst can only analyze the situation and present it to the director of the project, but to execute the project is dependent on the director of the project.

Availability of Funds Before Program Starts

Using the example of what happened with the SLSD, researching the cost of maintaining a program and determining what funding is available to ensure that there will

be sufficient funds to run the program for years to come before implementing the program would be beneficial. Doing this will protect the program from sudden cuts in funding which, as we have seen, can affect an entire school district. The financial status must always be kept sufficient to cover for a reasonable number of years while the program directors continue to solicit for funds to maintain the program and secure it from any sudden financial hit or crush.

Implications

Implications for Social Change

Since technology and online education are helping and contributing to students achieving educational goals, I think institutions should make a VEP a priority. Running a VEP in a district with the right incentives will encourage participation by people in the district, as well as outside the district, to take advantage of the VEP and enroll in classes. Asking people to look for a VEP outside their own school district will not encourage students to make use of it. Schools are made to benefit students; therefore, students' interest should be considered first, just as the KSD and the RSD did when making the decision to sustain their VEPs. If the SLSD had made the bold decision to continue their VEP by every consideration; it would still be serving many more students in the district. The SLSD's VEP was already growing at a rapid pace during the year before it terminated.

Sustaining the VEP would have increased the graduation rates of every high school in the district, because students would have been able to take online classes for credit recovery. This shows that VEPs help students now and in the future; therefore,

every possible effort should be put forth to run a successful VEP in every district, so that no students are left behind. Having a VEP is important; it can be used by the students as a tool to assist them in determining their future. The research also opened doors for those who still do not want to embrace any technological advancement to be educated. If many of those were educated in the SLSD, the decision to terminate the VEP could have been different.

This research study will inform people of the importance of online learning programs in this modern era where technological advancements have moved activities online. This includes virtual schools that serve in diverse ways, including working from the comfort of one's home—at leisure—and using it as a credit recovery school that will allow high school seniors to move on along their career paths. Virtual learning also serves as a cost-effective program because it cuts down on transportation cost for students and even some staff.

This research study will educate stakeholders at other institutions so that they will know what to do if encountered with a situation similar to that of the SLSD. It also will assist them in putting in place a better plan so that they can be self-sufficient and not have to rely on federal funding and terminate their online learning program unnecessarily. Even though there was the option of MoVip, there is nothing like having your own program tailored around the traditions and cultures of your institution.

Stakeholders' Role

Stakeholders play an important role in any project or establishment; however, the willingness of stakeholders to perform the activities assigned to them during the project

planning process greatly contributes to the success or failure of the project (Nordmeyer, 2015, p. 1). The concerns of stakeholders toward a project make them quite different from other entities who might be involved in one way or another. The best way to handle stakeholders is to be proactive and transparent.

An important factor to note is the importance of the inclusion of stakeholders in the decision-making process. In the case of the SLSD, had the stakeholders been involved and asked to express their opinions and concerns, they could have held some emergency brainstorming sessions and perhaps come up with options on how to make the VEP work, rather than simply terminating the program. Including the stakeholders in the decision-making process is necessary and must be noted, but at the end of the day, stakeholders are affected most by every decision made regarding the institution they represent. If they are part of the decision-making process, nothing will come as a shock to them, and they will have the opportunity to be a part of every decision made.

Management Support

Teleworktoolkit.com (2009) stated that, “before establishing goals and policies, it is important to clearly understand where executive management stands on the issue of telework. There should not be any misunderstanding about this as management’s position can have a significant impact on the program” (p. 1). Measures should be put in place to protect the management so that the superintendent is not making solo decisions on big issues, such as the termination of a VEP. Management was involved in the decision-making process to implement the VEP, and should have been involved in the same decision-making process when thought was being given to terminate it. Granted, there

was the concern of financial difficulties; however, a few brainstorming sessions may have fixed that. It was clear from the data collected from the SLSD that there was a mixed interest in the administration about the running of the SLSD's VEP. Institutions of higher education have found that online programs are essential in providing access to education for the populations they wish to serve. In order for an online program to be successful, the curriculum, the facilitator, the technology, and the students must be carefully considered and balanced in order to take full advantage of the strengths of the program (University of Illinois, 2015, p. 1). The opinions of the administration, management, and teachers should have been requested. The pros and cons of the VEP should have been weighed, and brought into better balance before making a decision that had the potential to impact thousands of lives.

Superintendent's Role

A measure should be put in place so that the superintendent is not making decisions on issues such as terminating the district's VEP, which affects thousands of lives. I assumed that the superintendent alone did not make the decision to terminate the VEP, since he was new to that position. If my assumption was correct, then it is likely he sought advice from certain administration and management, some of which already were not interested in the VEP, and preferred the traditional brick-and-mortar school. This is more likely the case because some of the stakeholders (e.g., parents and students) were surprised and disappointed by the termination of the VEP, which indicates to me that they were not part of the decision making. If this was true, then there is a serious concern to be addressed here. Students have been deprived of an education and, ultimately, the means

to enhance their career by ignorant and closed-minded administrators and management who simply did not like the idea of a VEP. In the future, the benefit to the students should be considered more than the mindset of a few administrators and managers.

Effect on Students

The main goal of establishing schools was to educate children. If that goal is not achieved, then it has failed. The SLSD took a step in the right direction to build a better and brighter future for its children when they introduced the VEP, as it benefitted many students. The program was progressing at a rapid rate, but was terminated due to a cut in federal funding. The management could not maintain the program, and the superintendent could not sustain the program because the decision to end it had been made. Just that quickly—lives were changed forever and dreams were shattered. Students were deprived of the option to accelerate their classes to graduate on time, and their chance to become familiar with online learning for continuing their education at the college level. More important, people who wanted to attend school from home and had the opportunity to do so by attending the SLSD's VEP, lost whatever opportunity they had to pursue a career when the SLSD terminated its program. Even though the SLSD offered students the option of enrolling in MoVip, that option was simply not going to be the same as attending the SLSD's VEP. Students who enrolled in MoVip from an unaccredited school had to pay full tuition; students from the SLSD were victims of that requirement. This is an indication that many students suffered from the termination of the SLSD's VEP.

Conclusions

This case study on the experiences of the successes and failures of running an online learning program in Missouri has unveiled many steps that are necessary if a VEP is going to benefit students—now and in the future. Since the KSD and the RSD decided to implement a VEP, it became part of the budget before the cut in federal funding. Therefore, it was not a problem to adjust when the cuts took effect. The SLSD, on the other hand, depended solely on federal funding; therefore, because they had no back-up plan in place, there was little they could do when their funding was cut.

Like the U.S. Congress, in a sensitive and important situation like this, the stakeholders needed to be subjected to debate followed by voting to determine what to do. By so doing, stakeholders would have a better understanding of what was going on and would know what to vote for. This should clear any doubt and bring transparency, knowledge, unity, and understanding about what is going on and, ultimately, bring peace into the SLSD for good. While accepting that a lack of funds, coupled with poor preparation and/or planning in running the SLSD's VEP, the lack of interest in the VEP by some in the administration also might have contributed to the closure of the SLSD's VEP. The foregoing points to the fact that better preparation was needed to run a successful VEP.

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Appendix A: Interview Questionnaire

1.
 - a. What measures did your school district take when it encountered financial difficulties due to the cut in federal funding during the 2009-10 academic year?
 - b. What were the stakeholders' reactions?
 - c. Did they show any interest in sustaining the VEP? How and why? Please explain. Who made the final decision as to sustain or terminate the VEP and why?
 - d. What was the final decision and did the school district authorities accept and stick to their decision? Please explain.
2.
 - a. What are the factors or conditions necessary to run a sustainable online program? Did your school district meet the application of all these factors? What was the school district's challenges (if any) in applying or failing to apply any of these factors? Please explain.
 - b. What was the effect of these factors in sustaining or terminating the VEP after experiencing the federal budget cut?
3.
 - a. What did the management do to sustain its VEP?
 - b. Did the management show any interest in sustaining the VEP? How and why?
 - c. What was the final decision and how did the management arrive at their decision? Please explain.
4.
 - a. What did the management do to terminate or abandon its VEP?
 - b. Did the management have any back-up option or plan to implement in an event like the experience of the federal cut? Please explain.
 - c. Why was it not applied and what was the ultimate effect (if any) of their decision to sustain or terminate the VEP after the cut in federal funding?
 - d. Did the management finally decide to sustain or terminate the VEP? Please explain.
5.
 - a. What factors, if any, influenced the decision of the school district to sustain or terminate its VEP?
 - b. Please lay out the main factors that led to the termination or maintenance of the school district's VEP? Please explain.

- c. Was the majority of the stakeholders satisfied with the final decision to sustain or terminate the VEP? How do you know?
6.
 - a. What role did the effect of technology have on the decision to sustain or terminate the VEP after the cut in federal funding?
 - b. Was cost of technological incentives a problem in the application of the VEP?
 - c. What was the cost effect on the decision to sustain or terminate the VEP? Why? Please explain.
 - d. Was the implementation of the technological tools (e.g., Internet service failure) a problem in running the VEP? How do you know about that?
 - e. Did you have people in the decision-making process who were not interested in using technology to some extent? If any, how did that affect the decision to sustain or terminate the VEP? Please explain.
7.
 - a. What recommendations can you offer based on lessons learned from the closure/maintenance of its VEP?
 - b. What advice can you give on all the information you have provided?
 - c. What factors do you think are the reason for the termination or maintenance of the VEP according to your personal experience? What recommendation would you give if an institution encounters a similar situation?

Appendix B: Research Request

Dear Sir/Madam:

My name is Stephen Anane-Boakye. I am a teacher in the St. Louis School District and have undertaken a small-scale research project for my Doctoral Course at Walden University. I am writing to request permission from the _____ School District, which is one of the districts I selected to conduct my research. This research project will involve interviews at a time and place convenient to participants.

The title of my research project is *A Comparative Analysis of the Successes and Failures of Virtual Learning Programs: A Case Study of the St. Louis School District's Virtual Education Program*. I am interested in exploring why the St. Louis School District discontinued its VEP following a cut in federal funding, with a focus on determining the factors involved in their decision to discontinue the online program and what could have been done to sustain the program.

I confirm the following:

- The Walden University IRB has given permission for me to get the signatures of my community partners.
- With your permission the interviews will be carried out.
- If you agree to participate, please sign and print your name at the bottom of this form and email it to me. This will be proof of your consent to participate in the study.

I sincerely hope that you will be able to help me with my research. If you have any questions regarding the nature of this research or are unclear about the extent of your involvement, please call me at XXXXXXXX or email me at XXXXXXXX.

Finally, thank you for taking the time to consider my request and I look forward to your reply. God bless you in Jesus name.....AMEN!

Sincerely,

Stephen Anane-Boakye

Appendix C: Letter of Cooperation

Address

Date: 7/8/2014

Dear Stephen:

Based on my review of your research proposal, I give permission for you to conduct the study entitled *A Comparative Analysis of the Successes and Failures of Virtual Learning Programs: A Case Study of the St. Louis School District's Virtual Education Program* in the _____ School District for comparative analysis purposes. As part of this study, I authorize you to recruit two participants for data collection and draw results by conducting an analysis. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibility is simply to provide information. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

Authorizing Official
Contact Information

Appendix D: List of Questions and Derived Themes

1. What measures did your school district take when it encountered financial difficulties due to the cut in the federal funding in 2009/10? Was there any interest in sustaining the VEP? If so, who made the final decision?

Theme:

SLSD: 1a, 1b, 1c, 1d

KSD: 1a, 1c, 1d

RSD: 1a, 1c, 1d

2. What are the factors or conditions necessary to run a sustainable online program and did your school district meet the application of all these factors? What was the school district's challenges (if any) in applying or failing to apply any of these factors? What was the effect of these factors in sustaining or terminating the VEP after experiencing the cut in federal funding?

Theme:

SLSD: 2a, 2b

KSD: 2a, 2b

RSD: 2a, 2b

3. What did the management do to sustain its VEP? Did the management show any interest in sustaining the VEP and how did the management arrive at that decision?

Theme:

SLSD: 3a, 3b, 3c

KSD: 3a, 3b, 3c

RSD: 3a, 3b, 3c

4. What did management do to sustain or terminate its VEP? Did the management have any back-up plan or other option to implement in an event like the experience of the cut in federal funding? What was the ultimate effect (if any) of the decision to sustain or terminate the VEP after the cut in federal funding?

Theme:

SLSD: 4a, 4d

KSD: 4a, 4d

RSD: 4a, 4d

5. What factors, if any, influenced the decision of the school district to sustain or terminate its VEP? And were majority of the stakeholders satisfied with the final decision?

Theme:

SLSD: 5a, 5b, 5c

KSD: 5a, 5b, 5c

RSD: 5a, 5b, 5c

6. What role did the effect of technology have on the decision to sustain or terminate the VEP after the cut in federal funding? Was cost of technological incentives and implementation of technology a problem in the application of the VEP? Did you have people in the decision-making process who were not interested in any way in the use of technology to some extent? If any, how did that affect the decision to sustain or terminate the VEP?

Theme:

SLSD: 6a, 6b, 6c, 6d

KSD: 6a, 6c, 6d, 6e

RSD: 6a, 6b, 6c, 6d, 6e

7. What recommendations can you offer based on lessons learned from the closure/maintenance of the VEP and what advice can you give upon all the information you have provided? What factors do you think are the reason for the termination or maintenance of the VEP according to your personal experience? What recommendation would you give if an institution encountered a similar situation?

Theme:

SLSD: 7c

KSD: 7a, 7b, 7c

RSD: 7a, 7b, 7c