Copyright

by

Scott Caloss

2018

The Treatise Committee for Scott Caloss certifies that this is the approved version of the following treatise:

ANALYSIS OF FINANCIAL STRATEGIES USED BY TEXAS SCHOOL DISTRICTS TO ENSURE LONG-TERM FINANCIAL STABILITY

Committee:	
Rubén Olivárez, Supervisor	
Edwin Sharpe, Co-Supervisor	
Pedro Reyes	
Jassa Rutlar	

ANALYSIS OF FINANCIAL STRATEGIES USED BY TEXAS SCHOOL DISTRICTS TO ENSURE LONG-TERM FINANCIAL STABILITY

By

Scott Caloss

Treatise

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the degree of

Doctor of Education

The University of Texas at Austin

May, 2018

Dedication

I dedicate this work to my supportive family. Your guidance and belief was my constant motivation. There is no adequate way to express my gratitude.

To my children, Jake and Maddie, I am so proud of both of you. Watching you grow and mature has been the best thing I could have ever asked for. I have learned so much from you, and I am the luckiest man in the world because I get to be your dad. I love you very much.

To JoAnn Caloss, my mother, who I know is smiling down on me today. You taught me the value of family and the importance of integrity. You are what every person should aspire to be. To Ronald Caloss, my father, thank you for your inspiration, guidance, and support. I would not be where I am today without this. You have always been there for me, in the good and the bad, and I will always be grateful for all that you have done for me.

To my wife, Adrian Caloss, I love you. Thank you for being my best friend. This would not have been possible if not for you. Your understanding and support has been amazing. I love how you always put your family first. You have raised two wonderful children and have kept me in line. You are my rock!

Acknowledgments

I am very fortunate to be part of the leadership program at the University of Texas at Austin. Being part of cohort 25 was special. I enjoyed the members of the cohort and want to thank them for motivating me to get through the program. I owe thanks to program director Dr. Ruben Olivarez. Your experience and knowledge has helped me grow as a school leader. I would also like to thank Dr. Pat Pringle for your guidance and influence. I have never taken classes that had more relevance than yours. I cherished our conversations and your support.

I want to send a special thank you to Dr. Jesse Butler and Dr. Devin Padavil. Dr. Butler, your knowledge and expertise in school finance was an asset. I owe a big part of this accomplishment to you and will always be grateful to you. Your unselfishness and willingness to help others is an inspiration to me. Dr. Padavil, I have learned so much from you through our conversation in class, and the many phone calls over discussions on how to write a dissertation. You are a very intelligent young man, and I see a very bright future for you.

I would also like to thank Wills Point Independent School District for allowing me the flexibility to make this accomplishment possible. Thank you for the incredible support you have given me. The culture you created as a learning organization allowed me to have this opportunity.

Thank you to my committee Dr. Ruben Olivárez, Dr. Edwin Sharpe, Dr. Pedro Reyes, and Dr. Jesse Butler. You shaped my research and worked well as a team of leaders and scholars. I am grateful and lucky you accepted the invitation to serve on both my proposal and final defense.

ANALYSIS OF FINANCIAL STRATEGIES USED BY TEXAS SCHOOL

DISTRICTS TO ENSURE LONG-TERM FINANCIAL STABILITY

Scott Caloss, Ed.D

The University of Texas at Austin, 2017

Supervisor: Rubén Olivárez

Co-Supervisor: Edwin Sharpe

The state's current financial system for education does not address drastic changes in a

school district's property values in mineral rich areas. Education funding formulas do not

provide support for any sudden changes due to fluctuation in mineral values. It is

unknown if school leaders have developed strategies to ensure long-term financial

stability. If strategies have been developed, these strategies are not known. School

leaders, whose districts are located in mineral rich areas, have little information for

determining what strategies they should use to ensure long-term financial solvency.

The literature on school finance describes the challenges school leaders face when trying

to provide every student a quality education with limited resources. However, research

lacks a comparable study and analysis of long-term financial strategies for school districts

located in mineral rich areas. This study is an analysis of strategies developed by school

leaders in districts where property values have been greatly affected by mineral values to

ensure long-term financial stability.

vi

Table of Contents

Chapter One: Introduction to the Study	1
Background	1
Context of Public Education Finance in Texas	4
Problem Statement	9
Purpose of Study and Research Questions	9
Overview of Methodology	10
Definition of Terms	11
Limitations of Methods	13
Delimitations	14
Assumptions	14
Significance	15
Summary	15
Chapter Two: Review of Literature	17
Texas School Finance Reform	17
Legal Challenges	17
Planning and Development of School Budgets	20
Superintendent Financial Responsibility	20
Multi-Year Financial Planning	21
Budget Planning	22
Developing Budgets	24
Budget Reductions	26
Texas School District Budgets	28

School District Expenditures	28
School District Revenues	30
Impact of Mineral Values on School Budgets	31
Mineral Impact on United States Schools	31
Mineral Impact on Texas Schools	33
Eagle Ford Shale Impact on Texas Schools	35
Conceptual Framework	39
Discussion	41
Conclusion	44
Chapter Three: Methodology	47
Purpose of Study and Research Questions	47
Research Methods	48
Epistemology	48
Theoretical Perspective	48
Methodology	49
Sampling Method	50
Procedures	50
Institutional Approval	50
Interviews	51
Sources of Data	51
Data Analysis	51
Strength of Methods	52
Trustworthiness and Quality	52

	Positionality	.53
	Ethical Considerations	.54
Summa	ary	.55
Chapter Four:	Findings	.56
Descrip	otions of Participants	.57
	One Independent School District	.57
	Two Independent School District	.58
	Three Independent School District	.59
	School Finance Expert	.59
Emerge	ent Themes	.60
Change	es in Revenue	.63
	Additional Revenue	.63
	Fund Balance	.64
	Small Projects	.66
	Personnel	.67
	Reduction in Revenue	.68
	Maintain/Reduce Expenses	.68
	Declining Property Value Statute	.69
Financi	ial Strategies Implemented	.70
	One-Time Expenses	.70
	Energy-Efficient Projects	.71
	Investments	.73
Long-T	Ferm Financial Planning Strategies	.73

	Revenue	/4
	Student Enrollment	74
	Property Values	75
	Expenditures	76
	Salaries	76
	Facilities	77
	Student/Staff Needs	78
	Template	79
Chang	es in Long-Term Financial Planning Strategies	80
	Property Value Projections	80
	Salaries	82
	Salary Increases	82
	Stipends	83
	Retirement Plan	84
	Personnel	85
	Bond Strategy	87
	Bond Content	87
	Bond Amount	88
	Bond Period	89
	Housing	91
	Communication	93
Summ	ary	94
Chapter Five:	Findings, Implications, and Recommendations	96

Problem Statement	96
Purpose of the Study	97
Methodology Overview	97
Data Analysis	99
Limitations of Methods	99
Significance of the Study	100
Summary of Results of Research Questions	101
Themes Connecting Long-Term Financial Strategies	101
Changes in Revenue	102
Financial Strategies Implemented	104
Long-Term Financial Planning	106
Changes in Long-Term Financial Planning	107
Theoretical Framework	110
Theory of Creative Conservatism	111
Implications for Practice	113
Recommendations for Further Research	114
Summary	114
Appendix	118
References	123
Vita	133

List of Tables

Table 1.	Participant Response Summaries	61
Table 2.	Keywords and Phrases Sorted by Theme	63
Table 3.	Strategies Implemented by Each District	110

List of Figures

Figure 1.	Participant Word Frequency Word Cloud	60
Figure 2.	Diagram of Themes and Concepts	95
Figure 3.	Change in Revenue as a Theme.	102
Figure 4.	Financial Strategies Implemented as a Theme	104
Figure 5.	Long-Term Financial Planning Strategies as a Theme	106
Figure 6.	Changes in Long-Term Financial Planning Strategies as a Theme	107
Figure 7.	Theory of Creative Conservative in Grounded Theory Model	112

CHAPTER ONE: INTRODUCTION TO THE STUDY

Background

The development of the public educational system in America has been described by some educational historians in terms of revolutions (Pipho, 1992). The first of these revolutions dealt with the need to educate a steadily growing population and to train individuals to function in a democratic society. The responsibility for providing this education fell on the individual states that, in turn, shared this task with local communities. Communities established school districts that were governed locally while still being held accountable by the state (Mort, Ruesser, & Polley, 1960).

The second revolution focused on the different types of education available in American schools. Not all schools offered the same learning opportunities, so reformers pushed for equalized educational opportunities for all students. The emphasis here was for all students to not only attend school, but for all students to have the same opportunities when receiving an education. As a result of this revolution, many states adopted minimally acceptable reform programs. School districts located in property-rich areas were able to generate additional funding from local sources to embellish minimally acceptable programs. This created wide disparities between those school districts considered property-poor and those considered property-rich. Property-rich school districts were able to provide their students a wide variety of educational programs that better prepared them for life after high school (Mort, Reusser, & Polley, 1960).

This resulted in a third revolution, which led to the call for a quality education for all students, a concern dating back to the mid-20th century. Focus on the quality of education students received was evident in *A Nation at Risk*, published in 1983. This

report brought to light perceptions of a minimal education program that was not providing an adequate or optimal educational experience for students. One implication was that as schools attempted to provide more equitable financial support for all, the public education system had lowered its standards in order to provide a more generic and more affordable education (The National Commission on Excellence in Education, 1983). The battle for an equitable and adequate education for all students seems to be neverending, and money is always part of the narrative (Wise, 1972).

School finance has been the subject of argument and controversy for decades. The creation of a free public education system for children has been no easy task for schools in the United States. How money is raised and the financial systems developed to allocate these funds are complex issues that often cause bitter debates among educators, legislators, parents, taxpayers, and other interested citizens. Funding issues are compounded when equity and adequacy issues are added to the mix. Consider that in the United States, fiscal year expenditures per pupil in the 100 largest public schools ranged from a low of \$5,539 in Alpine School District in Utah to a high of \$20,331 in New York City School District in New York (Institute of Education Sciences, 2016).

On a national basis, 37 percent of total revenues for public school districts came from local property taxes in fiscal year 2013. The percentage of revenues derived from local property taxes exceeded 50 percent in five states, fell between 40 and 50 percent in 14 states, fell between 20 and 40 percent in 23 states, and fell below 20 percent in nine states (Institue of Education Sciences, 2016). Figures such as these provide evidence of the great disparity in the amount of burden put on local taxpayers when it comes to paying school taxes.

Multiple lawsuits over equitable and adequate funding have been filed and continue to make headlines to this day (Institue of Education Sciences, 2016). Texas public schools have especially faced challenges in this critical area. Concerns over equitable and adequate funding have been at the forefront of the debate on funding public education. Funding formulas that determine the distribution of state aid to Texas school districts are outdated. These outdated formulas, added to a school population that is diverse and growing increasingly more so, have resulted in an underfunded public education system in Texas (Cato, 2013).

Lack of adequate funding for school districts makes it difficult to provide an effective and appropriate education that can best meet the needs of all students. The development of school budgets can be especially frustrating when working within constraints imposed by limited funds. The ultimate goal of a school budget is to optimize student achievement using available resources (Government Finance Officers Association, 2015). School districts must have strategies in place that will ensure the development of a budget that is both effective and efficient. Failure to do this could result in an inferior education for students and possibly the eventual closure of a school district.

The development of a school budget has become even more challenging for districts located in areas with significant amounts of mineral values. Contrary to popular perception, these districts are faced with some difficult and unique challenges related to funding for their schools. The research will assess the budget strategies developed by these districts to ensure that student achievement is not jeopardized and financial solvency is maintained. The purpose of this treatise is to identify the budget strategies

developed by school districts whose property values are greatly affected by mineral values and to determine if these strategies have changed as a result of the district's fluctuation in mineral values.

Context of Public Education Finance in Texas

This lingering controversy over funding of public schools is more evident than ever in the State of Texas. Over the past 30 years, seven lawsuits involving the Texas school finance system have gone before the Texas Supreme Court. The challenges of providing an equitable and adequate education remain at the forefront for educators and parents, and no relief appears in sight, at least for the near future.

The Foundation School Program (FSP) is the state program used today to determine the amount of state and local funding a school district is allocated under Texas finance law. The FSP is administered by the Texas Education Agency (TEA) and is meant to ensure that all school districts, regardless of property wealth, receive "substantially equal access to similar revenue per student at similar tax effort" (Texas Education Agency, 2014). The FSP has two main funding components, operational funding and facilities funding, and both are tied to a school district's tax collection efforts. Texas school districts collect two types of taxes: Maintenance and Operation (M&O) and Interest and Sinking (I&S) (Texas Education Agency, 2014). Maintenance and Operation tax collections go toward paying the daily operational costs of a school district. Salaries, transportation, maintenance of buildings, contracted services, and utilities are all examples of services that are paid from M&O taxes. Interest and sinking tax collection provide funds for payments on the debt that finances a district's facilities (Texas Education Agency, 2014). Typically, school districts develop debt through new

construction or renovation of facilities. Many schools do not have the large amount of monies required to construct and renovate facilities, so they often have to borrow the money. This is accomplished through the issuance of school bonds. Districts use the sale of bonds to accomplish the renovation and construction of facilities and pay off these bonds over a certain period of time. I&S taxes are used to pay off such bonds (Texas Education Agency, 2014).

The Foundation School Program provides school funding per student and provides variables such as recapture, also called Robin Hood, in which revenue from property-rich districts is redistributed to property-poor districts (Texas Education Agency, 2014). However, the state uses a complicated formula that places a higher value on some students compared to others when allocating funds to districts. The funding formula has created a \$3,264 difference in the value of a student between the highest and lowest paid schools. Students in the top five percent of the districts in the state are valued at \$9,021, while those in the bottom five percent are valued at \$5,757 (Equity Center, 2016). In a classroom of 25 students, this can mean a difference of \$81,600. That additional amount of money can have a significant impact on what happens in the classroom and a student's education.

A major and serious part of the problem lies in the fact that school funding formulas established in the 1980s and 1990s are still being used today. A perfect example of these outdated funding formulas is the cost of education index (CEI). This formula, developed in 1989 and unchanged since then, attempts to determine state aid for school districts based on varying economic conditions, such as the size of school districts, the teacher salaries of neighboring districts, and the percentage of low-income students in

the district (Texas Education Agency, 2014). Operating on a formula that was created over 25 years ago and trying to apply it to today's rapidly changing educational environment is questionable at best.

Indeed, Texas public schools have changed drastically over the past two decades. Some 3.3 million students were enrolled in public schools in 1990-91. Today, there are over 5 million students, about a 50 percent increase. In 1989, about 24 percent of children were living in poverty. In 2011, that number had risen to 30 percent (Cato, 2013). As late as 1994, Texas had 46 percent of the state's students on free and reduced lunch; that number increased to 59 percent in 2015. Texas students enrolled in bilingual/ESL programs have also increased significantly since the the CEI formula was put in place.

Texas lawmakers determine the basic budget based on how much they want to spend on education overall, not on how much academic standards cost. This overall cost typically averages out to about \$5,000 per student. On top of this basic budget, Texas gives extra money for students who need extra support (Isensee, 2015). For the most part, these are English-language learners and low-income, gifted and talented, and special education students.

The problem is that the formulas used to determine this extra funding go back to 1984. Not only are these formulas outdated, but research shows the amount of funding provided based on these formulas should be at least doubled (Isensee, 2015). School districts are spending much more to educate these students than the money they receive from the state. When comparing money received from the state versus how much was

actually spent to support students, one school district identified a shortfall of \$1,300 per student (Isensee, 2015).

The determination of a Texas school district's yearly revenue is based on another outdated formula. Currently, the amount of state funds a school receives is determined by prior year assessed values (Texas Education Agency, 2014). This formula, in place for several years, can create problems for school districts. For example, in a year where a district's values decrease, the state will provide funding based on the previous year's higher values, but the district will be collecting a smaller amount of taxes based on the lower amount of assessed values. This can create a decrease in revenue for a district and impact a district's solvency. When this funding formula was established, it was understandable based on resources available and the significant amount of time it took to gather all the data to determine funding. But with the vast amount of technological resources available today, some school leaders argue the state could use current year values to determine funding for school districts, rather than continuing to rely on the prior year's data.

The consequence of outdated funding formulas is especially relevant when considering Texas school districts located in areas home to the volatile oil and gas industries. Over the past few years, these districts have seen assessed values increase and decrease significantly due to oil and gas values. Although numerous school districts may see significant increase in property values, many school finance experts believe there is no increase more concerning than that of oil and gas. For example, a district's property values may increase drastically when a giant manufacturer decides to locate its business in the school district. This type of increase is fairly safe for school districts for the simple

fact that these districts can rely on the manufacturer's property values maintaining the same value as on entry in the district. The same does not hold true for oil and gas.

Property values can show significant increases or decreases from year to year, depending on the oil and gas market. A case in point is the Eagle Ford Shale over the past few years (Hiller, 2016).

Operating within a funding system that was developed years ago, which gives no consideration to the effects of oil and gas on a district's assessed values, school leaders are finding it increasingly challenging to handle the finances of their districts. On top of this, very little guidance is available to help school districts in these situations, such as those located in the Eagle Ford Shale of South Texas.

The districts in the Eagle Ford Shale most affected are those whose total property values consist of a high percentage of oil and gas. Texas has 1,020 Independent School Districts (ISDs), and of those, 595 ISDs have mineral-producing properties from which property tax revenue flowed in 2014. Of these 595 ISDs, 230 districts had oil and natural gas producing properties that generated at least \$1 million in property tax revenue. For 207 ISDs across the state, property revenue from oil and natural gas accounts for more than one-quarter of their total tax base, and for 107 districts, property revenue accounted for over half their tax base (North Texans for Natural Gas, 2015). The higher the percentage of total property values consisting of oil and natural gas, the more challenging it becomes to produce a balanced budget. With the oil and natural gas market being so volatile, district revenues have the potential for significant variance from year to year.

Problem Statement

This study emerged from the pressures exerted on school leaders faced with the challenges posed by significant increases and decreases in district property values related to oil production and its impact on school finances. The need existed to identify long-term financial strategies that can be used in districts that experience significant increases or decreases in property values. The lack of long-term financial planning and improperly designed budgets for such school districts could result in long-term financial instability.

The billions of dollars generated from oil and gas production have had a substantial financial impact on school districts located in the Eagle Ford Shale. Some of those districts have gone from once being the poorest in the state to now being the richest. Cotulla ISD's property values went from \$534 million in 2010 to 2.3 billion in 2012 (Kastner, 2012). This transformation happened almost overnight and created many unknowns for school districts in the Eagle Ford Shale. While these districts saw significant increases in revenues, they also faced new challenges in trying to calculate future revenue projections.

Purpose of The Study and Research Questions

The purpose of this study was to identify budget strategies that have been established and implemented by mineral rich school districts to ensure long-term financial stability. This study also examined if school district budget strategies have changed as a result of significant increases or decreases in mineral values. Specifically, these are school districts in the Eagle Ford Shale that have been confronted with dramatic increases and decreases in property values. The strategies were generally defined as the plan developed by school districts to ensure long-term financial stability. This developed

plan is for school districts where property values have increased or decreased significantly over the past five to ten years. Long-term financial stability was defined by school districts being able to develop and implement a budget without having to make budget cuts over a five- to ten-year period necessary to achieve district goals. School districts' management of fund balance, energy efficiency plans, fuel efficient plans, maintenance plans, and tax rates were examined to determine long-term stability, as well. The following research questions were used to guide the study:

- 1. What financial strategies have school districts developed to ensure long-term financial stability when property values significantly increase or decrease?
- 2. Have school districts' long-term financial planning changed because of property values significantly increasing or decreasing?

Overview of Methodology

This qualitative grounded theory study employed a constructivism epistemological stance and a theoretical perspective of interpretivism. Interpretivism is defined as finding understanding and explaining reality through cultural interpretations of the social life-world (Crotty, 1998). A series of semi-structured interviews were conducted to an understanding. These in-depth interviews were conducted with ten participants. During the study an interview protocol provided the initial structure, while further questions evolved during the interview process.

Superintendents, chief financial officers, and school board presidents were chosen from three school districts located in the Eagle Ford Shale. An interview was also conducted with one well respected expert in the field of school finance. Studying these different positions within a school district as well an expert in the field gave a well-

rounded representation. These interviews were triangulated with archival documents, field notes, and reflective journals. A requisite criterion for superintendents included in this study was to have at least five years of experience as a superintendent in their current school district.

Definition of Terms

School Budget - A school district's budget provides school leaders with an opportunity to justify the collection and expenditure of public funds. In its most simple definition, a school budget describes a district's plan for the upcoming year as related to anticipated revenues and expenditures (American Association of School Administrators, 2010).

School Leader – A school leader is an individual charged with cultivating a school's culture and helping the organization achieve set goals (Fullan, 2014). For the purpose of this study, the school leader is someone with a position of influence in school budget decision making.

Property Values – A property tax is assessed according to the value of a property. Property taxes are based on value; therefore, they are called ad valorem, meaning "according to value." Property value reflects the market value of a piece of property. County Appraisal Districts (CADs) are responsible for assigning the value of a property (The Real Estate Center, 2011).

Mineral Property Values – For the purpose of this paper, mineral will refer to oil and gas. A mineral interest is part of the ownership rights related to owning real property. The owner of a mineral interest owns part or all the mineral estate. A mineral

property only has value as it relates to its ability to produce future income (Longhorn Realty LLC, 2016).

Financial Strategies – The practices a firm adopts to pursue its financial objectives (Nasdaq, 2017). School districts develop financial practices that will best assist in obtaining the goals of the district.

Adequate Funding – This refers to the amount of money schools need to offer an "accredited" or basic program or to meet minimum state education requirements.

Adequate is defined by the Texas Supreme Court as "the requirement that public education accomplish a general diffusion of knowledge" (Equity Center, 2017).

Recapture - Recapture is a mechanism in state funding formulas that ensures that a district's property wealth per student does not exceed certain levels, known as equalized wealth levels (Texas Education Agency, 2014). A district that is subject to recapture is often referred to as a Chapter 41 district and must send part of its tax collections to the state.

Equitable Funding – This refers to fair and equal distribution of resources for schooling, taking into account student differences and school district characteristics. The Texas Supreme Court refers to this as "equal yield for equal effort" (Equity Center, 2017).

Career and Technical Education (CTE) - Career and technical education programs offer a sequence of courses that provides students with coherent and rigorous content. CTE content is aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare students for a wide range of high-wage,

high-skilled, high-demand careers (Assoication of Career and Technical Education, 2017).

Oil Production – Oil production refers to the quantities of oil, including crude oil, natural gas liquids (NGLs), and additives, extracted from the ground after the removal of inert matter or impurities (The Organisation for Economic Co-operation and Development, 2016).

Eagle Ford Shale - The Eagle Ford Shale is a hydrocarbon-producing geological formation of significant importance due to its capability of producing both natural gas and also more oil than other traditional shale plays. The shale play trends across Texas from the Mexican border into East Texas, roughly 50 miles wide and 400 miles long with an average thickness of 250 feet (Railroad Commission of Texas, 2017).

Limitations of Methods

The greatest limitation for this study was the lack of research in this area. Very little information was available regarding effects of increased or decreased mineral values on school district budgets. This study was also limited to the environment constructed by the researcher and participants. The researcher drew on the experiences of the three superintendents, chief financial officers, and board members involved in this study. The choice of districts was limited by the simple fact that not all school districts in the state of Texas are experiencing increases or decreases in mineral values. The scope of the study was limited by the focus only on school districts located in the Eagle Ford Shale. It was possible that researchers and participants from a different part of the state might have different findings. Selection bias was another factor, as well. If possible, the

superintendents who agree to participate might have done so because they have a personal agenda they wanted to put forth.

Finally, there are limitations involved with the semi-structured interview process. All participants might not be asked the exact same questions because the semi-structure process allows for additional questions to be asked besides those initially established by the researcher. Although semi-structured interviews may not ask all the same questions to each participant, it does allow for a profound understanding of each participant and a clear sense of the phenomenon being studied (Hays & Singh, 2012).

Delimitations

School districts across the state experience the effects of mineral values on their finances. However, this study specifically focused on school district located in the Eagle Ford Shale. It might be assumed, but not proven, that financial strategies developed for school districts located in the Eagle Ford Shale would apply to all Texas school districts whose property values are significantly impact by oil and gas. Additionally, the nature of the interviews focused on the strategies developed by school districts and not as much on the school financial system.

Assumptions

This study operated under several assumptions. The researcher assumed that all participants were honest and transparent when responding to semi-structure interviews.

The researcher assumed participants were knowledgeable in the area of school finance.

Finally, the researcher assumed participants had a vested interest in helping school districts in the Eagle Ford Shale develop strategies to ensure long-term financial stability.

Significance

This study was important because it will provide school superintendents with financial planning strategies for handling challenges they may encounter because of a significant increase or decrease in mineral values. In such situations, superintendents can be very vulnerable. There is little research and few financial strategies that can assist in this area. These guidelines can help superintendents in maintaining financial solvency for their school districts. These guidelines can also be helpful for superintendents who are facing significant increases or decreases in property values for reasons other than fluctuating mineral values. Mismanagement of finances can lead to quick unemployment for school superintendents, so it is very important for superintendents to understand the challenges associated in managing mineral values. Most importantly, at the end of the day, mismanagement of school finances will have a direct effect on student learning. Part of my passion in doing this study was to ensure that student learning is not impeded in areas of the state where mineral values play a major role in a school district's finances.

Summary

The purpose of chapter one was to introduce the study, including background information, a statement of the problem, purpose of the study, research questions, and an overview of the methodology. The overview of the methodology led to the definition of terms, limitations, delimitations, and overall significance of this study.

Chapter two is divided up into four main sections. Section one describes Texas school finance reform. Sections two details planning and developing budgets. Section three describes Texas school district budgets, while section four discusses the impact of

mineral values on school budgets. Section four is followed by the introduction of an initial conceptual framework and a brief description of chapter two.

Chapter three outlines in detail the explanation of the research methods, procedures used in this study, and study design. This chapter outlines the nature of a case study methodology, the method of data collection, and procedures. Lastly, this chapter describes positionality on this study.

Chapter four presents findings based on the two research questions, as well as additional related findings. This chapter begins with describing the creation of themes based on participant responses. The data gathered from the participants are presents, along with the results of the research questions. This chapter explains what strategies are developed by school districts to ensure long term financial stability. This chapter will also discuss if these strategies have changed due to current circumstances. Additional findings are reported in this chapter as well.

Chapter five presents the overall findings from this study. In chapter five, the purpose of the study, research questions, methodology, and data analysis are reviewed. Implications for practices based on the results are presented in this chapter, along with areas for future research.

CHAPTER TWO: REVIEW OF LITERATURE

Texas School Finance Reform

Legal Challenges. Texas has a long and provocative history of legal challenges related to how public schools are financed. Article VII, Section 1, of the Texas Constitution states, "A general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools." Article VIII, Section 1-e, of the Texas Constitution states, "No State ad valorem taxes shall be levied upon any property within this State" (TTARA Research Foundation, 2012). These two provisions have resulted in numerous challenges that have played significant roles in shaping today's Texas school finance system.

Local school district property tax rates have been at the crux of the challenges faced by the school finance system. In the 1980s, school district property tax rates ranged from \$0.18 to \$1.50 (TTARA Research Foundation, 2012). Districts with the lowest tax rate often collected the most taxes because of the high property values within the district. School districts rich in oil and gas and industrial property, or home to a nuclear power plant or high-end residential property, were able to collect significantly more money at a lower rate than other districts could generate at a higher tax rate. In 1984, Edgewood ISD filed a lawsuit against the state based on this notion of inequality in funding Texas public schools (TTARA Research Foundation, 2012).

In October 1989, the Texas Supreme Court ruled in favor of Edgewood ISD, stating that the funding system for public schools was unconstitutional. The court found that the Texas public education system was not efficient as mandated by the Texas

Constitution, and school districts did not have substantially equal access to similar revenue per pupil at similar levels of tax effort (TTARA Research Foundation, 2012). As a result of this lawsuit, the Texas Legislature passed a bill to equalize funding by providing an increase in the basic allotment and guaranteed yield to achieve the 95th percentile of wealth by 1995, but they excluded the wealthiest districts from the equalization system. Again, this system was challenged in Edgewood II and ruled unconstitutional by the Texas Supreme Court in January 1991. The court ruled that the wealthiest districts could not be excluded from the new funding equalization system and that tax-based consolidation could be considered as an option to include the wealthier districts (TTARA Research Foundation, 2012).

Following the Edgewood II ruling, the Texas Legislature passed SB 351 in 1991, which created 188 county education districts (CEDs), in effect consolidating the tax bases of property wealthy school districts with other districts in the county and neighboring counties, if needed, until the tax bases of the CEDs were largely equal (TTARA Research Foundation, 2012). In 1992, the system was challenged once again in Edgewood III, this time by a group of wealthy school districts and was again ruled unconstitutional by the Texas Supreme Court. In the court findings, it was stated that the tax levied by the CEDs was a state property tax set in statute and controlled by the state (TTARA Research Foundation, 2012).

Based on this court ruling, the Texas Legislature passed SB 7, which directed property wealthy school districts to choose one of five ways to limit the amount of taxable value the district could access. The system was again challenged by both property poor and property wealthy school districts, Edgewood IV, but was found to be

constitutional by the Texas Supreme Court in January 1995 (TTARA Research Foundation, 2012).

A group of almost 300 school districts filed suit in 2003 arguing that the \$1.50 cap on the Maintenance and Operation (M&O) tax rate constituted a statewide property tax because so many districts were at the cap and had no local discretion on how to raise funds. The Texas Supreme Court once again ruled the school finance system unconstitutional in November 2005. The Texas Legislature then responded with HB 1. This bill compressed the school district Maintenance and Operation (M&O) tax rates by one-third and provided districts with a maximum of \$0.17 of tax rate capacity above the compressed rate. This gave school districts meaningful discretion when setting tax rates (TTARA Research Foundation, 2012).

As a result of Edgewood, recapture was established with the passing of Senate Bill 7 by the Texas Legislature. Recapture, also known as "Robin Hood," required rich districts to give some of their property wealth to poorer districts. In 1993, 104 districts were classified by the state as property rich. Senate Bill 7 had a provision that held these districts harmless, so they did not have to decrease their revenues (Texas Public Policy Foundation, 2016). In 1999, the Texas Legislature passed Senate Bill 4, which slightly increased the wealth level that qualified a school district to be classified as a rich district, and which no longer held these districts harmless (Texas Public Policy Foundation, 2016).

In 2011, multiple lawsuits were filed by various groups representing over half of Texas school districts. Plaintiffs included: (1) the Texas Taxpayer & Student Fairness Coalition, a group of school districts and taxpayers organized by the Equity Center; (2)

the Texas School Coalition, a group of property wealthy school districts; (3) the Mexican American Legal Defense and Educational Fund (MALDEF); and (4) a separate group of more than 60 school districts that were not included in one of the previous three groups (TTARA Research Foundation, 2012). These groups claimed that the school finance system was inequitable, inadequate, and that the \$1.17 tax rate cap constituted a state property tax and left districts with no discretion over their tax rates (TTARA Research Foundation, 2012). In May 2016, the Texas Supreme Court ruled the current school finance system to be constitutional. While rendering the system constitutional, the court also urged state lawmakers to implement transformational, top-to-bottom reforms that would result in more than just a Band-Aid on top of a Band-Aid approach (Texas Judicial Branch, 2016).

Planning and Development of School Budgets

Superintendent Financial Responsibility. The effective management of the finances of a school district is a major responsibility of the superintendent and is vital to the success and survival of a person in this role. Problems with school budgets ultimately fall on the shoulders of the superintendent (Dlott, 2007). School superintendents must be knowledgeable in cost accounting, cost budgeting, cost allocation, and cost benefit analysis (Kemerer & Satryb, 1977). Most superintendents have staff with financial expertise to help with budget preparation and determination of long-term financial strategies, but the superintendent is still primarily responsible for all financial operations of the district, even though adverse financial situations sometimes are outside the realm of a superintendent's control. School boards and communities can quickly lose faith in a superintendent when financial mistakes occur (Dlott, 2007).

The Texas Education Code (2015) specifies as duties of the superintendent preparing and submitting to the school board a proposed budget and administering the budget. This necessitates an understanding of the complex Texas educational finance system of how revenues are generated and funds can be expended (Hill, 2006).

Superintendents have little to no control over incoming revenue and must possess strategies to maximize the efficient use of funds for the district. It is important for superintendents to have a solid grasp of state and federal funding formulas and information related to availability of possible grants (Pekow, 2005). Superintendents can exercise much more control when making decisions on expenditures, compared to their control of revenues. In addition, a superintendent must make informed decisions on where to invest district money. Good financial managers interpret available data and make informed choices for the district (Ediger, 2008).

Multi-Year Financial Planning. Developing a long-range financial plan is important to understanding the strengths and weaknesses of a school district. According to Ray, Condoli, and Hack (2005), planning has become a top priority because of the many burdens that challenge the educational system. A multi-year plan is an effective way to avoid future financial stress through the estimation of long-term revenue and expenditure projections. This long-term financial plan should be developed in an effort to reflect the district's vision and mission (Everett, R. E., Lows, & Johnson, 1996). A multi-year financial plan can be developed by assessing a school district's financial condition. Everett, Lows, and Johnson (1996), recommend looking at the following key indicators:

1. Has there been a decrease in year-end balances over the past three years?

- 2. Have budget expenditures exceeded budget revenues over the past three years?
- 3. Is the district involved in pending litigation?
- 4. Have cash balances decreased over the past three years?
- 5. Have per pupil expenditure increased or decreased over the past three years?
- 6. Have there been decreases in revenue from local sources? State? Federal?
- 7. Are resources adequate to meet academic needs?
- 8. At what rate has the cost of employee benefits been rising?
- 9. Have the school district's buildings and grounds been well maintained over the years, and are there significant needs in this area?
- 10. Is student enrollment projected to increase or decrease over the next few years?
- 11. Is the number of children with special needs increasing or decreasing?
- 12. Is state and federal aid increasing or decreasing?
- 13. Are property tax values increasing or decreasing?

Most long-range plans are based on three to four years of data, providing an historical perspective that can help determine trends and act as a good starting point to project data for future years.

Budget Planning. Budgeting is the process of allocating resources to the priority-ordered needs of a school district. In school districts, the adoption of a budget implies that the school board and school administrators have aligned district resources with district needs. The budget is a product of the planning process. The budget process is comprised of three major phases: planning, preparation, and evaluation (Texas Education Agency, 2010). Sound planning involves defining goals and objectives of the district and developing programs to attain those goals and objectives. Once the plans and programs have been established, resource allocations are made to support them. Budgets are then evaluated for the effectiveness in attaining the goals and objectives. In the evaluation process, funds are examined as to how they are spent, and whether or not the outcomes achieved the stated goals and objectives. It should be noted that school district

budget preparation is a continuous cycle of planning and evaluation to achieve a district's goals (Texas Education Agency, 2010).

School budget development and creation is a highly prescriptive process, requiring a coordinated effort organized by the superintendent (Edwards, 2007). In a typical budget process, schools within the district are separated into divisions and receive discreet allocations (Brimley, Burrup, & Garfield, 1996). The superintendent works with the school board and budget team to decide the needs for each division, constructs and organizes the budget goals and objectives for the divisions, and develops a budget to meet these goals and objectives (Kowalski, 1999). Superintendents are at the center of the budget development process. Effective money management is crucial to the success and survival of school districts (Abshier, Harris, & Hopson, 2011). This requires school leaders to display an understanding of school finance, which includes data management, budget creation, budget management, legal aspects of managing resources and problem solving (Dlott, 2007).

With so much controversy surrounding school finance and a limited amount of resources available to school districts, it is more important than ever for superintendents to develop and implement sound and effective school budgets. A superintendent who has good practices in place when planning a school budget is able to create a budget that accurately reflects the goals of the district. The Government Finance Officers

Association (2015) has outlined steps to developing a budget that best aligns resources with district goals and recommends the following:

1. Plan and Prepare. Develop principles and policies to guide the budget process, establish partnerships between finance and school leaders, analyze current student achievement, and establish communication strategies.

- 2. Set Instructional Priorities. Develop goals, identify the root cause of gaps in goals, research and develop potential instructional priorities, and weigh the different options for achieving goals.
- 3. Pay for Priorities. Perform a cost analysis and staffing analysis and determine how much money will be needed to implement the priorities and where this money will come from.
- 4. Implement the Plan. Develop a strategic financial plan, a plan of action, allocate resources, and develop a budget document.
- 5. Ensure Sustainability. The planning and budget process should be simulated in the future (Government Finance Officers Association, 2015).

While many believe school boards drive the decision-making process in schools, research indicates superintendents have the greatest influence in driving the budget development process (Bird & Wang, 2011). In most districts, superintendents delegate the daily budget operations to the chief financial official or business manager. For such positions, superintendents must employ staff who are honest and trustworthy (Edwards, 2007). Even though superintendents delegate daily budget operations, they still need to possess and exhibit the skills needed for successful leadership in the budget-making process. According to a 10-year study conducted by the American Association of School Administrators, school finance was the largest and most difficult challenge faced by superintendents. Political posturing from groups such as the school board, teacher unions, and community organizations in the budget development process add to the enormity of that task.

Developing Budgets. Over the past thirty years, a variety of budget types and formats have been utilized by school districts. Those currently used are: (1) line-item or "traditional" budgeting; (2) performance budgeting; (3) program and planning or "programming" budgeting; (4) zero-based budgeting; and (5) site-based budgeting. Each of the five approaches has relative advantages and limitations. School districts may

choose to use a single budgetary approach or a combination of two or more approaches (Texas Education Agency, 2010).

The line item budget format is the most widely used by school administrators because of its simplicity, ease of preparation, and recognition by all involved in the budget development process. This approach calls for budget requests to be based on historical expenditure and revenue data. A line item budget gives school boards and administrators a high degree of control. Funds may only be used for the line items developed in the budget process and only up to the amount appropriated (Texas Education Agency, 2010).

The performance budgeting approach focuses on efficiency, and the budget is considered a performance contract between the superintendent and school board. In this type of budget, expenditures are based upon standard costs inputs multiplied by the number of units. The total budget for a school district is the sum of all standard unit costs multiplied by the expected units provided. The performance approach includes narrative descriptions of each program and activity, organizes budgets into quantitative estimates of costs and accomplishments, and focuses on outcomes and accomplishments (Texas Education Agency, 2010).

The program and planning budget bases expenditures primarily on programs of work and secondarily on objects. The budget development process is less control and evaluation oriented, compared to line item and performance budgeting. Program and planning budgets place emphasis on identifying the fundamental objectives and goals of a school district and relating all program expenditures to these activities. This type of budget development focuses on projecting long-term costs of programs and the

evaluation of different program alternatives that may be used to attain long-term goals and objectives (Texas Education Agency, 2010).

Zero-based budgeting is one of the newest approaches and centers around justifying all program activities and services annually. School budgets start at zero each year, and all spending must be prioritized and justified. An evaluation of all program activities is required annually. The zero-based budgetary approach is particularly useful when overall spending must be reduced (Texas Education Agency, 2010).

Site-based budgeting emphasizes the decentralization of budgetary decision making and involves increased budgetary authority at the campus level. This budget process places the principal and other campus staff at the center of budget preparation. Principals set the long-term financial strategies for their campuses and are responsible for both the preparation and maintenance of the campus budget. Campuses are allocated a certain level of resources, which they have the authority to distribute to educational and support services at their discretion. This budgetary approach may be used in combination with any of the four previously discussed budget formats (Texas Education Agency, 2010).

Budget Reductions. Reducing a school budget implies change and letting go of old ways. Confronted with change, people within the organization will react with a range of emotions from fear, anger, denial, disorientation, and uncertainty. School leaders must listen compassionately and communicate openly to help employees make the transition. Leaders must acknowledge that even though employees may understand and know that change is coming, resentment, low morale and productivity, anxiety, and skepticism may still be present (Bridges, 2009). Reductions in revenue for school districts are usually the

result of federal and state aid reductions. School leaders must employ successful strategies to balance budgets in economically stressful times. Superintendents focus on a process that reduces overall expenses without eliminating available resources (Marchand & Weber, 2015) (Foster, 2007).

The development of a school budget is a year-long process that involves planning, setting priorities, monitoring, and accountability. A school district's budget should also be developed based on sound data, realistic projections, and input from all stakeholders (Butler, 2011). In challenging times, superintendents seek ways to increase revenue while ensuring that their school operates efficiently. Quite often school leaders are forced to reduce budgets due to decreases in revenue. In such situations, strategies must be in place. Dr. Butler (2011) recommends the following specific steps:

- 1. Analyze the existing budget to ensure an accurate estimate of revenue report.
- 2. Develop an estimate of revenue report and verify the deficit.
- 3. Inform the school board.
- 4. Inform the faculty and staff.
- 5. Inform the stakeholders.
- 6. Implement a budget freeze.
- 7. Implement a hiring freeze.
- 8. Create a calendar for a budget reduction plan.
- 9. Conduct a program/curriculum assessment.
- 10. Review/Establish district goals, mission and vision.
- 11. Develop a budget reduction rubric and guiding principles.
- 12. Form budget reduction/revenue enhancement teams.
- 13. Update budget procedures manuals for campus principals.
- 14. Identify cost saving options.
- 15. Schedule a school board workshop.
- 16. Utilize the school district website to receive input from the community and to communicate the budget reduction calendar.
- 17. Schedule community forms to communicate identified cost savings and revenues enhancement options.
- 18. Consult school attorneys regarding any planned reductions in force.
- 19. Prioritize budget reduction options and communicate the impact of these options.
- 20. Address school politics with school board members.
- 21. Maintain school climate.

- 22. Maintain day-to-day operations, and do not allow budget reduction issues to dominate faculty and staff meetings.
- 23. Continue to seek innovation and work to implement more efficient educational delivery systems.
- 24. Recommend a balanced budget to the school board (Butler, 2011).

A study by Alm & Sjoquist (2009) suggests that when faced with reductions in funding, school districts in Georgia responded by finding ways to increase local revenues. School districts can increase funding by using such methods as increasing taxes rates or forming an education foundation. When forced to reduce expenditures, school districts tended to try to preserve instructional spending and alleviate fiscal stress by spending less per pupil on administration, deferring maintenance and capital outlays, and utilizing portions of their fund balances. Districts faced with sustained economic difficulties, not surprisingly, were likely to have higher pupil-teacher ratios and spend less per student than districts experiencing fewer fiscal pressures (Ladd, 2009).

Texas School District Budgets

School District Expenditures. The State of Texas collects data each year on how school districts spend their tax dollars. All school districts must account for annual expenditures using codes that indicate the object, function, and funding source. This allows school budgets to be analyzed based on what is purchased, its purpose, and the source of revenue. The 2012-13 data indicate that public education remains a laborintensive operation. Salaries and benefits account for 80 percent of basic educational costs; contracted services represent an additional nine percent; supplies and materials make up nine percent; and other operating expenses account for two percent (Moak, Casey, and Associates, 2014).

Texas school district budget expenditures are recorded in reference to different functions, including instruction and instructional-related services, instructional and school leadership, support services – student (pupil), administrative support services, support services – non-student based, ancillary services, debt service, capital outlay, and intergovernmental charges (Texas Education Agency, 2010). Instruction, by function, accounts for the largest share of educational spending at about 61 percent of the basic educational costs. In 2012-13, Texas employed about 317,000 teachers and 58,800 educational aides. District operations, including facilities maintenance and operations, transportation, food service, data processing and security, account for the next largest share of spending for school districts at 21 percent (Moak, Casey, and Associates, 2014).

Most of this spending goes toward salaries and benefits of maintenance personnel, food service personnel, and transportation personnel (Moak, Casey, and Associates, 2014). These individuals play important roles in a student's educational experience, even though they do not work directly with the student in the classroom.

At 15 percent, instructional support is the next largest share of the public education budget. In 2012-13, Texas employed 7,200 campus principals, 9,000 assistant principals, 10,600 school counselors, and 5,800 nurses. Central administration accounts for the smallest share of all funds expended at three percent. Superintendents, associate superintendents, business managers, and human resource directors are all funded in this category. Also funded from central administration are costs associated with tax appraisal and collection, legal services, and audit and accounting services (Moak, Casey, and Associates, 2014). This information will be relevant when studying the expenditures of school districts in the Eagle Ford Shale and comparing expenditures by function.

School District Revenues. The state looks at three components when determining state aid for school districts: Tier I, Tier II, and funding for facilities. Tier I funding is determined by the number of students involved in the different educational programs. Funding is provided for students in regular basic education, special education, career and technical education, bilingual/English as a Second Language education, compensatory education, gifted and talented education, Public Education Grants, and transportation. Tier I also includes the high school allotment. The total amount of funding for Tier I is determined by the number of students in the above mentioned programs, the school district's M&O tax rate, and the school district's average daily attendance (Texas Education Agency, 2014).

Tier II funding provides a guaranteed level of funding to school districts to supplement the basic funding provided by Tier I. This guaranteed level ensures that school districts generate a specified amount of state and local funds per student for each cent of tax effort (Texas Education Agency, 2014).

The third component of state funding for school districts involves facilities. The facilities funding component consists of the Instructional Facilities Allotment (IFA) program and the Existing Debt Allotment (EDA) program. The IFA program provides funding for school districts for debt service payments associated with the purchase, construction, renovation, and expansion of instructional facilities. The EDA program provides funding to school districts for debt service payments on eligible bonded debt (Texas Education Agency, 2014).

Impact of Mineral Values on School Budgets

Mineral Impact on United States Schools. Researchers began to dedicate literature to rapidly changing economies in rural areas resulting from energy resource extraction during the 1970s and 1980s (Brookshire & D'Arge, 1980). The Middle East oil embargo in the 1970s forced many regions in the United States to begin developing their own sources of energy, from coal to oil (Jorgensen, 1981). Since the early-2000s, technological advances have led to a dramatic increase in natural gas and oil production in many regions of the United States. Only a handful of recent studies address the impact of natural resources on local finances and school spending. Surges in hiring, increased tax revenues, and income from outside investments helped lift the economies of states with big deposits of oil and natural gas (Schoen, 2016). With increased production comes new revenue and new costs for local and state governments. Revenue sources include property taxes on oil and gas property, sales taxes driven by the oil and gas workforce, allocations of state revenues from severance taxes or state and federal leases, leases on local government land, and contributions from oil and gas companies to support local services. At the same time, local governments tend to experience a range of new costs such as road damage caused by heavy industry truck traffic, increased demand for emergency services and law enforcement, and challenges with workforce retention (Raimi & Newell, 2016).

The Duke University Energy Initiative (2016) studied the fiscal impacts of oil and gas on eight states: Texas, Oklahoma, Colorado, North Dakota, Arkansas, Louisiana, Montana, and Pennsylvania. The percentage of local government revenue received from oil and gas ranged from one percent to ten percent in these eight states. On average,

schools and counties seemed to receive the largest share of these revenues (Raimi & Newell, 2016). Oil production was booming and at its peak in the United States in 2014. Most oil producing state education programs were benefiting financially from the oil boom. When the oil boom ended in the years to follow, it had devastating effects on education. No state has experienced these negative effects more than Oklahoma. From 2008 to 2016, Oklahoma saw a 24.2 percent decrease in funding for education, the steepest decrease in the country (Cohen & Schneyer, 2016). This decrease has had a significant and painful impact on Oklahoma schools and will ultimately have a negative impact on that state's school children (Querry, 2016). Across the state, districts are considering bigger class sizes; teacher pay cuts and hiring freezes; cutbacks in arts, athletics, and foreign language instruction; fewer offerings for special needs and gifted students; and shorter weeks or school years (Cohen & Schneyer, 2016).

Alaska is another state that has felt the impact caused by oil and gas production. As recently as 2102, nearly 75 cents out of every dollar in state revenue came from oil. With the oil bust in 2014, when a barrel of oil went from \$100 to \$30, Alaska began considering cuts to funding in early childhood education and consolidation of schools (Schoen, 2016). School districts in Alaska are having to cut teaching positions and increase class sizes. One lawmaker is even proposing closing dozens of the smallest rural schools (Johnson, 2016).

In Colorado, during the recent oil boom, many districts were able to fund their budgets through local taxes and little to no funding from the state. With the recent recession in oil production, permits to drill decreased 25 percent from 2014 to 2015.

Colorado school districts are now experiencing 30 to 50 percent decreases in local tax

revenue. State financial contributions to local school districts will not cover the loss in revenue from the drop in oil prices and production. School districts are having to reduce staff and increase class sizes. Some districts are even increasing tax rates to help compensate for the loss in revenue (Aguilar, 2016).

Mineral Impact on Texas Schools. Once booming when the rising energy prices rippled through the nation's largest oil-producing state, Texas' once astronomical economic growth is slowing as crude trades for less than what it did just a few years ago. Lawmakers are anticipating that billions of dollars of tax revenue will not emerge, threatening the government's surplus (Preston, 2016). The impact of falling oil prices is, however, not as detrimental to the state's employment and revenue as it is for other oil-producing states because Texas has such a diversified economy. Even with a weakened economy since late 2014, Texas will not face a recession reminiscent of the one the state experienced in the mid-1980s. In 1982, oil and gas related employment was 4.7 percent of the total employment in Texas, and in 2014 it was 2.6 percent. A major contributing factor to the recession in the 1980s was the savings and loan crisis, which tightened credit. The factors that shaped the savings and loan crisis no longer exist (Hyde, 2015).

Despite its more diverse economy, the State of Texas has still felt the impact of the oil boom and subsequent recession. Sales tax revenue is the largest source of funding for the state budget, accounting for 56 percent of all tax collections. Texas sales tax revenue in January 2015 was a record high and represented a double-digit percentage increase over January 2014. Sales tax revenue was down four percent in January 2016 when compared to the same month the following year (Hager, 2017). This represents both the positive and negative impact oil production has on the state's economy.

Taxes collected from the oil and gas industry have provided billions of dollars to the state, a record \$15.7 billion in 2014 alone. These taxes provide significant amounts of funding for Texas school districts. For example, in Dimmit County alone, the oil and gas industry provided approximately 79 percent of the local tax base in Carrizo Springs with \$60.3 million of that going to the local school district in fiscal year 2015. In Karnes City, the oil and gas industry provided \$66.5 million in taxes to the local school district and was 88 percent of the local tax base in 2015 (South Texas Energy and Economic Roundtable, 2016). A study conducted by the University of Alberta's Department of Economics (2015) examined the effects of increased revenues from mineral values on student achievement in Texas school districts. The study found student achievement slightly decreased even though schools had more money because of this resource boom. Vocational and economically disadvantaged students were pulled into the labor market. Because of the increased demand for low-skilled labor, students were encouraged to leave the classroom prior to graduation. At the same time, teachers were tempted to leave the education sector for more lucrative job opportunities. Schools responded to the tax base expansion by spending more on capital projects but not on teachers (Marchand & Weber, 2015).

In Denton County, the 2016 mineral values totaled \$791 million. This is the lowest the values have been since before the oil boom and a billion dollars lower than they were in 2007. Two rural school districts located in Denton County, Krum ISD and Ponder ISD, have seen their revenues decline sharply due to the decrease in mineral values. For both school districts, mineral values constitute the majority of their tax revenue. To make up for the loss in tax dollars, these districts will have to rely heavily

on a bump in state funding, use money from their general funds, or raise the tax rate through a tax ratification election (Heinkel-Wolfe & Caitlyn, 2016).

Mr. Bob Green (pseudonym), a managing partner in a top financial consultative service and highly respected by both state legislators and superintendents, discussed the changing role of mineral values on school finance over the past 30 years:

When I first came into this business, districts with high concentrations of mineral values had a significant benefit from having mineral values, in that once you reached a certain level of wealth, there was no recapture in the system. In those days, literally, the tax people for the oil companies would go to school districts, and they would negotiate the budget. And when they were finished negotiating the budget, then they would set the tax rate such that it provided the budget.

He pointed out that districts at that time were receiving big increases in revenue but were not having to pay any of this additional revenue back to the state through recapture.

Green contrasted the impact of mineral values on school districts today:

Leap forward to today, school districts still have an advantage with debt service, but much of that operational advantage that existed at one time has largely been absorbed by increasing recapture goals for school districts, not just for Eagle Ford Shale or for minerals, but, of course, for all property wealth. So, we've now reached a time in which we have very substantial reliance, on the state and local level, on mineral wealth.

Green believes school districts whose property values are greatly impacted by mineral values are still in a better financial position than they were before mineral values came into play, although recapture has definitely made their situations less advantageous. "It's certainly a plus in terms of financing facilities, and probably in passing school bonds." But, he added, "it's not a dependable source of revenue." Green stressed the need for such districts to exercise positive caution in their financial planning.

Eagle Ford Shale Impact on Texas Schools. Texas is the largest oil and natural gas producing state, producing roughly three times more oil than the second largest

producing state, North Dakota. Texas produces more than twice as much natural gas as Pennsylvania, the second largest natural gas producing state (North Texans for Natural Gas, 2015). The Eagle Ford Shale was one of the largest single economic developments in the history of the state of Texas and ranks as the largest oil and gas development in the world based on capital investment. What started out with the drilling of one oil well in LaSalle County in 2008 turned into almost \$30 billion spent developing the Eagle Ford Shale in 2013. The record drilling levels and production redefined South Texas as an oil industry hotbed. The oil and gas production in the Eagle Ford Shale brought newfound wealth to a region that previously was considered one of the poorest in the state (Eagle Ford Shale, 2016).

The Eagle Ford Shale is a hydrocarbon-producing geological formation that has the capability of producing both natural gas and more oil than other traditional shales. The shale stretches from Mexico to East Texas, approximately 50 miles wide and 400 miles long (Railroad Commission of Texas, 2017). It contains much higher carbonate percentages in south Texas, upwards to seventy percent. The Eagle Ford Shale took its name from the small town of Eagle Ford, located six miles west of Dallas, Texas, where it can be seen on the surface as clay soil (Railroad Commission of Texas, 2017). At its peak, the Eagle Ford Shale was the most active shale in the world. Operators indicated that the shale will be developed for decades to come. The Eagle Ford Shale stretches over more than 20 counties as seen below in Figure 1 (Eagle Ford Shale, 2016).



Figure 1

The Eagle Ford Shale has had a tremendous impact financially on South Texas and the State of Texas. Improvements in technology have allowed oil companies to reach underground depositories that they previously were unable to reach. The key to unlocking the massive Eagle Ford Shale resources was hydraulic fracturing combined with horizontal drilling (Dilallo, 2014). The University of Texas at San Antonio (UTSA) Institute for Economic Development calculated that in 2013 production from oil and gas in the Eagle Ford Shale generated more than \$87 billion in economic output. Production in the Eagle Ford Shale increased from 581 barrels per day in 2008 to more than 1.5 million barrels per day in August 2014 (UTSA Center for Community and Business Research, 2013). According to the UTSA Center for Business and Community Research (2013), it was projected that by 2023 the region would support more than 196,000 jobs and generate more than \$137 billion for Texas.

What has the state done with the significant amounts of additional revenue generated by the Eagle Ford Shale oil boom? According to financial expert Bob Green, most of the additional revenue has been put into the state's economic stabilization fund,

popularly known as the "rainy day fund." Green noted that a substantial contribution was made to the transportation department, but most of the additional money ended up in the rainy day fund. He added that this money was not made available to schools.

The Eagle Ford Shale oil boom took a sharp turn for the worse late in 2014 when oil prices dropped drastically. The price of a barrel of oil went from over \$100 to under \$50. This dramatic drop in oil prices caused big decreases in oil production in the Eagle Ford Shale and thus big declines in revenue. Suddenly, thousands of people were laid off their jobs, and local businesses saw sales decrease significantly. The oil boom had busted, and now the only question was is this going to be a temporary or permanent situation (Hiller, Once booming, now fading in the Eagle Ford Shale, 2015).

With the dramatic drop in oil prices in 2014, school districts saw their revenues follow suit. After several years of significant increases in revenue, school districts located in the Eagle Ford Shale were now faced with a double whammy of reduced revenues in addition to having to pay back state funds. Just as the oil and gas activity dried up so did the tax revenues that funded local districts. For example, Cuero ISD revenues increased from \$6 million in 2009 to \$22 million in 2013. When the district experienced an oil bust, revenues decreased to about \$16 million over the next few years. This represented a 30 percent decrease, which forced the district to cut personnel and services. Further, the district had to send money to the state because of their property wealth status (Alford, Eagle Ford School Districts Give Back Millions, 2016). This is the result of the state's looking at prior year values when considering funding for school districts. In 2015, Cuero had to pay \$4.3 million back to the state in the form of recapture. Examples of the amount of recapture paid back to the state for some other

school districts located in the Eagle Ford Shale include: Cotulla ISD - \$53 million,
Karnes City ISD - \$51 million, Carrizo Springs ISD - \$49 million, and Yorktown ISD \$19 million (Alford, Eagle Ford School Districts Give Back Millions, 2016). No wonder,
school districts are struggling with how to make sense of and manage their finances
because of the unfamiliarity with how to deal with this situation. Superintendents in
these districts have little guidance when it comes to spending and planning future
budgets.

Because of the Eagle Ford Shale, the state has more property rich school districts. This means more districts are paying recapture, which translates to more money for the state. What does the state do with these additional monies? Is the revenue invested back into public education? To answer these questions, financial expert Bob Green used a comparison to the state lottery in which the revenue generated was to go toward public education:

When the lottery first passed, there was all this commotion over the issue of is this really going to education. And basically what happened was, in the final analysis, the lottery money does go to public education. But what the state did when it made that decision was essentially reduce money from other sources.

Green explained that the same thing has happened with the additional money the state has received through recapture. They are putting this additional money into public education but reducing other public education funding sources.

Conceptual Framework

Several school districts in South Texas are located in the Eagle Ford Shale and are experiencing significant increases or decreases in mineral values. It is critical for superintendents to understand the unique challenges posed by these circumstances and to have some knowledge of various strategies to handle them. Failure to use long-term

financial strategies could put a school district in financial crisis, which would ultimately affect the education of students in that district.

The intent of this study is to develop a grounded theory related to strategies for managing school finances in districts that experience large increases or decreases in mineral values. Grounded theory, a qualitative approach to research, generates theory from observation (Calloway & Knapp, 2006). A grounded theory approach is utilized when there is a lack of knowledge regarding the subject of the study (Corbin & Strauss, 2008). A quality grounded theory is one that is (a) inductively derived from data, (b) subjected to theoretical elaboration, and (c) judged adequate to its domain with respect to a number of evaluative criteria (Haig, 1995). In grounded theory, concepts are the basic units of analysis because theories are developed from the analysis of the data and not the raw data (Pandit, 1996).

Multiple designs can be used in creation of grounded theory, including constructivist, systemic, and emerging. A constructivist grounded theory will be used for this study because of its emphasis on a more flexible stance than the positivist influence of classic grounded theory. In this study, theories, rather than being discovered, will be constructed through the researcher's immersion into a constant comparative analysis of the collected data (Charmaz, 2006).

Information on financial strategies school districts integrate when mineral values increase or decrease significantly is, at best, minimal. Grounded theory to be utilized in this study will allow the researcher to focus on the process or phases over time (Creswell, 2013). The focus will be on how superintendents are managing their school districts' finances with regard to increased or decreased mineral values. The study will look at the

specific strategies school districts have developed to help deal with this challenge and whether the district's strategies have changed, based on the status of oil production. The researcher also seeks to develop a theory of this process or action (Creswell, 2013). It is the intent of this research to develop strategies that school districts can reference and use when faced with large increases or decreases in property values.

Discussion

The current Texas school finance system has been in dispute for over 30 years, with little to no changes being made to the formulas that determine a school's funding. School districts located in the Eagle Ford Shale are operating on a funding system that is outdated and that does not take into consideration the unique situation of school districts in the region. School districts subject to the volatility of the oil and gas industry must use effective strategies as they work within the existing school district funding system.

Failure to understand the intricacies of funding can result in a district's insolvency. This makes it mandatory for school boards and school personnel to develop budget strategies to ensure the long-term financial stability of the district. This study will be designed to identify such effective strategies.

Budgets are developed to aid in achieving the goals of the district with the ultimate outcome of improved student achievement. Good practices must be created and implemented in order for a budget to accurately reflect the goals of the district.

Analyzing the current budget, implementing cost saving strategies, and communication and transparency are key elements to developing a successful budget. Good budgets also use information about school staff, students, and facilities to meet student learning needs and goals (Rennie Center Education Research & Policy, 2012). School districts

everywhere and, even more so, school districts located in the Eagle Ford Shale must use effective strategies when developing budgets in order to assure that taxpayer money is being spent wisely. Additionally, school districts in the Eagle Ford Shale must incorporate proven budget strategies to ensure long-term financial stability.

The Texas school finance system is complicated. The prevailing question remains, "Are school districts being funded equally and adequately?" The answer to this question often depends on the person asked. Many educators and parents will say school funding is not adequate and equal for all schools, while others who are not involved in education will say that public education is funded appropriately. This same outcome was evident when researching the effects of oil and gas on school funding. Organizations like North Texans for Natural Gas (2015) will argue for the benefits of oil and natural gas on public education finance. The organization promotes the oil and natural gas industry as not only fueling jobs and the economy, but also as a significant contributor to the state's education system. Oil and natural gas have contributed significant amounts of money to the state's Permanent School Fund. The organization also argues that school districts have benefited from property taxes paid by the oil and natural gas industry (North Texans for Natural Gas, 2015).

It becomes fairly evident that organizations such as North Texans for Natural Gas want to paint the best picture possible for the oil and gas industry. Because of some of the controversy surrounding fracking, this organization is trying to make a strong, positive case for oil and natural gas. The organization fails, however, to discuss how school district revenues can be cut drastically as a result of the volatility of the industry, sometimes forcing districts to make substantial cuts to personnel and programs. This

organization also fails to address how little can be done with the added revenues from oil and natural gas when those revenues will either go back to the state or be used to subsidize for future losses. Many superintendents in the Eagle Ford Shale have good cause to be concerned. They know if oil values start dropping sharply, they could easily find their districts owing more to the state in recapture then in the amount of taxes collected (Alford, 2015).

The common perception is that school districts where property values have increased significantly because of oil and natural gas have a surplus of revenue. In reality, school districts do receive additional revenues but must save most if not all of this revenue because, inevitably, revenues may take a drastic turn for the worse. A decrease in revenue of over 30 percent can be devastating for a school district. Two to three years of this percentage of decrease in property values can cause bankruptcy for a school district (Alford, 2016). Many community members in a school district are not aware of this potential danger and are upset when school districts do not spend this extra revenue. Often these constituents believe that school districts should lower the tax rate because of the additional revenues they collect. Community members can also falsely perceive a school district as being incompetent and unable to properly manage money when the district is suddenly operating on budget deficits because of drastic decreases in property values. It is critical that school districts communicate with people in their communities when values increase or decrease due to fluctuations in the price of oil and natural gas.

Lack of funding for public schools in Texas makes it critical for school districts to operate efficiently and effectively. School districts should use a strategic and deliberate approach when developing school budgets, based on information about school staff,

students, and facilities to meet student learning needs and goals. School districts should use financial data and student performance measures to develop data-driven budgets that help ensure the effective use of resources to support best practice. Current school budgets are not constructed to support uniformly high levels of student learning, particularly when dealing with diverse populations (Rennie Center Education Research & Policy, 2012). For school districts in the Eagle Ford Shale, developing a budget that is effective and efficient can make the difference in whether the district succeeds or fails.

School boards, superintendents, and business managers must use effective strategies to ensure the long-term financial stability of a district. This study will examine if educational leaders have become better in the development of budgeting strategies as a result of the uncertainty created by the Eagle Ford Shale, especially in predicting revenues. In order for superintendents and business managers to survive in a school district located in the Eagle Ford Shale, it is imperative they develop long-term financial strategies. This study will identify effective long-term strategies for financial stability that will serve as a resource and reference not only for school districts located in the Eagle Ford Shale, but for all school districts seeking to be better stewards of their district finances.

Conclusion

All school districts need and should have long-term financial budget strategies in place. Without such strategies a district could face financial insolvency. The importance of having long-term budget strategies in place is amplified for those districts located in the Eagle Ford Shale. The volatility of the oil and gas industry inevitably results in school districts receiving unpredictable amounts of revenue. Not having long-term

strategies in place to address the different possibilities can have negative consequences for schools. In the end, those who will be affected the most will be the students in classrooms.

Since the study will focus on highly unusual manifestations of school districts that have experienced dramatic increases or decreases in property values due to changes in mineral values, the research will use extreme case sampling (Creswell, 2013). The focus will be on school districts that have gone from being some of the poorest districts in the state to some of the richest. These districts are located in the same geographical area of South Texas and draw minerals from the same shale: The Eagle Ford Shale. School districts will be identified by the following demographics: (1) low percentage of students qualifying as economically disadvantaged; (2) high percentage of students qualifying as economically disadvantaged; and (3) about 50 percent of students qualifying as economically disadvantaged. Districts will be selected based on superintendent experience. The research will involve superintendents with several years of experience in school leadership and superintendents fairly new to the profession. The study will conduct an analysis of districts that have been impacted as a result of increased mineral values; that is, districts that are financially solvent as a result of effective fiscal management practices and others that are struggling to maintain financial stability.

The state has established a financial accountability rating system for school districts known as the School Financial Integrity Rating System of Texas (FIRST). This rating system ensures that Texas public schools are held accountable for the quality of their financial management and that they improve those practices (Texas Education Agency, 2015). The districts chosen for this study will be studied through FIRST for

analysis of effective strategies. Finally, the research will include districts of different sizes. These specific criteria, taken together, will afford the transferability of the study and contribute to its credibility and trustworthiness.

CHAPTER 3: METHODOLOGY

The purpose of this chapter is to outline the methodology and procedures used in this study. Included are the purpose of the study, research questions, and a rationale for the selected methodology and design. This chapter outlines the nature of a qualitative study methodology, the method of data collection, procedures, positionality, and strategies to enhance trustworthiness.

Purpose of The Study and Research Questions

The purpose of this study was to identify long-term financial strategies that have been established and implemented by mineral rich school districts to ensure long-term financial stability. This study also examined if school district financial strategies have changed as a result of significant increases or decreases in mineral values. Specifically, these are school districts in the Eagle Ford Shale that have been confronted with dramatic increases and decreases in property values. The strategies were generally defined as the plan developed by school districts to ensure long-term financial stability. This developed plan is for school districts where property values have increased or decreased significantly over the past five to ten years. Long-term financial stability was defined by school districts being able to develop and implement a budget without having to make budget cuts over a five- to ten-year period necessary to achieve district goals. School districts' management of fund balance, energy efficiency plans, bond planning, employee salaries, and personnel management were examined to determine long-term financial stability, as well. The following research questions were used to guide the study:

- 1. What financial strategies have school districts developed to ensure long-term financial stability when property values significantly increase or decrease?
- 2. Have school districts' long-term financial strategies changed as a result of property values significantly increasing or decreasing?

Research Methods

Epistemology. Epistemology can be defined as "how we know what we know" (Crotty, 1998, p. 8). For purposes of this study, the epistemology will be constructivism. Using a constructivist approach, individuals construct their own unique realities through their lived experiences (Creswell, 2013). Superintendents and school leaders who work in mineral rich school districts have a unique perspective on school budgeting. Their experiences have allowed them to construct budgeting strategies to maintain financial solvency. Maxell (2013) describes constructivism as an understanding of an experience as "inevitably our construction, rather than a purely objective perception of reality, and no such construction can claim absolute truth" (pg. 43). Participants in this study shared their experiences and meanings, which are accepted as their perception of truth. Qualitative researchers "embrace the temporal nature of truth that is context dependent" (Nolen & Talbert, 2011). This constructivist approach was more relevant than a positivist approach that seeks to define an absolute truth or reality. It was conceivable that the budget strategies in one school district might be different from those in another district, yet just as effective.

Theoretical Perspective. Crotty (1998) defines the theoretical perspective of research design framework as "the philosophical stance informing the methodology" (pg.

3). The theoretical perspective utilized for the purposes of this study was interpretivism. The definition of interpretivism is understanding and explaining reality through "culturally derived and historically situated interpretations of the social life-world" (Crotty, 1998). The interpretivist paradigm is the idea that one's point of view is built upon past experience, and, consequently, multiple perspectives bring about greater understanding of a situation (Willis, 2007). Using this perspective allowed for a greater understanding of the context brought by superintendents and school leaders who are associated with school districts experiencing significant increases or decreases in mineral values. The experience of superintendents and school leaders in these districts created a unique perspective on effective budget strategies for districts that may find themselves in similar exceptional situations.

Methodology. Methodology is the "strategy, plan of action, process or design" lying behind the choice and use of particular research methods (Crotty, 1998, p. 3). A qualitative grounded theory study methodology was utilized in order to obtain a better understanding of the strategies used by superintendents in oil producing districts to maintain long-term financial solvency. Tracy (2013) indicates education is one of the fields best suited for qualitative research. Rudimentary qualitative research is a methodology that probes into the how, what, and why of a specific topic (Merriam S. B., 2009; Merriam & Associates (Ed.), 2002). Corbin and Strauss (2008) describe qualitative research as most appropriate for those interested in seeking how participants form meaning. This study appropriately involved the observation of how superintendent strategies have changed in order to maintain financial solvency in districts located in oil producing areas.

Sampling Method. The participants for this study were superintendents, chief financial officers, and school board presidents from three school districts. Most school districts located in the Eagle Ford Shale are rural school districts, so the districts used in this study were located in rural areas. One semi-structured interview was conducted with the superintendent, the chief financial officer, and the school board president. All three representatives were from the same school district. The interview focused on gaining background information and strategies associated with the district's budget. An semi-structured interview was also conducted with an individual who deals with the public education finances at the state level. This interview focused on gaining information on the development of the budget at the state level.

Maxwell (2013) describes purposeful sampling as selecting persons, activities, and settings to provide information that is relevant to the questions and goals. In order to achieve determined variation, superintendents and chief financial officers were selected based on years of experience. Specifically, superintendents and chief financial officers had at least five years of experience working in a school district located in the Eagle Ford Shale. It was preferred that the school board president have at least five years' experience as a member of the school board. The selection process involved a purposeful selection method.

Procedures

Institutional Approval. To ensure the rights, privacy, and welfare of the participants were protected, the researcher applied for review and approval from the Institutional of Review Board (IRB) at the University of Texas at Austin. The researcher contacted the selected participants and completed all necessary forms required to conduct

external research while following the research protocol described on the IRB approved forms.

Interviews. Once the University approved consent to conduct the research, the researcher solicited interviews from the study participants. To facilitate the interview process, the researcher met with the participants in their respective offices. All interviews were tape recorded and transcribed. This allowed the researcher to deeply interact with participants at a setting and time that was most convenient for the participant. Interview protocol was observed throughout the interview process. Rapport with the interviewees was established prior to the interviews. Interviewees were assured of the confidentiality and anonymity of the data collected from the interviews.

Sources of Data

In addition to interviews, documents were collected to help verify data collected through the interviews. Documents that were collected for the purpose of this study include summary of finance reports, audit reports, and budget expenditures from the Texas Education Agency (TEA) website for the selected school districts. Finally, school district budget calendars will be collected and analyzed.

Data Analysis. Data analysis for this study was ongoing throughout the data collection process. Constant comparisons were used to identify patterns and similarities to help identify themes within ground theory (Corbin & Strauss, 2008). Data was broken down into separate excerpts, analyzed, and coded into the online program NVIVO, using an open coding process. Open coding procedures were used for interview transcripts and categories, and themes from these categories were developed in relation to superintendent, chief financial officer, and board member financial strategies.

Information from participant responses were assigned codes to ensure respondents were not be linked to their responses and that superintendents, chief financial officers, and board members were not identifiable. To maintain the confidentiality of the data and the participants, information was kept in a private and locked file.

Strengths of Methods. This study identified budget strategies used by superintendents in districts whose property values are largely made up of mineral values. The need for a qualitative study centered around the lack of data in this particular area. A qualitative study allowed for personalized and customized interviews based on the experiences of the superintendents, chief financial officers, and board presidents. One advantage of interviews was that the depth and breadth of each participant's individualized perspective was revealed (Hays & Singh, 2012). Each school leader's perspective and assessment of his or her budget strategies had personal experiential intensity. This study was strengthened through a qualitative study perspective.

Trustworthiness and Quality

All interviews were recorded to provide accurate and complete records of the data. Accurate accounts of the interview were vital to ensuring the trustworthiness of this study. Reflective journaling was crucial to capturing the true essence of the interviews. Precise descriptions from documents and interviews are important in qualitative research and the main method for identifying patterns of data (Creswell, 2013).

Triangulation was used to help ensure the trustworthiness of the study. Data was collected from multiple sources, including individual interviews from superintendents, CFOs, board members, and one financial expert. A clear purpose of the study was explained to each participant before the study began through a letter of information and

consent form. Throughout the entire study, the researcher followed required accepted ethical standards, as well as the perspectives of Lincoln and Guba (1985) for establishing validation and trustworthiness. Credibility, authenticity, transferability, dependability, and confirmability are essentials for validation, reliability, and objectivity (Lincoln & Guba, 1985)

Positionality. Having been in public education for over 25 years, it was hard to remain unbiased in my study. I am proud of my profession, and I felt a sense of loyalty to public education. It has been good to me and provided for my family, so I was hesitant to say anything that would portray this profession in a negative light. In particular, I interviewed colleagues and did not want to say anything negative about them or their school districts. In a sense, I was talking about myself when I made comments about superintendents, so naturally, it was hard to project any wrong doing. I set high expectations and high standards as I developed and interpreted the information from this study, and I had to take my educator hat off and be as objective as possible. To ensure the integrity of this project, I had to distance myself from my colleagues and profession.

I think, in general, most educators do not like change. I, myself, have been very cautious when it comes to change. I had to keep this in mind, and in selecting the superintendents who I would interview, I needed to find at least one who didn't have a mindset that change was not good, at least one who was willing to look outside the box when it came to school finance. I didn't want all the superintendents I select to have the same viewpoint as I did. Looking at an issue from a different perspective would help validate my findings.

In my brief tenure as a superintendent, my experience with school finance had not been a very good one. My district had struggled financially due to lack of funding, so I had a biased attitude toward our state government and what I perceive as a lack of funding for public education. I had to keep this bias in check during this study and keep an open mind. I had to realize there are other issues besides state funding that can cause financial hardship to school districts. I had to remain open to searching for these causes and not focus solely on state funding.

I am a conservative person especially when it comes to finances. This conservative viewpoint could have limited options I saw as being realistic when it came to school finance. I could not let my personal bias prevent me from looking for and considering any and all options to the problem presented by this study. Just because I might have thought a strategy was too risky or not something that I would do, doesn't mean that I should have eliminated that option from consideration. This was difficult because I definitely believed there were certain things that could have been done to correct the problem. I had to keep in mind that my solution was not the only or, for that matter, the best solution.

Ethical Considerations. As I carried out this study and began to collect and analyze data, I had to continuously revisit my positionality. Being in the education profession for over 25 years, I had to keep from favoring the side of my profession and colleagues. Journaling and peer debriefing helped eliminate bias throughout the data collection and analysis process. I developed useful information for colleagues and did not use this study as a way to project my bias regarding what I considered a broken school financial system. Regarding ethical issues, the data collection phase of the study

was the part that most concerned me. I had to develop and follow strict procedures related to confidentiality and consent. I established a relationship with the participants and was careful when having discussions that were "off the record." Throughout the process, I was upfront and shared with the participants any and all information obtained by them that I used in my study.

Summary

This chapter provided an overview of the researcher design, the need for a grounded theory qualitative study, procedures for data collection, the process for data analysis, and strategies employed to promote trustworthiness and quality. Chapter four presents the discoveries form this qualitative grounded theory study.

CHAPTER FOUR: FINDINGS

Long-term financial strategies are essential to the success of a school district and the students it serves. Nowhere is this more evident than in districts where property values consist of a high percentage of mineral values. The volatility of oil and gas prices and production can drastically change a school district's assessed property values in any given year. As the Texas public school finance system is currently structured, the revenue generated for a school district can fluctuate significantly. This makes it crucial for school leaders to have an unquestionable understanding of the school finance system and the long-term effects that oil and gas can have on school budgets.

The purpose of this study was to research the long-term financial strategies of school districts where property values were affected significantly by rise and fall of mineral values. Three school districts located in the Eagle Ford Shale were specifically chosen for the analysis. The study looked at the long-term financial strategies implemented by these districts and whether these strategies changed based on effects of mineral values. The following questions were pertinent to the investigation: (1) What financial strategies have school districts developed to ensure long-term financial stability when property values significantly increase or decrease? (2) Did school districts' long-term financial planning strategies change because property values significantly increased or decreased? Using these two questions to guide research, this study examined how school leaders perceive and prioritize school finances in an environment that creates substantial uncertainty.

The previous chapter defined the methods and procedures used to recognize the long-term strategies created in districts with high mineral values. Chapter four presents the study's findings. This grounded theory qualitative study used a combination of semi-structured interviews, data collection, reflective journals, and participant checks. To place the findings of the study in context, the ten persons who participated in the study will be described. Pseudonyms for all the participants and sites are used to protect the anonymity of all participants.

Description of Participants

The ten participants in this study, included three superintendents, three chief financial officers, three school board presidents, and one public school finance expert. The school participants were from three different small school districts located in the Eagle Ford Shale. The superintendent of each of these districts had served in that position for at least five years. It was essential to the study that each superintendent had experienced the effects of mineral values on their school budget. The one school finance expert brought his unique perspective on school finance from the state level. It should be noted that this is not a definitive analysis of the implementation of long-term financial strategies since not all school districts located in the Eagle Ford Shale participated in the study.

One Independent School District. One Independent School District yielded three total participants who took part in interviews, participant checks, and provided documents related to financial strategies implemented. Individuals interviewed from this school district were the superintendent, Joe Smith; the chief financial officer, David Jordan; and the school board president, Bill Heinz.

Mr. Smith has 41 years' experience as an educator with 27 of those years as a superintendent. Mr. Smith has served the last six years as the superintendent of One ISD. Mr. Jordan has been in education for 25 years, and over that time has served as a CFO of several school districts. Mr. Jordan has been the CFO for One ISD for the past three years. Mr. Heinz has been a member of the One ISD school board for 18 years and has served as board president for six years.

One ISD has over 1,300 students in their district with about 85 percent of those students labeled as economically disadvantaged (Texas Education Agency, 2017). In 2012, property values in the district were about \$527 million, and the district had a fund balance of about \$3.7 million. In 2016, property values in the district equaled \$7 billion, and the district had about \$32.5 million in fund balance (Texas Education Agency, 2017).

Two Independent School District. Two Independent School District yielded three total participants who took part in interviews, participant checks, and provided documents related to financial strategies implemented. Individuals interviewed from this school district were the superintendent, Julie Brown; the chief financial officer, David Dunn; and the school board president, Amanda Jones.

Ms. Brown has 30 years' experience as an educator, including eight years as a superintendent -- all eight years as the superintendent at Two ISD. Mr. Dunn has been in education for 40 years, 20 of them as the CFO for Two ISD. Ms. Jones has been a member of the Two ISD school board for six years and has served as board president for two years.

Two ISD has over 1,000 students in their district with about 67 percent of those students labeled as economically disadvantaged (Texas Education Agency, 2017). In

2012, property values in the district were about \$263 million, and the district had a fund balance of about \$7 million. In 2016, property values in the district equaled \$6.4 billion, and the district had about \$42 million in fund balance (Texas Education Agency, 2017).

Three Independent School District. Three Independent School District yielded three total participants who took part in interviews, participant checks, and provided documents related to financial strategies implemented. Individuals interviewed from this school district were the superintendent, Kelly Wright; the chief financial officer, Jose Cruz; and the school board president, Bob Shiner.

Ms. Wright has 28 years' experience as an educator with 14 of those years as a superintendent. Ms. Wright has served all 14 years as the superintendent of Three ISD. Mr. Cruz has been in education for 29 years, with eight years as CFO for Three ISD. Mr. Shiner has been a member of the Three ISD school board for nine years and has served as board president the last four years.

Three ISD has over 1,000 students in their district with about 84 percent of those students labeled as economically disadvantaged (Texas Education Agency, 2017). In 2012, property values in the district were about \$176 million, and the district had a fund balance of about \$9 million. In 2016, property values in the district equaled \$1.7 billion, and the district had about \$21 million in fund balance (Texas Education Agency, 2017).

School Finance Expert. One financial expert took part in interviews and offered documents related to public school finance. The expert interviewed was Mr. Bob Green. Since 1998, Mr. Green has served as a managing partner in a top financial consultative service, highly respected by both state legislators and superintendents. He previously held senior staff positions in the Texas Education Agency, the State Comptroller's Office,

and the Lieutenant Governor's Office. Mr. Green currently serves as a consultant for the Texas School Alliance, the South Texas Association of Schools, and numerous individual school districts.

Emergent Themes

Emergent codes were established as interview transcripts, reflective journals, field notes, and archival documents were analyzed. All documents were loaded into NVIVO to code collected data using the process of constant comparison. Word clouds were generated to help develop codes for use in analyzing transcripts. One of these word clouds is represented in Figure 1.



Figure 1. Participant Word Frequency Word Cloud

The word cloud provides a tool to easily identify predominant themes and enables further analysis of the dominant themes. After analysis of the world cloud and identification of major themes, child codes were developed and merged with parent codes. Codes were condensed into overarching themes that yielded the phenomena of priorities, commonalities, and organizational long-term financial strategies. A summary of participant responses is characterized in Table 1. The themes derived from the word cloud include significant changes in revenue, budget strategies implemented, long-term financial planning, and changes in long-term financial planning. Words and phrases associated with themes are represented in Table 2.

Table 1

Participant Response Summaries

Question	Summary of Responses
What data are considered when determining long-term financial planning?	Appraised values, financial template, three year average of what we've appropriated, student count, the needs of kids, the needs of staff, look at the appraisal district estimates, taxable values are going to be certified as, average daily attendance, five years' worth to draw a statistical expectation of what the ADA's going to be for the next year, look at preceding budgets, enrollment, look at markets and talking to people in the industry, students figures and facts and demographics, previous values, projected enrollment, salary scale, facilities, state funding
What was done with the increased revenue received because of increased mineral values?	Put that money aside, started saving it and saving it, instructional budget for supplies, work on buildings, built a new athletic complex, rebuild the track, personnel increases, added some administrative type positions, outside consultants coming in to help with our academics, address as many academic needs as we could with either personnel, programs, those types of things, started banking it to see what was happening, we have been so conservative, banked it and banked it and banked it, we were able to take care of roofs, added technology, redo our football stadium, add a few teaching positions, expanded our CTE programs, have to hold money back to survive

Table 1 Continued

Participant Response Summaries

Question	Summary of Responses	
What did the district do to reduce spending when mineral values decreased?	Cut non-payroll expenditures by 10%, we tightened up where we could outside of personnel, weather it a little bit with the money that we put away, it's kind of that rainy-day fund, a position here or there where maybe someone leaves and then maybe we didn't feel like there was a need to replace, belt tightening but not at the expense of teachers, not at the expense of staff, not cutting staff, not cutting salary, adopted a deficit budget for the last three years, more careful about expenses, hold the line on our budget, no increases	
Were strategies put in place to become more energy efficient?	All our lighting to save money, bought some new buses, replaced a lot of our air conditioning units, replaced all the lights in the district, set up a control system where you can turn the air conditioners on ar off at a certain time, new facilities are more energy efficient	
What budget strategies were established and implemented because of mineral values?	One-time expenses, one-time purchases, we're going to try to keep to one-time type expenditures and stay away from the recurring expenditures, one-time expenses that we put into the budget, athletic band, facilities and band equipment, bought some vehicles, we investin CDs, a little bit more conservative, because of the unknown	
What has been the greatest challenge because of the Eagle Ford Shale?	Trying to stay on top of the values, having enough money to pay the government, being consistent in your message that every boom is followed by a bust, being conservative, educating your board and your community, your staff, make sure that we can operate our existing programs tomorrow without having a reduction in force or curtailment of programming, the rollercoaster ride, the unpredictability, getting good employees, keeping good employees, no housing, communication, making sure the community and our employees understand why we're not just spending all of this money	
Have long-term budget strategies changed because of the mineral values?	Salaries, big percent increase on salaries, teacher stipends instead of raises, personnel, additional personnel, additional bond projects, length of bond payoff, provide housing, economic equity stipend for the cafeteria, the maintenance, the custodial and the bus drivers, using I & S monies to make capital purchases, school buses, technology, added instructional programs, early college-high school program, setting our tax rate, matching 457 for staff, projections	

Table 2

Keywords and Phrases Sorted by Theme

Major Themes	Key Words	Totals
Changes in Revenue	Revenue, additional, decrease, projections, mineral values, reduction, significant, old, maintenance and operation, interest and sinking, expenditures, conservative, increase, salaries, personnel, staff, extra, property values, small projects, fund balance, oil field	982
Financial Strategies Implemented	One-time, small projects, energy-efficient, investments, instructional, healthy, purchase, save, money, past, expenditure, careful, conservative	559
Long-Term Financial Planning	Projections, revenue, property values, enrollment, expenditures, template, needs, students, staff, salaries, personnel, facilities, past, trends, state, aid, legislation	467
Changes in Long-Term Financial Planning	Communication, housing, tax rate, bonds, facilities, instructional programs, salaries, projections, personnel, staff, no changes, update, stipends, increase, maintenance and operations, interest and sinking,	442
Totals		2,450

Changes in Revenue

Through the study, a major theme developed related to significant fluctuations in revenue for school districts because of mineral values. This change in revenue at certain times could be either a great increase or a great decrease. School leaders who participated in this study believe it is essential to know what to do when faced with this situation.

Additional Revenue. Districts located in the Eagle Ford Shale have seen dramatic increases over the past several years. These increases were a result of improvements in technology that made it significantly cheaper to drill for oil. This, along

with a substantial increase in the price of oil, caused mineral values for school districts in the Eagle Ford Shale to drastically increase. With this surge in mineral values, school districts found themselves receiving large amounts of additional revenue. School leaders, faced with obstacles they had never experienced, desperately searched for answers and quickly determined the district should save as much of this additional revenue as possible. If any of this revenue were to be spent, such expenditures should be limited.

Fund Balance. All participants stressed the importance of not spending the additional revenue that was generated from mineral values. Rather, the money should be placed in the school district general operating fund balance, which is equivalent to a savings account. Kelly Wright, superintendent of Three ISD revealed what her district did with the additional revenue:

We banked it and banked it ...because wise old superintendents told me what goes up will come down.

Wright explained that banking the additional revenue was important because of the way the state funding system operates. The state determines the amount of funding they will provide a school district based on previous year property values. When a district's values drop, the state funds the district based on the previous year's values. This results in significantly less revenue. Bill Heinz, CFO for One ISD, discussed this impact:

We put that money aside because we knew when the downfall hit, you must remember TEA recaptures on the previous year, not on the current year. So, when we knew that downfall would start hitting, TEA wants to recapture on \$6.9 billion, but I can only tax on \$4.5 billion. I can't come up with enough money to pay them and still keep a decent budget for my district. That was the reason that we started putting money aside. We started saving it and saving it.

Heinz said when the values dropped, the district had to operate on a budget deficit. It would have been impossible to cover this deficit if the district had not saved the additional revenues that came from oil and gas.

Superintendent Joe Smith, One ISD, pointed out the impact the revenue from mineral values had on his fund balance:

When I came here, we had a fund balance of under a million dollars, and we peaked out about \$32 million the year before last.

Smith said it may seem ludicrous for a district to have this much money in fund balance, but if mineral values start to decline, the money that is needed is there. Smith added that most of this money is accounted for when figuring in the cost of recapture and the possibility of having to operate on a budget deficit.

Superintendent of Two ISD, Julie Brown, said her district tries to operate as if the Eagle Ford Shale did not exist:

We just pretended like the boom really hadn't happened and just try to sock the money away. The unpredictability of oil and gas and the way the state funding system works forces our district to set aside the additional revenue.

Brown points out how easy it would be for districts to spend this additional revenue on many needed projects, but by doing so the district might find itself in a financial bind down the road.

When David Dunn was asked what he did with the additional revenue as the CFO for Two ISD, he responded:

Our mineral values went crazy. We were sitting at approximately \$220 million for our mineral values, and we topped out over a three-year period at \$6.4 billion. So, our mineral values went nuts. As a result, our revenues changed drastically. You must hold money back to survive the crashing loss of the property values. Yes, we went from having a budget of approximately \$9 million a year to a budget of approximately \$70 million a year of which \$50 million was recapture.

Dunn went on to say he would have never fathomed his school district going from being a property poor district to a property rich district. He pointed out the difficulty of being prepared for something like this that literally happened overnight.

Small Projects. School leaders at the three districts stressed the importance of saving additional revenues received from increases in their districts' mineral values.

Most of them felt comfortable, however, to use a little of this extra money for some small projects within the district. Superintendent Smith commented on some of the projects in his district:

We did some much needed work on our existing buildings; in addition, we did some work on our athletic fields. Artificial turf was placed on our football field, and the track was rebuilt from the base up. Our softball field and baseball field did not meet UIL regulations, so we rebuilt those as well.

Smith explained that even though these projects cost some money upfront, in the long term they will bring savings in other high expense areas. For example, putting artificial turf on the football field will reduce the district's maintenance and utility costs.

Superintendent Wright stated that most of her district's small projects would have been accomplished even without the additional oil and gas revenue:

We were able to take care of roofs and paving and things like that, but we didn't build any buildings. The only thing I might say that we probably did more of than we would have if we were still poor is added technology.

The superintendent, CFO, and board president of Two ISD all discussed how they used some of the additional revenue to do some work on their athletic fields. Board President, Amanda Jones explained:

We have spent some money on a few projects because we had the money in the bank, and we could amortize it out over time, like putting the turf into the football field.

Jones pointed out the current football field had some issues that needed to be addressed in the near future. She said the CFO did a study that compared the costs of fixing the current issues and maintaining the field over the next 20 years versus the cost of installing artificial turf. The study concluded the artificial turf would be the better cost-saving option.

Personnel. With the additional revenue, districts were a little more willing to hire new staff members. Although most said adding staff was a necessity regardless of revenue from mineral values, they felt more comfortable doing so with the extra monies.

Mr. Dunn talked about adding positions at Two ISD:

We did initially. We added some administrative type positions, along with some outside consultants coming in to help with our academic side of it there.

Dunn stressed that all added positions were necessary to help meet the growing needs of the students in his district. He also said increased accountability from the state and federal government played a role in personnel hiring decisions.

Superintendent Brown explained how the extra revenue allowed her district to consider the addition of much needed positions:

I did have to increase ... Let me think. We had to add a few teaching positions, but we pretty much have held the line on adding because of our salaries being so high. I did add one CTE because there's always pressure that, well, you got all this money, why aren't you expanding your CTE programs? You know it's because ... it's not just about just buying equipment and then having this building, it's about you also must have an instructor.

Brown mentioned enhancements in the Career Technical Education (CTE) program.

Because of the additional oil and gas revenue, the district was able to provide students greater opportunities in that program.

Reduction in Revenue. At some point over the previous six years, all three districts have experienced drastic decreases in mineral values. With this decrease, each district was faced with the challenge of developing a budget with significantly less anticipated revenue. Anticipation of and preparation for the day values decreased were key to the financial solvency of all three districts.

Maintain/Reduce Expenses. School leaders at all three districts cautioned against panic when experiencing severe drops in revenue. Since most of the additional revenue had been saved by all three school districts, they felt confident they were prepared to handle the decrease. All the school leaders emphasized that in this situation their goal was to not add any new expense or, possibly try to reduce expenses. CFO Cruz of Three ISD explained how his district handled the drop in revenue:

We've tried to weather the storm a little bit with the money that we put away; it's kind of that rainy-day fund. We tightened up where we could outside of personnel and even with personnel; we didn't make any cuts.

Cruz, along with most other leaders in his district, stressed the importance of not letting staff go. He stated that any reduction in staff would come through attrition.

There's a position here or there where maybe someone leaves and then maybe we didn't feel like there was a need to replace per se. But it wasn't we didn't go in saying we needed to do away with eight positions, or ten positions, or anything.

All school leaders felt the political implications from a reduction in staff would be negative and not worth the trouble. Superintendent Wright expressed the same belief regarding reduced revenues and the budget:

I hate that we're having to do an upside-down budget. We're probably more careful about expenses. You look around and say, "Do we really need to do that, or can it wait?" We'll see if the future looks better. We're conservative about teaching slots, whereas before I might have been a little bit gentler with maybe temporary part-time help. There's belt tightening, if you will, but not at the expense of teachers, not at the expense of staff.

Wright also shared a unique strategy her district has used to save money. The district had some of their long-time seasoned employees retire. They then hire them back part-time and also hire another full-time employee. Typically, the cost to pay both the full- and part-time employee is less than what they were paying the one employee.

When Superintendent Brown was asked the question of how her district handles reductions in revenue, her response was similar to that of the other school leaders:

Our concern is just to hold the line on our budget. Just looking at no increases. Obviously, we've got to maintain. Was it so bad that we needed to freeze salaries yet? It would be really hard to freeze salaries when you still have \$40 million in fund balance. We focus on maintaining our regular step increases and wage increases for our hourly employees. It was just keeping a hard line and trying not to add any other extraneous expenditures. Also, I keep an eye on those projections and what the possibilities look like five, even ten years from now with property values.

Brown was firm in her desire to avoid cutting personnel. She said that even though salaries typically make up about eighty percent of a school district's budget, cutting personnel would only occur if they were in desperate times. Because her district had planned and prepared for a revenue reduction, the district had escaped those desperate times.

One ISD school leaders indicated that when their property values decrease because of oil and gas, they cut expenses in their supply budget, but personnel and salaries remain intact.

Declining Property Value Statute.

Although the three districts participating in this study did not mention any statutes that could assist them with declining property values, financial expert Bob Green,

discussed a provision in the foundation program that could provide additional funding for school districts with declining mineral values:

There is a declining property value provision in the foundation program. Texas has a number of non-operative statutes that are part of the foundation program, or are otherwise part of the state aid program that the legislature has not repealed, but are not funding. So, on the one hand, you have a statute, which provides for this relief, and on the other hand, it hadn't been used in a number of years. And the reason it hadn't been used was because there was no money specifically appropriate for that purpose.

Green said he has worked with some school districts located in the Eagle Ford Shale to enact this statute. "Working with the education agency and the legislative staff, we kind of turned the switch on for one year. It's not a continuing obligation of the state."

Financial Strategies Implemented

A second theme that developed during the study related to financial strategies implemented by the three districts. All three districts discussed the budget strategies they established as the Eagle Ford Shale began to drastically affect their property values. The small amount of money spent from the additional revenue focused mainly on one-time expenses and not on reoccurring expenses.

One-Time Expenses. School leaders from all three school districts emphasized that any additional revenue should only be spent on expenses that are not recurring. Superintendent Smith discussed his school district's strategy when budgeting additional expenditures:

With this additional revenue, our district's philosophy, with regards to any additional expenditures that incurred, was to try to keep to one-time type expenditures and stay away from the recurring expenditures.

Smith explained the reasoning behind this way of thinking:

With the volatility of the oil market, those values that are increasing at a significant rate can decrease at that same rate. When they decrease, our district

does not want to have an expanded budget that cannot be reduced. Increasing the budget with one-time expenses allows the district to easily reduce the budget if needed.

CFO Cruz and Three ISD followed the same philosophy:

The first budget we developed after the big increase in property values actually had one-time expenses that we put into the budget; athletic facilities and band were major priorities. A district like ours does not have the opportunity very often where you can take a swing at the band equipment and upgrade it all at once. We put quite a bit of money out as one-time expenses. We bought some vehicles; we upgraded our fleet of vehicles. We bought a couple of pickup trucks, an Expedition, and a car that was needed. When this opportunity presented itself, we took advantage of it.

Superintendent Wright echoed her CFO's budget strategy:

We wanted to spend money from additional revenue on one-time expenses as opposed to expenses that are recurring. That's why when you asked me about added salary and positions, we were very careful not to do that and not to give raises that we couldn't afford if it all went away.

Both Cruz and Wright made clear the importance of looking at the future and the big picture, aware that a day might come when the district might be forced to make budget cuts. They wanted to do what was necessary now to ensure that down the road the district could handle any financial situation it might face.

Energy-Efficient Projects. When asked if any energy-efficient projects were completed with the additional revenue to help reduce expenses, one of the three districts confirmed this. CFO Jordan of One ISD discussed what his district did to reduce expenses through energy-efficient projects:

As far as being efficient, we've spent \$2 million in this area. We did all our lighting to save money. I'm always skeptical about those things because it's always on paper, and until I see the actual where I'm saving money, then I can live with it. I'm a skeptic when it comes to those things, but we did do that to try to save money. They told us that we were going to save money; we talked to districts that they use as references, and they all claimed that yes, they've been saving money, and it has worked.

Mr. Jordan added that he is glad the district decided to take on this project. Now that the district is receiving significantly less revenue, the reduced expenditures in utilities and maintenance have resulted in beneficial cost savings.

One ISD Board President Bill Heinz also elaborated on what the district has done to cut expenses through energy-efficient projects:

We bought some new buses. They were not necessarily fuel efficient, but we knew they would save the district money in maintenance costs. We had a company come in and do an energy plan for the district to try and conserve energy and maintenance costs in this area. Through this plan, the district replaced several air conditioning units and installed LED lighting.

Heinz said he believes by doing these projects the district has put itself in a better position to handle the major reduction in revenue.

At Three ISD, school leaders admitted doing very little in the area of energyefficiency compared to what they would have done under any circumstance. CFO Shiner mentioned how the additional revenue allowed his district to buy buses:

We were able to buy school buses, where in the past we had to plan and budget and say, "Okay, we can buy a school bus every other year." Where during that time, we just said, "Okay, let's buy another bus. We have the money."

Shiner felt his district had done a good job of keeping items such as air conditioning units and lighting updated previous to receiving additional revenues. This being the case, the district was able to focus on other areas when considering the reduction of expenses.

Two ISD did not consider any energy-efficient projects as a way to cut future expenses. Board President Jones stated her district's focus was on new construction, and consequently, more energy-efficient buildings:

The benefits of the pursuance of a bond was a major priority for our school district. Instead of putting significant amounts of money into older buildings, we decided on most of our money going into new construction. By virtue of the new buildings constructed, those were obviously much more energy-efficient. The

district is now more energy-efficient per square foot because of the new buildings, but, overall, this did not reduce expenses because we still have all the older buildings. In fact, we have increased our expenses overall.

Jones concluded she believes the district came out on top by taking this direction. She is certain the benefits of pursuing a bond far outweigh any additional expenses.

Investments. Investing has taken on new meaning for districts located in the Eagle Ford Shale. Previously, all three districts chosen for this study were very poor districts. They did not have large amounts of money in fund balance, which means there was little money to invest. With the development of the Eagle Ford Shale, everything changed. Fund balances went from five or six million dollars to forty or fifty million dollars. Three ISD was the only district that pointed out the benefits of investing the additional revenue. Superintendent Wright explained:

We invest in CDs. We had our investor layer our money in CDs. On the money in the bank, we make about \$500,000 a year. That's a lot of teachers. By not investing in the typical investment pools and those kind of things, that's probably the other thing where we planned ahead a little bit and said, "Look, this is an investment. We'll need this down the road."

Wright stressed the importance of taking advantage of the situation any and every way possible. Making money through good investing has proven extremely beneficial for her district.

Long-Term Financial Planning Strategies

Long-term financial planning was another recurring theme throughout the study. Whatever the situation of the district, all participants stressed the importance of planning financially for the long term. None of the leaders wanted to put their district in a scenario where years from now the district would be financially insolvent. Their focus was on good practices that would prevent their school districts from experiencing financial

hardship. Participants stressed the importance of knowing anticipated revenues and expenses, and the value of using the school finance template to make future projections.

Revenue. In projecting revenue, school leaders in this study pointed to two major areas of focus: student enrollment and property values within the school district boundaries. The higher the number in both these areas, the higher the revenue. Each of these districts looks at past trends to predict future outcomes in student enrollment and property values.

Student Enrollment. School districts across the state are funded based on the number of students enrolled in the district and average daily attendance (ADA). The higher the enrollment and the higher the average daily attendance, the more funding provided by the state. Will enrollment decline, increase, or stay constant? School leaders must have the information and knowledge to make sound future projections. David Dunn, CFO for Two ISD, explains how he uses past student enrollment numbers to project future numbers:

I run a cohort analysis for all the years that I have back to 1990 for all the different years of enrollment to show the change from class to class on enrollment. Then, come up with an average for a five-year average, an eight-year average, a three-year average, and project the next year's numbers to come up with a reasonable projection for what we expect our numbers to do.

Using enrollment projections to estimate revenue for the district and calculate needed staff is key to the financial planning process, according to Dunn. If student enrollment decreases, then district staffing must decrease. By the same token, if student enrollment increases, then staffing must increase.

Superintendent Smith of One ISD said his district projects future revenues based on student enrollment:

We look at the number of kids we have and average daily attendance. And we have a historical running record, of course, and I use five years' worth to draw a statistical expectation of what the ADA's going to be for the next year.

Smith emphasized the key role student enrollment and average daily attendance play in school funding. He pointed out how districts must stay on top of this and establish budgets based on past trends. If districts don't adjust expenditures and staffing based on projected enrollment, they will find themselves in a precarious financial situation that will be hard to overcome.

CFO Cruz, Three ISD, stated the importance of knowing future student enrollment numbers when establishing school budgets: "Student enrollment is obviously an important piece of the puzzle when determining revenue." Three ISD superintendent Wright echoed her CFO's statement by stressing the importance of looking at the district's projected enrollment.

Property Values. Property values also play a key role in determining a school district's revenue. Since school districts collect taxes from property values, the higher the property values, the higher the revenue for the district. CFO Dunn explains his district's process in projecting possible changes in property values:

We look at running numbers and allocating outside data to try to determine what will affect our property values. Is there something that will affect growth or is there something that's going to cause us to drop?

Dunn pointed out that because of the way state funding works, it becomes crucial to know if the district's values will decrease. Since the state funds a district based on the previous year's values, when a district's values decrease, their revenue for that fiscal year will decrease.

CFO Jordan cited the importance of maintaining close communication with county appraisal districts in projecting property values:

We look at the appraisal district estimates and then the finals. See what our taxable values are going to be certified as. I do projections on these appraised values. I use a financial template and go out as far as I can so that I know what our revenue will be.

Jordan stressed the need to constantly stay on top of property values. He believes districts that fail to do so could find themselves in financial jeopardy.

CFO Cruz, Three ISD, explained how he ties property values to the district's revenue:

We constantly must be on top of our property values. I determine what the district's estimated values will be. This is done in conjunction with our county appraisal district. Based on this number, I see what that means for the district in terms of revenue. Once I have a good revenue estimate, then I start to determine what we can do as far as our budget is concerned.

Cruz said he works closely with his superintendent through this whole process. He believes good communication with the superintendent is vital.

Expenditures. School leaders noted the importance of studying district expenditures when planning long-term finances. They revealed several common factors that play a major role in budget development and financial planning, including salaries, personnel, facilities, and student and staff needs.

Salaries. On average, eighty percent of a school district's expenditures consists of employee salaries, and this is typically the first item considered by districts in long-term financial planning. Superintendent Brown from Two ISD explained the importance of studying salaries in long-range planning:

Obviously, when we look long term at budgeting, you look at your biggest cost factors, which is your salary scale. With every single school district, the biggest piece of your budget is your salaries. We are always looking for ways that we can

increase salaries, increase our hourly wages, but must still maintain where the state has set the low-funding level for our district.

Brown said her district constantly monitors the salaries of surrounding districts. She pointed out that in order to attract and retain quality employees, her district must pay at or above that of surrounding school districts. Brown and her school board take pride in the fact that their salaries are higher than those of other districts in the area.

Board President Shiner from Three ISD also discussed the impact of salaries on a school budget over the long term:

Salaries are crucial for a district like ours. For our district to get good employees, we must pay well. Because of our location and lack of housing, people must commute long distances. They are not willing to do this unless they are well compensated. Since salaries are a large percentage of our total budget, we constantly have to study trends in compensation.

Shiner said his district was always looking for creative ways to compensate their employees – perks that might not be available in other districts. He said this has brought more employees to the district, and has also shown current employees how much they are appreciated.

Facilities. Through the study, it became evident that district leaders must monitor the age and condition of their facilities. CFO Dunn of Two ISD explained the importance of monitoring the age of the district's facilities and replacing items on a routine basis:

We have different ways that we are tracking the conditions of our buildings. I do most of my work in spreadsheets, and we track all the different major facility items in our buildings. Also, we track the air conditioning systems, the roofs that cost so much to repair, the parking lots, all the big-ticket items.

Dunn stated, "If you don't monitor and replace maintenance items on a routine basis, you are putting your district in a tough financial position in the future." Not including such items in a district's budget can be a recipe for financial disaster.

Board President Heinz from One ISD discussed these same challenges:

As a board president, you want the students in your district to be in the best buildings possible. This becomes a great challenge when salaries are taking such a large percentage of existing revenue for a school district. We realize that we must take care of our teachers and staff, but if we don't attend to the needs of our facilities, we are asking for trouble down the road. It is very important to know the conditions of our facilities and replace items regularly.

Heinz believes his district has done a good job in this area but points out that this has become increasingly difficult over recent years, considering the state has cut four billion dollars in funding for public education.

CFO Cruz joined others in stressing the importance of maintaining facilities.

Every district wants great facilities for their students and staff, he said, and it is always the intention of the district to replace aging facilities that require extraordinary maintenance. "The difficulty is making this a priority when you are trying to compete with surrounding districts with respect to salaries, and the state is cutting funding on top of this." He concluded that districts that do not maintain their buildings now will be adversely affected later on.

Student/Staff Needs. A common thread among the districts involved in this study was a strong belief in doing what was necessary to meet the needs of staff and students.

Superintendent Smith was direct in his comments related to knowing past trends to predict the future needs of the district in regard to students and staff:

You look at the needs of kids, you look at the needs of staff, you look at historical expenditures, you look at whatever you need to run your programs. A great example of this is a district's special education program. Looking over the past few years, most districts' special education population is increasing. It costs a school district more to educate a special education student. Many times this increased cost is tied to additional staff. School districts must plan and prepare for these additional costs. Failure to do so can result in financial insolvency.

Smith discussed the challenges that his district has faced in meeting the needs of students and staff. Although he feels he operates his district efficiently and effectively, he expressed his frustration with the state and their funding of public schools. "As the needs of our district increase and funding from the state declines, it makes it extremely difficult to provide our students the education they deserve."

Template. Leaders in all three districts discussed how they used the finance template to help monitor present and future revenues. As previously mentioned, the two biggest factors in determining a school district's revenue are student enrollment and property values. The number of students in certain programs such as special education, dyslexia, bilingual, gifted and talented, career and technical education, etc., also adds to a district's overall revenue. For this reason, school districts must continuously monitor the number of students in these programs. Superintendent Brown explains how her district uses the template to stay on top of projected revenue:

On a regular basis, we get our student enrollment for the district and the number of students in special programs. We take those numbers and input them into the template. This gives us our projected revenue for the current school year, which will tell us if we need to adjust our expenditures. Then, based on trends over the past few years, we input projected numbers into future years to determine what future revenue projections look like. We also are always talking with our appraisal district to get projected property values.

Brown stressed the merit of being conservative when making future projections and always considering worst-case scenarios.

CFO Dunn echoed his superintendent's thoughts on the template and the need to be extremely conservative when making projections. Dunn said he also tries to predict possible changes in state funding:

We try to watch trends, but, in general, what we try to do is be as conservative as possible. I personally come in and recommend that we look at the state from

different perspectives and possibility of changes, especially if something is on the table. In general, we look at going with the current system they have and it not changing because in my opinion it's not going to get much worse. The odds, if they make a change, it's going to help us slightly and we project that for the future.

Dunn also cited the need to regularly update the template with regard to the district's student enrollment and the number of students in different programs. He warned that not doing this can put a district in the hole quickly.

At Three ISD, both Superintendent Wright and CFO Cruz noted the importance of the template. Wright said her district does what every district in the state does, that is, use the template on a consistent basis to predict revenue. Cruz backed this up in his comments. Both mentioned the need for districts to be cautiously conservative when making future projections.

Changes in Long-Term Financial Planning Strategies

The prevalent theme that came to the forefront in this study was related to changes the three districts made in their long-term financial planning. Suddenly, what was routine became a major area of focus. Creativity and thinking outside the box were necessary to maximize revenue and decrease expenditures. School leaders discussed how they looked differently at projections, salary increases, personnel, facilities, housing for staff, communication, and district tax rates.

Property Value Projections. Most school leaders noted the increased difficulty in predicting future property values for their district. Before the Eagle Ford Shale, two things were fairly consistent for these three districts: student enrollment and property values. When the Eagle Ford Shale came into play, the predictability of property values

became anything but predictable. Superintendent Wright discussed the challenges her district faces because of volatility of the oil market:

I would tell you the unpredictability, without a doubt. You just don't know how next year's going to be. When I first started as superintendent, our values climbed so slowly. I knew from year to year what it was going to cost, knew how much we'd have left, almost down to the penny. Now, not knowing what our certified property values are going to be, it becomes very hard to develop a budget. We want to give our staff raises, but we have no idea if we will have the money to do this. So, we are giving raises hoping our values don't tank.

Wright explained that previously the district would find out from their county appraisal district what their certified values would be. It was a safe bet, she said, that the final values would be very close to the preliminary values. Her district was very confident in using these preliminary values to determine their budget. Now, Wright points out, because of the uncertainty of property values, her district must be in constant communication with the appraisal district and local oil companies, in addition to monitoring the global oil market. This helps them predict the future of their mineral values.

CFO Jordan expressed some of these same concerns related to predicting future property values. Jordan said that the Eagle Ford Shale had forced his district to become more conservative in its predictions:

The biggest challenge is trying to stay on top of the values. That's going to be the biggest challenge. It became very important to keep in close contact with our county appraisal district. We also made it a point to start meeting with the oil companies in the area. The best way I've learned to handle it is to be conservative. Whatever you think it's going to be, do it low.

Jordan said that the last thing a district wants to happen is to project values too high and end up having to cut expenditures. Superintendent Smith shared his CFO's sentiments: "We're conservative in our revenue projections, and we are conservative in our

appropriations for expenditures." Board President Shiner agreed: "Because of the unknown with property values, you have to be a little more conservative."

Salaries. The three participating districts discussed changes and challenges related to salaries resulting from the impact of the Eagle Ford Shale and the uncertainty of the oil market. To avoid continuous cost increases in payroll, districts became creative and offered employees stipends or retirement incentives. While additional revenue could certainly be used for salary increases, the districts knew there would be greater financial risks if salaries were increased.

Salary Increases. Of the three districts participating in this study, Two ISD was affected the most from the loss of employees. Several employees left the district for work in the oil fields simply because the pay was better. Board President Jones explained the issue in her district: "The Eagle Ford Shale has forced us to give significant pay raises because we couldn't fill maintenance positions since they were getting better pay in the oil field industry." CFO Dunn explains the effect the Eagle Ford Shale had on employment in his district:

We suddenly got into a real difficult situation hiring people. The Eagle Ford was not only stealing our teachers but stealing our custodians, bus drivers, maintenance, and other non-certified positions. So, as a result, we did a survey of what they were paying different people and increased our salaries. We also surveyed school districts, but the big thing was what the oil field was doing. The salaries being offered by the Eagle Ford jobs had a huge impact on employment in our school district.

Dunn said the leaders in his district knew the possible future consequences of salary increases: "If the oil prices drastically drop, we might not have enough revenue to cover the salary increase." He said he had even consulted with the school district's legal counsel to determine if such a day comes, would the district be able to legally reduce

salaries. Dunn's superintendent, Brown, noted not only having to increase salaries because of the higher pay for oil field workers, but also due to the loss of some employees who retired because of personal gains realized from oil production:

We did have to increase our salaries, not only our teacher pay scale but our non-certified positions, as well. We did lose some teachers to the oilfield. We lost a fair number of teachers to just early retirement because they'd become independently wealthy.

Brown commented that school leaders in her district believed that to attract and retain employees, they had to make significant increases in salaries. These salary increases were higher than the three percent increase school districts attempt to give their employees on a yearly basis.

Stipends. Two of the districts focused on stipends over significant salary increases as compensation alternatives. Both districts still gave employees a yearly three percent pay raise, which would have been a priority even if the Eagle Ford Shale was not a factor. Superintendent Smith explained why leaders in his district chose to give their employees a stipend over a big pay raise:

I didn't want to raise the salary scale because when the oil bust came, I didn't want to get stuck with a bunch of high-end salary scales in any category of employee. That's why we went with the stipend concept. We developed what I term as an economic equity stipend for the cafeteria, the maintenance, the custodial, and the bus drivers.

Smith explained that if the oil market goes bad and the district must reduce salary expenditures, it is much easier to eliminate stipends than to reduce actual salaries. Smith said that typically he would do everything he could to increase salaries, but because of the uncertainty of the oil market, the district decided to go with stipends. Board President Heinz agreed with his superintendent: "Instead of giving our teachers raises every year,

we give them stipends because it is much easier to take away a stipend when times get hard "

A teacher excellence stipend was in place at Three ISD before the Eagle Ford Shale developed and has continued even in the current circumstance. Board President Shiner discussed how the stipend worked:

We do a stipend for the teachers, so it's not locked into the budget. The stipend was in place before the oil came into play. To get the stipend, teachers must come to work. They can't miss so many days. Teachers must do community outreach so many times a year. They must call so many parents. They must participate in so many activities, very simple. It's just what most teachers are doing anyway. Teachers get \$4,000 if they do these different things. By doing the stipend, it's not tied into a salary, so if things went south, we could cut the stipend.

Shiner pointed out school leaders in his district wanted the stipend to be representative of district goals. The criteria tied to getting the stipend were all things the district felt were significant to students' success.

Retirement Plan. Three ISD school leaders expressed pride in their recently implemented "457 Plan" to attract and retain employees. Board President Shiner described the new retirement plan that is now offered to every employee in the district:

This year we started a matching 457 for staff. It is part of retention. We opted to go in; every staff member from custodian to the superintendent can put in \$1,500 a month or 3%, whichever is greater, and we will match that.

Shiner was excited when the superintendent presented this idea to the board. He felt this was a unique way to do something for employees that not many other districts in the state offer. Superintendent Wright said the program also sends a message to district employees regarding the importance of future planning:

I really was worried about putting it out there, because to me it made sense, but I thought, this is going to cost some money. You know, we probably have 90 people participating in it out of 200 employees. That's 90 people that were not saving money before that are now saving money.

Wright pointed out employees are being shown that the district cares for them and wants what is best for them in the long-term.

Personnel. For the most part, planning for personnel did not change for the districts participating in the study. Each year districts evaluate personnel based on student needs and enrollment. All three districts have added personnel since the development of the Eagle Ford Shale, but all say these are positions that would have been added regardless. District leaders agreed that the Eagle Ford Shale has made it a little easier to add positions because of the additional revenue. Before the Eagle Ford Shale, these districts might not have been able to cover costs for new positions. CFO Jordan discussed personnel in his district:

We've added a few employees that I can say we needed for whatever special reasons. We have added them for increases in the number of special needs children, and some have been added for kids that are behind on math or another content area. We needed someone to just go in and attend to those kids and try to bring those scores up. Everything's about scores.

Jordan said the increased accountability measures have forced his district to hire additional personnel. He noted that the state continues to add mandates without providing the funding needed to implement those mandates.

Board President Jones said her district had slightly increased personnel since mineral values had gone up in her district:

We haven't added that many positions. If I had to guess, we've maybe gone up three or four positions. It was not a goal to add more positions, but because we had a need in some areas, we did. We now have a curriculum director because our test numbers are down for a variety of reasons, one being the Eagle Ford Shale. We decided we really needed some vertical alignment, and we had the opportunity when the Eagle Ford Shale came.

Jones went on to explain in detail how the Eagle Ford Shale was part of both the problem and solution when dealing with personnel. While the district lost some key personnel because of the Eagle Ford Shale, the district was also able to address this loss, thanks to the Eagle Ford Shale.

The study uncovered a unique personnel strategy in Three ISD involving employee retirement. Superintendent Wright explained the new-found strategy:

We've also done this thing where some of my seasoned employees that have been around a long time, we've let them go to half time. I can replace the other half of them cheaper than I was paying them. For example, my secretary, she was making \$56,000. She's gone to half time. I can hire a receptionist for 20,000 for the other half of her. My high school librarian, the same thing. She's dropped to half time. I've got a teacher's assistant doing her other half time, so we're saving money that way. For them, it's a great bonus, because they can work half time. A lot of times, if they've got 30 years in the system, they're making more money than they were making before.

Although this idea originated in an effort to try and cut expenses because of the Eagle Ford Shale, Superintendent Wright thought this would be a good practice for districts, no matter their situation. Board President Shiner had seen this work in another district and convinced his superintendent to apply it to their district. He discussed the district's approach to employees on the verge of retiring:

Our superintendent was not a big believer in this. I was, and I think I may have influenced her just a tick but we've done a big thing on the retire-rehire side. I think the superintendent's secretary has been here 34 or 35 years, and her salary is high. She retired, and we hired her back half time. In addition, we hired a young lady who only wants to work half time. The retired secretary is training the newly hired secretary. We've done that with several different areas around the central office here, and we have saved a ton of money. Basically, what we're getting is the same position but saving 20%-25% of our money because we now only pay half of the high-end salary and bringing in somebody that's on the lower end that maybe makes half of what she makes.

Leaders in Shiner's district love this strategy. They feel they are getting equal or even better support at a reduced price.

Bond Strategy. One of the most frequently recurring topics related to long-term planning in all three districts, dealt with bond strategies. When these districts became property rich, it was to their benefit to purchase as many items as possible using bond money. Because of the situation created by the Eagle Ford Shale, these districts could go out for higher than normal bonds over a shorter period of time.

Bond Content. Bond content looked different than that of most school districts as these districts were able to maximize the financial situations they faced. Superintendent Smith told how his district used bond monies to replace high cost items that typically would have been purchased with maintenance and operation (M&O) monies:

We have used every legal trick and loophole to try to use I&S monies to replace large ticket item pieces of equipment, our air conditioning systems, school buses, and those kinds of things. And we've been pretty successful.

Smith said he typically would not recommend making purchases such as buses and air conditioning units with bond money. "Most school districts float a bond note over a 30-year period. Items such as buses and air conditioning units do not last that long." Smith noted that paying off a bond note on something the district no longer uses is not good financial practice. But, because the district could float the bond over a five-year period, Smith felt comfortable using bond money to purchase these items.

Board President Shiner explains the strategy his district took in using bond money:

We did a little six-million dollar bond and did things that we would normally pay out of our M&O. Things like roofing repairs, parking lot repairs, and technology upgrades. Anything that we felt would lend itself.

Shiner cited the strategic planning that went on in his district due to school leaders' awareness that the state would be taking most of their additional revenue through

recapture. His district decided to purchase what they could through interest and sinking (I&S) money because they knew any I&S money raised was not subject to recapture.

Superintendent Wright backed up her board president's thinking:

We decided to be very conservative. We only went out for 6.5 million, and we were going to use it to shamelessly supplant, as I say. We were going to use it, as money that wasn't subject to recapture, buy school buses, technology, textbooks, library books. It was really just a strategy.

Superintendent Wright went on to explain how she sold stakeholders on purchasing items such as school buses with I&S money:

When we went out for the bond, I used the example of a school bus. I said, "If we buy \$100,000 school bus and we buy it on the M&O side, as we would have in the past, I have to collect \$170,000 worth of taxes. Where if we buy it on the I&S side, we collect \$100,000 for the school bus and maybe \$3,000 because interest rates were so low. So it cost me \$103,000 versus \$170,000." The board took off with it. The community took off with it.

Since M&O money is subject to recapture, for every M&O dollar the district collects, a certain percentage of that dollar goes to the state. In the example above, when the district collects \$170,000 in M&O taxes, the district keeps \$100,000 and sends \$70,000 to the state. With I&S money, the district keeps all collections. So, if the district collects \$100,000 in I&S taxes, the district retains all the money.

Bond Amount. The effects of the Eagle Ford Shale made it easier for school districts to sell their communities on bond projects. It also made it easier for them to seek higher bonds. Through effective communication, these districts were able to show stakeholders that the majority of the bond would be paid by the oil companies, and the bond would have minimum impact on the school district's tax rate. Board President Jones described the communication process:

We went out to the community, and one of the things that sold the bond to the community is 80 ... actually more like 90% of the bond was going to be paid by

mineral interests and businesses. The individual homeowner was going to pay less than 2% of the bond. Because of the big increase in property values, our tax rate did not have to increase.

Jones said it was really a "no brainer" when they went out for their bond. This was a \$45 million bond over a 10-year period with no raise in taxes and most of the bond being paid by oil companies. Superintendent Brown echoed her board president's statements:

With the huge property value surge, we're like this is our opportunity to try to get some updated facilities instead of trying to breathe life into the old ones. We did a \$45 million bond election. Before the Eagle Ford Shale, we would have never been able to pass such a large bond because of the huge impact it would have had on our tax rate. With the Eagle Ford Shale, we were able to pass a huge bond that will be paid off over a ten-year period, without raising taxes. On top of this, most of the bond is being paid by oil companies. They are the district's biggest taxpayers.

Brown stressed the importance of communicating with the community. She believed that if the district had not communicated the advantages of the bond, given the current situation, it would have never passed.

Many of the same strategies were used in District One, which passed a \$50 million bond. Board President Heinz said his board would have never even considered such a large bond if it were not for the impact of the Eagle Ford Shale:

The drastic increase in property values allowed our board to pursue a \$50 million bond. It had very little impact to the school district's tax rate, and most of the bond was going to be paid by the oil companies. Our citizens that struggle financially to make it every day had very little impact from the bond.

Heinz admitted he was thrown back by the amount of the bond and the effect it had on the tax rate. "Just a few years ago we would have not even considered a bond this size because of what it would have done to our tax rate."

Bond Period. Thirty years is the typical time period that school districts choose to pay off a bond. School districts in this study took a different strategy to determine the

payoff period. Board President Heinz, citing the volatility of the oil market, said his district wanted to do a short-term bond while mineral values were high. Heinz pointed out that One ISD chose a five-year term on their bond. By selecting this short term, Heinz felt his district was in a better position to pay it off with no impact on the tax rate. If the oil market takes a sharp turn for the worst in that five-year period, the district would have to raise the tax rate to collect enough taxes to make the bond payment. Heinz said the leaders of his district felt more comfortable with a five-year term than a longer one.

Three ISD took the approach to bond length further. CFO Cruz explained how his district constructed a bond that was shorter term than typical and callable after the first year:

We structured our bond to be paid off over a ten-year period and made it callable after the first year. Even though this cost us a little bit to be able to call it after the first year, there was still that doubt of what would happen with oil prices. What happens if oil prices tank? Fortunately, we did this because oil did take a down turn, so we're not paying the bond off early at this point.

Cruz stated that by making the bond callable after the first year, his district would have paid it off, or at least paid off a majority of the bond, if oil prices continued to increase. Since oil prices decreased instead of increased, the district did not call the bond and pay it off. Cruz's superintendent, Wright, also discussed her district's bond strategy:

We purposefully cut the term of the bond short. We made it so that we could pay it off at any time, so we paid a little bit more in financing fees to be able to do that. Our thinking was, and this is still a very real possibility, that if our values go up again, we're going to pay that off and pass another one.

Wright was enthusiastic, as were many of the district leaders, when discussing newly developed strategies related to school bonds.

CFO Dunn described how Two ISD took a similar short-term and early call approach to structuring their bond:

It's going to be a really positive thing for our district if we can structure this to pay this off quickly because about 70 percent of every dollar we're putting on this bond will be paid for out of oil field company revenue. The entire bond package will be paid off over a 10-year period unless we decide to call it and refinance, which we can because we have an early call. After two years, we can call in the bond and refinance it if we need to do that ... because of the circumstance we were able to have an extremely positive financial structure.

Dunn said his view of bonds and bond strategies had changed significantly over the past few years due to the creation of the Eagle Ford Shale. At times, he finds it hard to believe that all of this is really happening.

Housing. All three participating districts discussed the challenge of available housing in their districts caused by the Eagle Ford Shale. Superintendent Brown explained how additional employment opportunities associated with the Eagle Ford Shale had greatly increased the demand for housing. She commented how it not only had limited the availability of housing but also increased the pricing: "It was already a challenge to get people to come, but to come teach here when there really wasn't available housing or the housing was extremely costly was almost impossible."

Two of the three districts involved in this study discussed providing housing for employees in their district. Superintendent Smith said employees in his district were struggling to find housing because of the high demand resulting from development of the Eagle Ford Shale:

The Eagle Ford Shale created a housing situation that became so bad for the district. We had hired teachers in June, and they quit in July because they couldn't find a place to live. And if they found a place, when the rent is more than your paycheck, it doesn't work. So, what the district did was expand an RV park; we opened our own trailer park, and we bought an apartment complex, 28-unit apartment complex. And our turnover have gone down considerably.

Smith called this a win-win for his district. Housing was now available for district employees at an affordable price. This has helped attract potential employees to the district and encouraged employee retention. An added benefit to providing housing, although not a reason for doing this, Smith said, was generation of revenue for the district.

Three ISD also purchased some housing as rental property for employees in their district. Superintendent Wright said available housing had been a challenge in her school district even prior to the development of the Eagle Ford Shale:

We did buy some housing. We were pretty blessed in that. I had a high school principal retiring, so we bought his place. We bought 65 acres that had a house on it. Then, if the money had stuck around, we would have continued to buy some housing, but that's been a long-term need here prior to even the oil coming to town. What was getting worse was that the oil was sucking up all the rent houses, so they'd put man camps in the rent houses. Rent would go up to \$1,500 a month, which obviously a teacher couldn't afford here, so we considered putting in some housing.

Board President Shiner was on the same page as Superintendent Wright in discussing this issue:

We just bought 65 acres. It's got a house on it. We're renting the house out as well, but it borders a street that backs up to the school here. We're looking at trying to do something like a housing development. This is an abstract thing. You got to be really thinking outside here.

Shiner went on to say that this is an area that they would really like to expand on in the future and one that could be of great benefit to the district: "Providing employees available and affordable housing will only help in attracting and keeping employees in this district." Shiner added that this endeavor has also generated new revenue for the district.

Communication. The study also looked at how communication has changed and been influenced by the significant increases in mineral values. Because of the Eagle Ford Shale, each of the districts found themselves having to explain and justify their actions, relative to their respective situations. Superintendent Smith stressed the importance of educating people on the financial effect oil production had on the school district:

We had to educate our board, our community, and our staff about why we're not going out and spending this big pile of money we received from oil production. We have it today, but we may not have it tomorrow. And we've got to make sure that we can operate our existing programs tomorrow without having a reduction in force or curtailment of programming.

Because the school finance system is so complex and complicated, Smith said this was difficult for people in his community to understand. The fact that he has been in the district for several years and has gained the trust of many made it a little easier pill for people to swallow. CFO Dunn reiterated what Smith said regarding changes in communication:

It became a priority of the district to increase communication with the public on the finances of the district. I think we did a relatively good job of publicizing and talking about the fact that most of this additional money the district is receiving needs to be set aside. Reason being is that most, if not all, would eventually be sent back to the state in the form of recapture.

Dunn said that by making people aware of the real financial picture, the district was able to successfully move forward with projects such as the bond.

CFO Jordan also pointed to increased communication between the district and others related to projection of future mineral values. He discussed conversations and development of relationships with the local oil companies:

We make it a point to meet with the oil companies regularly. We call them and ask them, "Hey, how's it going? What are you all doing?" You've got to make friends with those people because they're very important to our district. I don't mean friends like buddy buddies. I mean just get to know them, who they are,

who's there, who you're dealing with, and then converse with them. You must understand that they're taxpayers also, not them themselves, but the company.

Jordan said developing these relationships was time consuming but a necessary piece in being able to accurately plan for the financial future of the district.

Summary

Chapter four explored findings from a qualitative grounded theory study. The participants' feedback generated four themes related to dealing with long-term financial planning for districts located in the Eagle Ford Shale. Themes related to how school leaders handle significant changes in revenue, having good long-term planning practices in place, implementing additional financial strategies, and making changes to long-term financial planning. Findings revealed the importance of school leaders regularly reviewing projections of revenue and expenditures for their districts in light of a volatile oil market. Additionally, research findings indicated that clear and consistent communication between school leaders and their communities and local businesses was critical when developing a district's financial plan. Chapter five will discuss in further detail the findings from chapter four and provide recommendations and implications for financial planning in a school district located in an area with high mineral values.

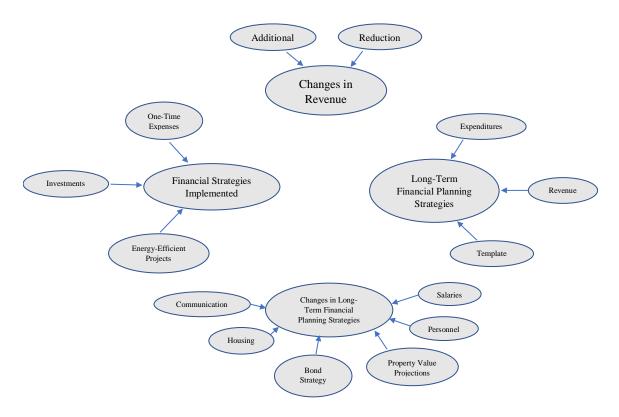


Figure 2. Diagram of Themes and Concepts

CHAPTER FIVE: FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents the findings, implications, and recommendations of this study. A developed theory to explain the findings of this study will be offered as well. The qualitative methods of this study described in chapter three were used to attain these results. The depth of the interview process, reflective journals, documents, and field notes produced full and comprehensive findings. In addition, the semi-structured approach of interviews provided unique perceptions and real-life experiences of school leaders. The comprehensive design of the study allowed for numerous perspectives to be represented by superintendents, board members, and chief financial advisors.

The content in this chapter is presented in three parts. First, the results of the research will be summarized. Second, implications for practice will be offered. Third, recommendations for further research and a summary of the study will conclude the chapter.

Problem Statement

This study emerged from the pressures exerted on school leaders faced with the challenges posed by significant increases and decreases in district property values related to oil production and its impact on school finances. The need existed to identify long-term financial planning strategies that could be used in districts experiencing significant increases or decreases in property values. The lack of long-range financial planning and improperly designed budgets for such school districts could result in lasting financial instability.

The billions of dollars generated from oil and gas production have had a substantial financial impact on school districts located in the Eagle Ford Shale. Some of

those districts have gone from once being the poorest in the state to now being the wealthiest. This transformation happened almost overnight. Changes in property values created many unknowns for school districts in the Eagle Ford Shale. School districts faced new challenges in trying to calculate future revenue projections when dealing with volatile mineral values.

Purpose of the Study

The purpose of this study was to identify long-term financial planning strategies that have been established and implemented by mineral rich school districts to ensure long-term financial stability. The study also examined if school district financial strategies have changed because of significant increases or decreases in mineral values. Specifically, these are school districts in the Eagle Ford Shale that have been confronted with dramatic increases and decreases in property values. The strategies were generally defined as the plan developed by school districts to ensure long-term financial stability – especially in those school districts where property values have increased or decreased significantly over the past five to ten years. Long-term financial stability was defined by school districts being able to develop and implement a budget without having to make budget cuts over a five- to ten-year period necessary to achieve district goals. School districts' management of fund balance, energy efficiency plans, bond planning, employee salaries, and personnel management were examined to determine long-term financial stability, as well.

Methodology Overview

A qualitative grounded theory methodology was utilized to obtain a better understanding of the strategies used by superintendents in oil producing districts to

maintain long-term financial solvency. Tracy (2013) indicates education is one of the fields best suited for qualitative research. Rudimentary qualitative research is a methodology that probes into the how, what, and why of a specific topic (Merriam S. B., 2009; Merriam & Associates (Ed.), 2002). Corbin and Strauss (2008) describe qualitative research as most appropriate for those interested in seeking how participants form meaning.

A qualitative study approach was most appropriate since the intent of the research is to examine the strategies developed by superintendents and school leaders in districts where property values have been seriously affected by oil production. This study appropriately involved the observation of how the strategies of superintendents, chief financial officers, and board members in three school districts located in oil producing areas have changed to maintain financial solvency. A series of semi-structured interviews were conducted with ten participants. An interview protocol provided the initial structure, while further questions evolved during the interview process.

Superintendents, chief financial officers, and school board presidents were chosen from three school districts located in the Eagle Ford Shale. An interview was also conducted with a well respected expert in the field of school finance. Studying these different positions within school districts as well an expert in the field gave a well-rounded representation. Interviews were triangulated with archival documents, field notes, and reflective journals. A requisite criterion for superintendents included in this study was at least five years of experience as a superintendent in their current school district.

Data Analysis

Data analysis for this study was ongoing throughout the data collection process. Constant comparisons were used to identify patterns and similarities in determining themes within ground theory (Corbin & Strauss, 2008). Data were broken down into separate excerpts, analyzed, and coded into the online program NVIVO, using an open coding process. Open coding procedures were used for interview transcripts and categories, and themes from these categories were developed in relation to superintendent, chief financial officer, and board member financial planning strategies.

Information from participant responses was coded to ensure respondents were not linked to their responses and that superintendents, chief financial officers, and board members were not identifiable. To maintain the confidentiality of the data and the participants, information was kept in a private and locked file.

Limitations of Methods

The greatest limitation was the lack of research in the study area. Very little information was available regarding effects of increased or decreased mineral values on school district finances. The study was also limited to the environment constructed by the researcher and participants. The researcher drew on the experiences of the superintendents, chief financial officers, and board members of the three districts involved in this study. The choice of districts was limited by the simple fact that not all school districts in the state of Texas are experiencing increases or decreases in mineral values. The scope of the study was limited by the focus only on school districts located in the Eagle Ford Shale. Perhaps researchers and participants from a different part of the state might have different findings. Selection bias was a factor, as well. It is possible

that the superintendents who agreed to participate might have done so because of a personal agenda they wanted to advance.

Finally, the semi-structured interview process itself presents limitations. All participants might not be asked the exact same questions; a semi-structured interview is open-ended and allows for additional questions to be asked besides those initially established by the researcher. Although semi-structured interviews may not ask all the same questions to each participant, it does allow for a profound understanding of each participant and a clear sense of the phenomenon being studied (Hays & Singh, 2012).

Significance of the Study

This study provides school superintendents with financial planning strategies for handling challenges they may encounter because of a significant increase or decrease in mineral values. In such situations, superintendents can be very vulnerable with little research and few planning strategies to assist them. These guidelines are intended to help these superintendents maintain financial solvency for their school districts. These guidelines can also help superintendents who are facing significant increases or decreases in property values for reasons other than fluctuating mineral values. Mismanagement of finances can lead to quick unemployment for school superintendents, so it is crucial that superintendents understand the challenges associated with managing mineral values. Most important, at the end of the day, mismanagement of school finances will have a direct effect on student learning. Part of the researcher's passion in doing this study was to ensure that student learning is not impeded in areas of the state where mineral values play a major role in a school district's finances.

The study uncovered several key findings based on the insights of school superintendents, chief financial officers, and board members. The school leaders stressed the importance of proper handling of changes in revenue, solid practices in long-term planning, implementation of good financial strategies, and changing some current long-term practices. The consensus was that financial planning is critical to ensure the long-term financial solvency of a school district, whether dealing with volatile mineral values or not.

Summary of Results of Research Questions

This grounded theory qualitative study used a constructivist epistemological stance and theoretical perspective of interpretivism to answer the research questions. Overarching themes are outlined to present conditions, actions, and consequences surrounding school leadership financial practices when mineral values significantly increase or decrease. Eventually, a theory explaining the financial practices of school leaders in this unique situation developed. Themes are presented in a manner that answered each of the following research questions:

- 1. What financial strategies have school districts developed to ensure long-term financial stability when property values significantly increase or decrease?
- 2. Did school districts' long-term financial planning change because property values significantly increased or decreased?

Themes Connecting Long-Term Financial Strategies. Four themes developed from discussions with school leaders from the three participating districts. The first theme revolved around the significant increases and decreases in revenue for these three districts located in the Eagle Ford Shale. At some point over the past five years,

participating districts experienced drastic changes in revenue. School leaders believed it was particularly important to know what to do when revenue significantly increased or decreased. This created the second theme, which related to financial strategies implemented in the three districts. A third theme revolving around long-term financial planning then emerged from the strategies described by school leaders. Participants believed it was important for all school districts to have long-term financial strategies in place. Many of these strategies continued after the development of the Eagle Ford Shale, but for all three districts, some new financial strategies emerged. These new strategies formed the fourth theme related to changes in long-term financial planning strategies.

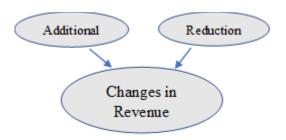


Figure 3: Changes in Revenue as a Theme

Changes in Revenue. A school budget is a product of the planning process. The budget process is comprised of three major phases: planning, preparation, and evaluation (Texas Education Agency, 2010). A finding emerging from this study was how school leaders handled significant changes in revenue for their respective school district. Drastic changes in revenue complicate the planning process. In a time when school districts are struggling to meet needs due to lack of funding, it would be tempting to use additional oil and gas revenue to attend to those needs. Through conversations with experts in school finance, district leaders discovered that spending large amounts of this additional revenue

would jeopardize their district's financial future. Many superintendents in the Eagle Ford Shale knew if oil values start dropping sharply, they could easily find their districts owing more to the state in recapture than in the amount of taxes collected (Alford, 2015). All three school districts stressed the importance of saving this additional revenue by placing it in the district's general operating fund balance. At some point, it will be needed to cover the amount of money required by the state in the form of recapture or to cover the loss of revenue when oil values decrease.

All three districts in this study took a slight portion of the additional revenue and used it to complete small projects in their district. Some of the projects included replacing roofs, repaving roads, purchasing technology, purchasing buses, and upgrading athletic facilities. Regarding personnel, the goal was to maintain and add only if absolutely necessary. However, mineral values did give these districts the option of adding needed positions. Districts typically focused on CTE and accountability when considering additional staff.

When mineral values decreased and caused a drastic drop in revenue for participating districts, little was done to reduce expenses. To make up for the loss in tax dollars, districts had to rely heavily on a bump in state funding, revenue from their general funds, or raise the tax rate through a tax ratification election (Heinkel-Wolfe & Caitlyn, 2016). Because these districts had placed additional revenue from increased mineral values in their general operating fund balance, they were able to use this money to cover losses in revenue. District leaders were adamant about not cutting personnel, with the negative implications of a reduction in force being something they wanted to avoid. Leaders must acknowledge that even though employees may understand and

know that budget cuts are coming, resentment, low morale and productivity, anxiety, and skepticism may still be present (Bridges, 2009). School leaders were cognizant that if decreases in revenue continue over an extended period of time, eventually they will have to make considerable cuts in expenses.



Figure 4: Financial Strategies Implemented as a Theme

Financial Strategies Implemented. The implementation of financial strategies was discussed at length with school leaders in this study. As previously mentioned, all three districts believed most, if not all, additional revenue received from increases in mineral values should be saved. Participating districts did, however, use small portions of the additional revenue to fund small district projects. This study supported the finding that schools responded to the tax base expansion by spending more on capital projects but not on teachers (Marchand & Weber, 2015). Knowing revenue could change drastically from year to year, districts focused on one-time expenses and stayed away from recurring expenses such as salaries and personnel. These one-time expenses usually pertained to capital expenditures.

One school district in this study implemented an energy-efficient project. which allowed the district to address concerns with aging equipment while at the same time reducing future utility and maintenance expenses. The additional revenue from increased mineral values assisted in the project's carry-through. Knowing that mineral values at some point might drop, district leaders believed the project was important because it would assist in reducing future expenses. This would help in developing a balanced budget in years when revenue decreased. In addition, this illustrated to taxpayers the district's priority of operating an efficient budget. Effective money management is crucial to the success and survival of school districts (Abshier, Harris, & Hopson, 2011).

Investing the additional revenue was another strategy implemented by one district in the study. This district could pay the salary of several teachers from the interest received through its investments. This creative strategy also allowed the district to save some of money received from investments in preparation for revenue decreases. A study by Alm & Sjoquist (2009) suggests that when faced with reductions in funding, school districts responded by finding ways to increase local revenues. These districts would use the additional revenue to create strategies that would produce additional revenue or reduce future expenses.



Figure 5: Long-Term Financial Planning Strategies as a Theme

Long-Term Financial Planning Strategies. A third theme that developed through the study was related to long-term financial planning strategies. Analyzing the current budget and implementing cost saving strategies are key elements to developing a successful budget. Good budgets also use information about school staff, students, and facilities to meet student learning needs and goals (Rennie Center Education Research & Policy, 2012). All three districts acknowledged having long-term financial planning strategies in place before the Eagle Ford Shale came into play. A multi-year plan is an effective way to avoid future financial stress through the estimation of long-term revenue and expenditure projections (Everett, R. E., Lows, & Johnson, 1996).

The districts involved in this study use calculated strategies when attempting to project future revenues and expenditures. Revenue projections are driven by student enrollment and property values, while trends in salaries, facilities, and student and staff needs control expenditures. Many of the school leaders mentioned the state as a third factor in determining their district's revenue. The way in which public schools are financed is subject to change based on legislative action. Changes in school funding laws can impact a district's state aid.

Every district relies heavily on the use of the school finance template to predict future revenues. Although the template was used before oil and gas became a factor in their districts, it is used even more so now. A decrease in revenue of over 30 percent can be devastating for a school district. Two to three years of this percentage of decrease in property values can cause bankruptcy for a school district (Alford, 2016). Different scenarios are inputted into the template to determine projected revenues. A school district's revenue is determined if values increased, decreased, or remained equal. Often, leaders emphasized the need to be over-conservative when predicting future values. Districts frequently found themselves planning for the worse-case scenario when making predictions. Because of the unpredictability, many leaders went from being conservative to ultra-conservative when dealing with their district's finances.

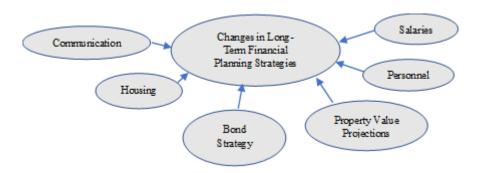


Figure 6: Changes in Long-Term Financial Planning Strategies as a Theme

Changes in Long-Term Financial Planning Strategies. The last theme involved the changes in long-term financial planning strategies that resulted because of sudden increased mineral wealth in the three districts. Participating superintendents understood that effective management of the finances of a school district is a major responsibility and is vital to the success and longevity of a school superintendent.

Problems with school budgets ultimately fall on the shoulders of the superintendent (Dlott, 2007). Superintendents, along with other school leaders, understand the importance of long-term financial strategies for the district to remain financially stable.

It should be noted that school district budget preparation is a continuous cycle of planning and evaluation to achieve a district's goals (Texas Education Agency, 2010). Previously, all three districts could accurately predict future student enrollment and property values for the district with little effort. When the Eagle Ford Shale was established, the task of predicting property values became quite difficult. Increased communication, time, and effort was put into estimating future property values with the development of the Eagle Ford Shale. Some of the participating districts took a different approach in compensating their employees. Instead of the typical percentage raise in salary, districts established stipends or contributed to retirement plans as alternatives. These districts made every effort not to increase personnel because of the extra revenue they received. One district developed a retire-rehire plan, the objective being to reduce salary expenses. A couple of the districts started providing housing to some employees. Lack of available housing and high real estate prices played into this decision.

The most significant change in strategy was related to bond planning. To maximize the amount of tax collections the district can keep, participating districts conducted more business with their I&S tax money. This necessitated an understanding of the complex Texas educational finance system of how revenues are generated and funds can be expended (Hill, 2006). Typically, the contents of a bond include the construction of new facilities or the renovation of existing facilities. Some of these districts included additional items such as school buses and technology. The amount of

the bond was also unusual for these districts. Because property values increase significantly causing little to no impact on the tax rate, districts could develop larger than normal bond amounts. In addition, bonds were atypically short-term. Districts wanted to pay off their bond debt quickly because of the uncertainty of the oil market. With high mineral values, these districts also wanted to take advantage of the fact that most of the bond would be paid by the oil companies.

All three districts placed value on good communication practices. Communication and transparency are key elements to developing a successful budget (Rennie Center Education Research & Policy, 2012). Each district had to clearly communicate to its employees and community members the reasons why the district could not spend all the additional revenue it was receiving. They had to educate their constituencies on how the school finance system operates and what the consequences would be if the additional revenue was spent. They had to communicate how a bond program could be beneficial and advantageous for school districts in their situations. This was a special challenge for very conservative communities that shy away from borrowing money. A summary of strategies implemented by the three participating districts is provided in Table 3.

STRATEGIES IMPLEMENTED BY EACH DISTRICT

Strategies	One ISD	Two ISD	Three ISD
Implemented			
Saved Additional			
Revenue (Fund	X	X	X
Balance)			
Invested in One-Time			
Expenses	X	X	X
Did Not Add			
Personnel Because of	X	X	X
Additional Revenue			
Reduced Budgeted			
Expenses	X		
Declining Property			
Value Statute			
Energy-Efficient			
Project	X		
Invested Additional			
Revenue			X
Gave Stipends as			
Alternative to Pay			
Raise	X		X
Retirement			
Contribution Plan			X
Bond Plan	X	X	X
Provided Housing for			
Employees	X		X
Communication Plan			
for all Stakeholders	X	X	X

Table 3: Strategies Implemented by Each District

Theoretical Framework

As a grounded theory qualitative study, this research started with an intent to create a theory describing a school leader's development of long-term financial planning strategies in a district where mineral values have significantly increased and decreased. Research presented in this study helped form the original grounded theory of creative conservatism. Information on long-term financial planning strategies school districts

integrate when mineral values increase or decrease significantly is, at best, minimal. Grounded theory allowed the researcher to focus on the process or phases over time (Creswell, 2013). Through the information gathered, themes were identified in this study. The identified themes helped form the original grounded theory of creative conservatism.

Theory of Creative Conservatism. The theory of creative conservatism sheds light on the mindset of school leaders when developing long-term financial planning strategies for their districts. Most impressive about the participants interviewed was their love for their respective school district and community. Several school leaders mentioned how easy it would have been to spend all the additional revenue they received and to let the next person deal with the consequences. But, because they are invested in their respective districts, they did not want to put that district in a precarious financial situation in the future. This personal investment drove school leaders to become very conservative in their financial decision making. In addition, the fear of the unknown provoked this more cautious, conservative position. The way the school finance system operates and the volatility of the oil industry made it almost impossible for school leaders to predict future values. They found it hard to commit to expenditures when revenues were unknown. This forced many of them to prepare and plan for worse-case scenarios.

These school leaders look at the money they handle daily as not their money, but the taxpayer's money. They take seriously their responsibility to allocate taxpayer money so that the result is effective and efficient operation of the district. Given their new circumstances, district leaders became creative in their financial management practices. They did whatever was legally possible to keep as many tax dollars in their

district so as not to have those monies recaptured by the state. They came up with creative alternatives to compensating employees and inventive methods for purchasing certain items.

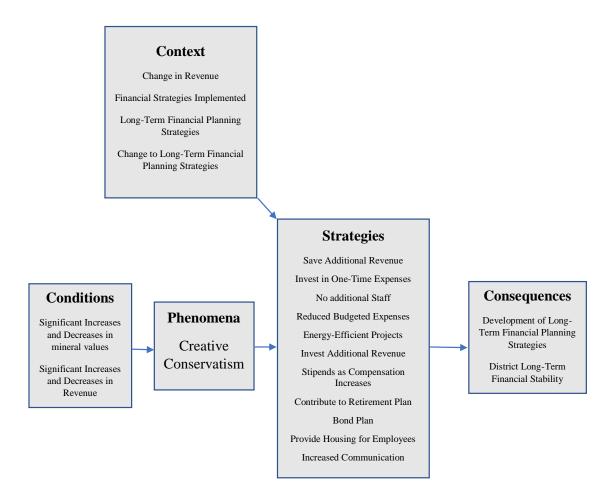


Figure 7: Theory of creative conservatism in grounded theory model

Figure 7 illustrates how the phenomenon of creative conservatism aligns school leader conditions, context, and strategies towards successful long-term financial planning. As a result, this theory explains the consequences of the development of long-term financial strategies for districts experiencing drastic increases and decreases in revenue because of mineral values.

Implications for Practice

At a time when public education finance is in a state of crisis, most Texas public schools are struggling to provide all students with an appropriate education because of lack of funding. The unknowns of the impact of substantial increases or decreases in a school district's mineral values make this task even more difficult. This study provides superintendents, whose school district's property values are affected significantly by mineral values, some strategies to ensure long-term solvency. Because a superintendent's tenure relies heavily on the financial stability of the district, implementation of these long-term financial strategies could enhance the tenure and, ultimately, the stability of the district.

Whatever the financial situation of a school district, superintendents need to have long-term financial strategies. This is essential to the success of the superintendent and the district. This study illuminates the importance of knowing what some of those strategies should be when a district's mineral values comprise a high percentage of its overall revenue base. In such situations, superintendents must have strategies in place to deal with significant increases or decreases in revenue. Superintendents should be aware that implementation of these strategies may be different from that of previous strategies. They must be cognizant of changes in strategies to ensure their districts' long-term financial solvency.

School superintendents need to understand the impact of communication when mineral values increase and decrease. It is important to communicate to all stakeholders how these increases and decreases affect the finances of the district. Equally important, when districts experience drastic fluctuations in mineral values, they must communicate

the strategies that will be implemented to yield the highest financial benefit for the district.

Recommendations for Further Research

Few studies exist examining long-term financial strategies for school district with significant increases or decreases in mineral values. Three school districts from a specific geographical region were purposefully chosen for this qualitative study to provide a depth of understanding in long-term financial strategies. One recommendation would be to replicate this study because of the small sample size. A replicated study could further validate strategies identified through this research and possibly identify additional strategies.

Future studies in relation to school districts located in the Eagle Ford Shale could include: (a) energy-efficient plans implemented in these districts in relation to other districts in the state; (b) employee compensation plans implemented in these districts; (c) bond strategies implemented and their success rate; (d) school districts' personnel strategies, additions or reductions, and effects on student success; (e) effects on attraction and retention of school employees; (f) school district communication strategies implemented as a result of the mineral values; and (g) strategies used to project accurate mineral values for a school district.

Summary

This study was conducted to determine and analyze the effects of long-term financial strategies implemented to ensure districts located in mineral rich areas remained financially solvent. School leaders from three school districts located in the Eagle Ford Shale were chosen to identify strategies associated with their experiences. The

participation of superintendents who maintained a tenure of at least five years at their current school district was essential in getting detailed experiences over a period of time. Interviews, document analysis, reflective journals, and theoretical sampling allowed for the development of themes.

Four themes developed from the data collected from participants: a) the experience of significant increases and decreases in revenue, b) financial strategies implemented, c) long-term planning strategies, and d) changes in long-term financial planning strategies. School leaders stressed the importance of a district knowing what to do when they receive a large revenue increase or decrease in relation to mineral values. Most, if not all, of any additional revenue must be saved and placed in a school district's general operating fund balance. School leaders pointed out this additional revenue will be needed in the future to pay recapture money to the state or to cover budget shortfalls when revenue decreases because of a decrease in mineral values.

The three school districts implemented new financial strategies because of the increases in mineral values. If any of the additional revenue was spent by these districts, it was spent on small projects that were one-time expenses. Districts tried to avoid spending the additional revenue on recurring expenses such as personnel and salaries. Some districts invested in energy-efficient projects to help reduce expenditures. This better prepared the district for the time when mineral values dropped and revenue decreased. One district discussed taking advantage of the additional revenue by creating additional revenue through investments.

School leaders stressed the importance of having financial strategies in place, no matter the financial situation of the district. Whether or not a district's property values

consist highly of mineral values, good long-term financial planning by school leaders is important in determining the success of students. All school districts should be constantly looking at future projections of the district's revenue and expenditures.

Trends in a district's student enrollment and property values assist in determining future revenue. Salaries, personnel, facility needs, and student and staff needs contribute to predicting future expenses.

The challenge for these three school districts is twofold: a) the unpredictability of the oil market, and b) maximizing taxpayer money. Because the oil market is so volatile, it was hard for these districts to not only predict revenue five to ten years from now, but to predict revenue for the next fiscal year. When predictions were made, the amount of revenue could vary drastically from year to year. This forced the districts to make changes in their long-term financial planning strategies. Future projections had to be studied more thoroughly. This was typically done through additional conversations with county appraisal districts and oil companies located in their districts. Additional pay given to employees was done in the form of a stipend. These districts knew that if the oil market dropped for an extended period of time and expenditures needed to be reduced, it would be easier to take away an employee stipend than to cut a salary. Retirement plans and housing for employees were other strategies implemented as compensation options.

The three districts in this study had become property rich school districts and were subject to recapture, meaning they had to send part of their tax collections to the state, and the state would redistribute this money to property poor districts. To minimize the amount, they had to send to the state, the districts developed some creative financial strategies. Since I&S tax collections are not subject to recapture, districts utilized bond

programs to make certain purchases. New facilities or the renovation of existing facilities, school buses, and technology were some examples of purchases made through bonds. All three districts stressed the value of communication with their employees and community throughout this process. Passage of a bond would have not been possible without good communication with stakeholders.

Superintendents and school leaders who are currently in school districts with a high percentage of mineral values can use the strategies identified in this study to develop long-term financial plans that will ensure the financial stability of the districts. The identified strategies help create an aligned shared financial vision for school leaders. Financial stability and vision alignment assist in promoting the long-term tenure of a superintendent and enhance the long-term success of a district.

Appendix A

Superintendent Interview Protocol

- 1. How long have you been an educator?
- 2. How long have you been a superintendent?
- 3. How long have you been the superintendent of current school district?
- 4. What data do you study to determine long-term financial planning?
 - a. Do you use trends in revenue and expenditures over the past few years?
 - b. Do you use trends in litigation costs when developing budgets?
 - c. Do you look to see if per pupil expenditures have increased or decreased over the past few years?
 - d. Do you consider trends in funding from the state and federal government?
 - e. Do you look at trends in employee benefits?
 - f. Do you consider the condition of school facilities?
 - g. Are student enrollment trends and projections studied?
 - h. Do you consider the trends and projections of special needs enrollment?
 - i. Do you study the trends and projections of property values in the district?
- 5. Did the district experience a significant increase in revenue because of mineral values?
 - a. What was done with the additional revenue? Was it spent? If so, on what? What determined how it was spent?
 - b. Was fund balance effected by the increased revenue? If so, how and why?
 - c. Did the budget strategies change because of additional revenue?
- 6. Did the district experience a significant decrease in revenue because of mineral values?
 - a. Did the district have to reduce the budget because of the reduction in revenue?
 - b. Was fund balanced effected by the decreased revenue? If so, how and why?
 - c. What strategies were used to reduce the budget?
- 7. Where any strategies put in place to become more energy efficient?
 - a. Transportation, utilities, water, etc.
- 8. What long-term budget strategies where established and implemented because of the mineral values?
- 9. What changes in long-term budget strategies occurred because of the mineral values?
- 10. Is there anything else you would like to add?

Appendix B

Chief Financial Officer Question Protocol

- 1. How long have you been an educator?
- 2. How long have you been a CFO/Business Manager?
- 3. How long have you been the CFO/Business Manager of current school district?
- 4. What data do you study to determine long-term financial planning?
 - a. Do you look at revenue and expenditures over the past few years?
 - b. Do you consider if the district has pending litigation?
 - c. Do you look to see if per pupil expenditures have increased or decreased over the past few years?
 - d. Do you consider trends in funding from the state and federal government?
 - e. Do you look at trends in employee benefits?
 - f. Do you consider the condition of school facilities?
 - g. Are student enrollment trends and projections studied?
 - h. Do you consider the trends and projections of special needs enrollment?
 - i. Do you study the trends and projections of property values in the district?
- 5. What type of budget format is used in your district?
 - a. Line item, performance, programming, zero-based, site-based budget?
 - b. Does the district have a budget calendar? How was it developed?
- 6. How do you develop a budget that assists in obtaining the goals of the district?
- 7. Did the district experience a significant increase in revenue because of mineral values?
 - a. What was done with the additional revenue? Was it spent? If so, on what? What determined how it was spent?
 - b. Was fund balance effected by the increased revenue? If so, how and why?
 - c. Did the budget strategies change because of additional revenue?
- 8. Did the district experience a significant decrease in revenue because of mineral values?
 - a. Did the district have to reduce the budget because of the reduction in revenue?
 - b. Was fund balanced effected by the decreased revenue? If so, how and why?
 - c. What strategies were used to reduce the budget?
- 9. Where any strategies put in place to become more energy efficient?
 - a. Transportation, roofs, utilities, etc.
- 10. What long-term budget strategies where established and implemented because of the mineral values?
- 11. What changes in long-term budget strategies occurred because of the mineral values?
- 12. Is there anything else you would like to add?

Appendix C

School Board President Question Protocol

- 1. How long have you been a school board member?
- 2. How long have you been a school board president?
- 3. Did the district experience a significant increase in revenue because of mineral values?
 - a. What was done with the additional revenue? Was it spent? If so, on what? What determined how it was spent?
 - b. Was fund balance effected by the increased revenue? If so, how and why?
 - c. Did the budget strategies change because of additional revenue?
- 4. Did the district experience a significant decrease in revenue because of mineral values?
 - d. Did the district have to reduce the budget because of the reduction in revenue?
 - e. Was fund balanced effected by the decreased revenue? If so, how and why?
 - f. What strategies were used to reduce the budget?
- 5. Where any strategies put in place to become more energy efficient?
 - g. Transportation, roofs, utitlities, etc.
- 6. What long-term budget strategies where established and implemented because of the mineral values?
- 7. What changes in long-term budget strategies occurred because of the mineral values?
- 8. Is there anything else you would like to add?

Appendix D

IRB USE ONLY

Study Number: 2017-05-0066 Approval Date: 7-10-2017

Expires: 7-09-2020

Consent for Participants in Research

Title: Analysis of Financial Strategies Used by Texas School Districts to Ensure Long-Tern Financial Stability

Introduction

The purpose of this form is to provide you information regarding your decision to participate in this research study. The researcher will answer any follow-up questions you have. Please read the information below and ask questions before deciding whether or not to take part. This will be used to record your consent.

Purpose of the Study

You have been asked to participate in a research study about financial strategies developed as a result of mineral values significantly impacting your district's budget.

What will you be asked to do?

If you agree to participate in this study, you will be asked to:

- Participate in interviews
- Review transcribed data from the interviews
- Provide artifacts

This study will take one personal interviews, each with a 60-minute duration and will include approximately six (11) study participants.

Your participation will be audio/video recorded.

There are no foreseeable risks to participating in this study.

You will receive no direct benefit from participating in this study; however, findings can be further examined or replicated to enhance learning environments.

Do you have to participate?

No, your participation is voluntary. You may decide not to participate at all, or, if you start the study, you may withdraw at any time. Withdrawal or refusing to participate will not affect your relationship with The University of Texas at Austin (University) in any way.

If you would like to participate, please sign and send the original copy to the address provided. You will receive a copy of this form.

Will there be any compensation?

You will not receive any type of payment for participating in this study.

How will your privacy and confidentiality be protected if you participate in this research study?

Your privacy and the confidentiality of your data will be protected by using an alias, not disclosing any information to other participants, including supervisors, to ensure details can not be traced to participants. All data will be locked in a secure location.

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could be associated with you or with your participation in any study.

If you choose to participate in this study, you will be audio and/or video recorded. Any audio and/or video recordings will be stored securely. Recordings will be kept for two years, then erased.

Whom to contact with questions about the study?

Prior, during, or after your participation you can contact the researcher **Scott Caloss** at **830-570 4101** or send an email to **calossscott@gmail.com** for any questions or if you feel that you have been harmed.

NOTE: Only include this statement if the study is Expedited or Full Board:

This study has been reviewed and approved by The University Institutional Review Board, and the study number is [2017-05-0066].

Whom to contact with questions concerning your rights as a research participant:

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

Participation

If you agree to participate, please sign the form and send the original copy to:

Scott Caloss 1399 Canyon Lake Road Wills Point, Texas 75169

Signature

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

As a representative of this study, I have explained the p involved in this research study.	ourpose, procedures, benefits, and the risks
Printed Name of Person obtaining consent	
Signature of Person obtaining consent	Date

As a representative of this study, I have explained the purpose, procedures, benefits, and the risks involved in this research.

References

- Abshier, W., Harris, S., & Hopson, M. (2011). Superintendent perspectives of financial survival strategies in small school districts. *The Rural Educator*, 32(3), 1-9.
- Aguilar, J. (2016, January 16). *The Denver Post*. Retrieved from Why oil's price drop is hitting Colorado schools, communities so hard:

 http://www.denverpost.com/2016/01/30/why-oils-price-drop-is-hitting-colorado-schools-communities-so-hard/
- Alford, E. (2015, December 8). *Are Eagle Ford School Districts in Jeopardy?* Retrieved from Eagle Ford Shale: News, Marketplac, Jobs:

 http://eaglefordshale.com/news/are-eagle-ford-school-districts-in-jeopardy/
- Alford, E. (2016, March 28). *Eagle Ford School Districts Give Back Millions*. Retrieved from Eagle Ford Shale; News, Marketplace, Jobs:

 http://eaglefordshale.com/news/eagle-ford-school-districts-give-back-millions/
- Alford, E. (2016, July 21). Some Eagle Ford Schools Fighting to Survive. Retrieved from Eagle Ford Shale: News, Marketplace, Jobs:
 - http://eaglefordshale.com/news/some-eagle-ford-schools-fighting-to-survive/
- Retrieved from

 https://www.aasa.org/uploadedFiles/Policy_and_Advocacy/files/SchoolBudgetBri
 efFINAL.pdf

American Association of School Administrators. (2010, May 18). School Budgets 101.

Assoication of Career and Technical Education. (2017). What is CTE? Retrieved from https://www.acteonline.org/cte/

- Bird, J., & Wang, C. (2011). Authentic leadership and budget-building: superintendents reveal origins, strategies and connections. *Academy of Education Leadership Journal*, 15(3), 143-160.
- Bridges, W. (2009). *Managing transitions: making the most of change. 3rd Edition*. Philadelphia, PA: Da Capo Press.
- Brimley, V., Burrup, P., & Garfield, R. (1996). Financing education in a climate of change. Boston, MA: Allyn and Bacon.
- Brookshire, D., & D'Arge, R. (1980). Adjustment issues of impacted communities or, are boomtowns bad? *Natural Resources Journal*, 20, 523-546.
- Butler, J. (2011). Hard choices for hard times: sculpting the school budget. Austin, Texas:

 A Waterford Schoo Services Inc.
- Calloway, L., & Knapp, C. (2006, February 24). *Using grounded theory to interpret interviews*. Retrieved from Pace School of Computer Science and Information Systems: http://www.csis.pace.edu
- Cato, G. (2013, August 16). Education in Texas Is Dangerously Outdated. Retrieved from Burnt Orange Report:

 http://www.burntorangereport.com/diary/13951/education-funding-in-texas-is-dangerously-outdated
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. Thousand Oaks, CA: SAGE Publications. Inc.
- Cohen, L., & Schneyer, J. (2016, May 17). *Reuters Investigates*. Retrieved from When the oil boom went bust, Oklahoma protected drillers and squeezed schools: http://www.reuters.com/investigates/special-report/usa-oklahoma-bust/

- Corbin, J., & Strauss, A. (2008). Basics of qualitative research (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Creswell, J. W. (2013). Qualitative inquiry & research design. Los Angeles: SAGE Publications, Inc.
- Crotty, M. (1998). The foundations of social research. London: Sage.
- Dlott, S. (2007). Surviving and thriving as a superintendent of schools. Lanham, MD:

 Rowman annd Littlefield.
- Eagle Ford Shale. (2016). *News, MarketPlace, Jobs*. Retrieved from http://eaglefordshale.com/
- Ediger, M. (2008). Leadership in the school setting. *Education Journal*, 129(1), 17-20.
- Edwards, M. E. (2007). The modern school superintendent: An overview of the roles and responsibilities in the 21st century. Lincoln, NE: IUniverse.
- Equity Center. (2016). What Does It Mean When the Supreme Court Errs? *In Depth*, Volume 6, Number 2.
- Equity Center. (2017). *Glossary*. Retrieved from http://equitycenter.org/resources/glossary/
- Everett, R. E., Lows, R., & Johnson, D. (1996). Financial and managerial accounting for school administrators. Reston, VA: Association of School Business Officials International.
- Foster, S. T. (2007). *Managing quality: integrating the supply chain (3rd ed.)*. Upper Saddle River, NJ: Pearson Education, Inc.
- Fullan, M. (2014). *The principal: Three keys for maximizing impact*. San Francisco, California: Jossey-Bass.

- Government Finance Officers Association. (2015, Jamuary). *Best Practices in School District Budgeting*. Retrieved from http://www.gfoa.org/best-practices-school-district-budgeting
- Hager, G. (2017, January). *Texas Comptroller of Public Accounts*. Retrieved from MONTHLY STATE REVENUE WATCH:

 https://www.comptroller.texas.gov/transparency/revenue/watch/
- Haig, B. (1995). *Grounded theory as scientific method. Philosophy of Education*.

 Retrieved from http://www.ed.uiuc.edu/eps/pes-yearbook/95_docs/ haig.html
- Hays, D., & Singh, A. (2012). Qualitative inquiry in clinical and educational settings.
 New York, NY: Guilford.
- Heinkel-Wolfe, P., & Caitlyn, C. (2016, July 25). *Denton Record-Chronicle*. Retrieved from Oil, gas values affect 2 ISDs: http://www.dentonrc.com/local-news/local-news-headlines/20160725-oil-gas-values-affect-2-isds.ece
- Hill, P. (2006). Getting hold of districts finances: A make-or-break issue for mayoral involvement in education. *Harvard Education Review*, 76(2), 178-189.
- Hiller, J. (2015, February 21). *Once booming, now fading in the Eagle Ford Shale*.

 Retrieved from San Antonio Express-News:

 http://www.houstonchronicle.com/business/energy/article/Once-booming-now-fading-in-the-Eagle-Ford-Shale-6094815.php
- Hiller, J. (2016, July 21). Report: Eagle Ford Shale takes big spending hit during oil bust. Retrieved from San Antonio Express-News:

 http://www.expressnews.com/business/eagle-ford-energy/article/Report-Eagle-Ford-Shale-takes-big-spending-hit-8401921.php

- Hyde, S. (2015, August). *Bureau of Labor Statistics*. Retrieved from Lower oil prices,

 Texas, and the national economy: https://www.bls.gov/opub/mlr/2015/beyond-bls/lower-oil-prices-texas-and-the-national-economy.htm
- Institue of Education Sciences. (2016, January). Revenues and Expenditures fof Public Elementary and Secondary Education: School Year 2012-2013 (Fiscal Year 2013). Retrieved from http://nces.ed.gov/pubs2015/2015301.pdf
- Isensee, L. (2015, October 8). Why One Superintendent's Budget Falls Short \$1,300 Per Student. Retrieved from Houston Public Media:

 https://www.houstonpublicmedia.org/articles/news/2015/04/29/59851/why-one-superintendents-budget-falls-short-1300-per-student-2/
- Johnson, K. (2016, March 14). *The New York Times*. Retrieved from Alaska's Schools Face Cuts at Every Level Over Oil Collapse:

 https://www.nytimes.com/2016/03/15/us/oil-collapse-drains-alaskas-wide-ranging-education-system.html?_r=0
- Jorgensen, J. (1981). Social impact assessments and energy developments. *Review of Policy Research*, 1(1), 66-86.
- Kemerer, F., & Satryb, R. (1977). *Facing financial exigency*. Lexington, MA: D. C. Heath and Company.
- Kowalski, T. (1999). *The school superintendent: theory, practice, and cases.* Upper Saddler River, NJ: Simon and Schuster.
- Ladd, H. F. (2009). *How school districts respond to financial constraint*. Retrieved from Selected Papers in School Finance: https://nces.ed.gov/pubs98/ladd.pdf

- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Longhorn Realty LLC. (2016, October 12). What is a Mineral Interest in Texas?

 Retrieved from http://www.longhornrealty.net/blog/what-is-a-mineral-interest-interest-interest.html
- Marchand, J., & Weber, J. (2015, September). The Labor Market and School Finance

 Effects of the Texas Shale Boom on Teacher Quality and Student Achievement.
- Maxwell, J. (2013). *Qualitative research design: A qualitative approach*. Los Angeles: Sage.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Fransico, CA: Jossey-Bass.
- Merriam, S., & Associates (Ed.). (2002). Qualitative research in practice: Examples for discussion and analysis. San Francisco, CA: Jossey-Bass.
- Moak, Casey, and Associates. (2014, May). *Tracking the Educational Dollar in Texas**Public Schools. Retrieved from https://www.tasb.org/Legislative/documents/140601eddollarup.pdf
- Mort, P., Reusser, W., & Polley, J. (1960). *Public school finance: its background,* structure and operation. New York: McGraw Hill Book Co., Inc.
- Nasdaq. (2017). *Financial Strategy*. Retrieved from http://www.nasdaq.com/investing/glossary/f/financial-stgrategy
- Nolen, A., & Talbert, T. (2011). Qualitative assertions as prescriptive statements. *Educational Pyschology Review*, 23(2), 263-271.

- North Texans for Natural Gas. (2015). Fracking Funds Texas Schools. Retrieved from A

 North Texas for Natural Gas Special Report:

 http://www.northtexansfornaturalgas.com/education_report
- Pandit, N. R. (1996). The creation of theory: A recent application of the grounded theory method. *The Qualitative Report*, 2(4), 1-20.
- Pekow, C. (2005). State aid formula seriously flawed report finds. *Black Issues in Higher Education*, 22(1), 1, 9.
- Pipho, C. (1992). The condition of education finance and litigation: Can school finance be reformed? Washington, D. C.: NEA.
- Preston, D. (2016, May 13). *Star-Telegram*. Retrieved from Texas economy goes from miracle to reality as oil bust spreads: http://www.star-telegram.com/news/business/article77550972.html
- Querry, K. (2016, December 16). *KFOR-TV*. Retrieved from \$900 million budget shortfall expected to impact Oklahoma education:

 http://kfor.com/2015/12/16/900-million-budget-shortfall-expected-to-impact-oklahoma-childrens-education/
- Railroad Commission of Texas. (2017). *Eagle Ford Shale Information*. Retrieved from http://www.rrc.state.tx.us/oil-gas/major-oil-and-gas-formations/eagle-ford-shale-information/
- Raimi, D., & Newell, R. G. (2016). Local fiscal effects of oil and gas development in eight states. Durham: Duke University Energy Initiative.
- Ray, J., Condoli, I., & Hack, W. (2005). School business administration: A planning approach. Boston: Pearson Education.

- Rennie Center Education Research & Policy. (2012, October). Smart School Budgeting:Resources for Districts. Cambridge, MA. Retrieved from http://www.renniecenter.org/research/SmartSchoolBudgeting.pdf
- Schoen, J. W. (2016, April 22). *CNBC*. Retrieved from Painful transition for energy states as oil revenues evaporate: http://www.cnbc.com/2016/04/18/painful-transition-for-energy-states-as-oil-revenues-evaporate.html
- South Texas Energy and Economic Roundtable. (2016, July 24). Retrieved from The impact of mineral property valuations in South Texas: http://steer.com/impact-mineral-property-valuations-south-texas/
- Texas Education Agency. (2010, January). Financial Accountability System Resource Guide. Retrieved from file:///C:/Users/calosssc/Downloads/BudV14%20(1).pdf
- Texas Education Agency. (2014, September). *Office of School Finance*. Retrieved from School Finance 101: Funding of Texas Public Schools:

 http://tea.texas.gov/Finance_and_Grants/State_Funding/Manuals/School__Finance_Manuals/
- Texas Education Agency. (2014, November). School Finance Topics-One Page

 Descriptions. Retrieved from Cost of Education Index:

 http://tea.texas.gov/Finance_and_Grants/State_Funding/Manuals/School__Finance_Topics_-_One_Page_Descriptions/
- Texas Education Agency. (2015, October). Financial Integrity Rating System of Texas.

 Retrieved from

 http://tea.texas.gov/Finance_and_Grants/Financial_Accountability/Financial_Inte

- grity_Rating_System_of_Texas_(FIRST)/Financial_Integrity_Rating_System_of_
 Texas/
- Texas Education Agency. (2017). *PEIMS District Financial Audit Reports*. Retrieved from https://rptsvr1.tea.texas.gov/school.finance/forecasting/financial_reports/1516_FinActRep.html
- Texas Education Agency. (2017). *Texas Academic Perfomance Report*. Retrieved from https://rptsvr1.tea.texas.gov/perfreport/tapr/2017/srch.html?srch=D
- Texas Education Code. (2015, November). Retrieved from http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.11.htm#11.201
- Texas Judicial Branch. (2016, May). *In the Supreme Court of Texas*. Retrieved from No. 14-0776: http://www.txcourts.gov/media/1371141/140776.pdf
- Texas Public Policy Foundation. (2016, March). *Texas School Finance: Basics and Reform*. Retrieved from https://indd.adobe.com/view/bb2557d7-5d2b-4bc3-b2ab-c7304781d354
- The National Commission on Excellence in Education. (1983, April). A Nation At Risk:

 The Imperative for Educational Reform. Retrieved from

 http://www2.ed.gov/pubs/NatAtRisk/index.html
- The Real Estate Center. (2011, July). *The Texas Property Tax System*. Retrieved from https://assets.recenter.tamu.edu/Documents/Articles/1192.pdf
- Tracy, S. J. (2013). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. Malden. Malden, MA: Wiley.

- TTARA Research Foundation. (2012). *An Introduction to School Finance in Texas*.

 Retrieved from http://www.ttara.org/files/document/file-4f1732f763446.pdf
- Willis, J. W. (2007). Foundations of qualitative research interpretive and critical.

 Thousand Oaks, CA: Sage.
- Wise, A. (1972). *Rich school, poor schools: the promise of equal educational opportunity*. Chicago: The University of Chicago Press.

Vita

Scott Caloss attended Bandera High School, Bandera, Texas. In 1987, he entered the

University of Texas at Austin followed by St. Mary's University in San Antonio. In

1992, he earned a Bachelor of Arts degree in Exercise and Sport Science with a minor in

Mathematics from St. Mary's University. After graduation, he began his career as a

middle school mathematics teacher and coach at Birdville ISD in North Richland Hills,

TX. In 2000, he received a Masters of Education Degree in Educational Administration

from Texas Woman's University in Denton, TX. In the Fall of 2000, he accepted a

position to become the head boys' basketball coach and high school mathematics teacher

at Jourdanton High School and was then promoted to assistant high school principal two

years later. In 2004, he received his Superintendent Certification from the University of

Texas at San Antonio. The Fall of that same year, he became the principal at Poth Junior

High. In 2012, Scott was promoted to become the superintendent of Poth Independent

School District. In 2014, he began his doctoral work in Educational Administration at the

University of Texas in Austin as a member of Cooperative Superintendency Program

Cohort 25. He remained in Poth from 2004 until accepting a position in 2016 as the

superintendent of Wills Point Independent School District, where he is currently

employed.

Email Address: calossscott@gmail.com

This manuscript was typed by the author.

133