SUPERINTENDENT PERCEPTIONS OF THE EFFECTS OF THE SCHOOL FUNDING FORMULA ON INDIANA'S SMALL, RURAL SCHOOL DISTRICTS

by

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This dissertation is dedicated to my wife, Jana, and my children, Lillian and Lucas, who constantly inspire me to do more than I think is possible.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

This study examines the perceptions of five superintendents of small, rural school districts in Indiana as they pertain to their experiences with the current school funding formula. In 2008, the Indiana legislature enacted Public Law 146, which was a significant shift in how Indiana's schools were funded. This change removed local property taxes as a component of general fund revenue. It also placed property tax caps into the Indiana constitution, making the change permanent. The state of Indiana made the commitment to provide all funding to local school districts through the funding formula, which became directly tied to student enrollment. Historically, Indiana has not increased the level of funding going into the formula by sufficient amounts when compared to the rate of inflation, creating a funding deficit for schools.

The review of the literature explores the history of school funding in the United States of America, and also specifically examines Indiana's funding history. It also explores many of the challenges faced by Indiana's small, rural schools, going on to examine recent developments and legislation in this area. Five experienced superintendents were interviewed for this study, using an interview protocol that explored a variety of topics to help bring out their lived experiences. The interview data were coded and analyzed, and three assertions emerged.

Based on the interviews and shared experiences of the superintendents who participated in the study, it was found that the Indiana school funding formula is not providing sufficient funding to support its small, rural school districts. The data also revealed that the superintendents in this study have found creative and innovative ways to increase revenue, reduce costs, or both, in an effort to maintain financial stability as a result of this insufficient funding. Additionally, it was revealed that in order to truly support its public schools with the resources needed to provide an outstanding education to all students, Indiana must increase the funding being allocated to the

funding formula in future years. While recent legislative developments appear promising for the funding of Indiana's schools, time will tell if this is the start of a positive trend, or if these improvements are simply a temporary reaction to political pressure. To answer this query, further study and analysis of the funding formula and superintendent perceptions in future years will be needed.

CHAPTER 1. INTRODUCTION

Overview

Public school funding in the United States of America is provided through a combination of federal and state financial support. While the federal government does provide funding for K-12 schools, over 90% of funding is still provided by state and local sources (Cornman, Ampadu, Wheeler, & Zhou, 2018). In response to funding adjustments and reductions at both the national and state level, many school districts throughout the country find themselves constantly being expected to do more with less. In addition, schools located in different states, or within different socioeconomic settings, often find themselves not only with varying levels of financial support, but also varying options available to address financial shortfalls.

In an attempt to address this, lawmakers have worked over the years to develop a system of public school funding that is equitable to all districts and communities. In the state of Indiana, this has resulted in the creation of, and subsequent revisions to the state funding formula. In its current iteration, the Indiana state funding formula provides funding for public schools primarily through a foundational amount based on average daily membership, with additional funding possible through a variety of specific qualifications, such as honors graduates, number and type of special education students, and several others (Sugimoto, 2016). With the current realities of increased directives and accountability from state and federal mandates, as well as the financial constraints that can affect public school districts that are charged with educating every child who walks through their doors, one is left to wonder whether or not Indiana's small, rural schools are being provided adequate funding to effectively meet the needs of their students. Regardless of the adequacy of funding being provided, the superintendents of these districts have the challenging task of continuing to provide every student with the best educational experience possible.

Statement of the Problem

Public school funding in Indiana has changed in various ways over the years. While it has been based on a system that provides a minimum foundational amount since 1949 (Hirth & Eiler, 2012), a variety of adjustments have been made that have impacted the way school funds have been collected and distributed (Michael, Spradlin, & Carson, 2009; Toutkoushian & Michael, 2008). Although many of these changes have been made with good intentions and with the desire to develop a system of funding that provides more equitable funding for every school district, it is unclear whether or not the intended outcomes have truly been realized. Small, rural school districts often struggle to provide the same educational staff and opportunities as larger school districts, a problem which is exacerbated by tightening budgets and increased mandates (Tieken, 2014).

Due to the rising costs required to operate and maintain an effective school district, an increasing number of small districts in Indiana are starting to pursue other avenues of funding to survive. A strategy that is being used more frequently is the pursuit of an operational referendum, which allows tax payers to provide funding directly to their local school district through a local property tax rate increase (Hiller & Spradlin, 2010). Once a rare event, districts are turning towards this approach with increasing frequency. As of May 2018, 103 operational referenda have been proposed to Indiana voters to support local school districts, with a 67% pass rate (Center for Evaluation & Education Policy, 2018). While the use of a referendum does provide local school districts with a direct line of financial support from their respective communities, that funding is provided only if the tax payers are willing to impose a tax on themselves. Additionally, the increase in the number of districts pursuing a referendum has had an effect on the role of the superintendent, causing the position to shift more towards that of a politician rather than a leader of teachers (Gentry & Hirth, 2017).

Without such a tax increase, districts that face increasing costs without a corresponding increase in enrollment are left with few options that do not reduce the effectiveness of their programs and staff. There has been a push from leaders at various levels of state government for smaller school districts to consolidate, in an effort to streamline costs and operate more efficiently (Indiana Commission on Local Government Reform, 2007). While this may achieve the desired result in specific cases, there are also tradeoffs that may result, which could even include increased inefficiencies in certain situations (Gronberg, Jansen, Karakaplan, & Taylor, 2015).

Much of the research on school funding in Indiana has focused on the various reforms that have occurred over the past 65 years (Lehnen & Johnson, 1989; Michael et al., 2009; Lagoni, 2011; Gentry, 2016; Bowling, 2017). While this research provides a strong base of knowledge of the history behind Indiana's current funding formula, little research has been conducted that focuses on the funding challenges that plague Indiana's small, rural school districts. This study focused on small, rural school districts in Indiana, and considered the unique financial challenges faced by these districts. This study examines these challenges through the collection of interview data from superintendents working in five specific school districts. These individuals were selected based on pre-determined criteria, and the goal of the study was to uncover their insights and perspectives regarding their experiences. Additionally, the sampled superintendents were asked to identify and discuss the impacts that have been experienced by their districts as a result of the changes to the funding formula that occurred following the passage of Public Law 146 in 2008. The financial data of these five districts was also examined more closely as a means for comparing the perceptions of the superintendents with the actual financial situations in their district.

Significance of the Study

This study explored the perceptions of Indiana superintendents of small, rural school districts regarding the current funding formula, gaining insight into what adjustments have been made in their districts as a reaction to the financial changes that have occurred. This study also considered whether or not these superintendents feel that the current funding formula is providing adequate financial resources to achieve the mission of educating every student. While it is likely impossible that there will ever be a perfect solution that funds every school district in a manner that is deemed to be completely sufficient, it is important that the funding formula provides sufficient financial resources that allow all school districts to provide an appropriate education for every child. This financial support must be provided to every district, regardless of its size or geographic location. Though critics of small schools argue that smaller school districts should consider consolidation to minimize their administrative costs (Indiana Commission on Local Government Reform, 2007), others feel that there are many benefits enjoyed by students and communities in smaller districts that large districts simply cannot provide (Tieken, 2014).

The results of this study provide an insight into the experiences of small, rural Indiana school districts due to the historical changes to the funding formula, and how specific school district leaders have addressed any challenges that may be present. The study examined common themes that emerged from the superintendents who were interviewed and highlights areas that may not be considered in the current funding formula. Based on the results of the study, recommendations for improvements to the funding formula have been shared, as well as suggestions for further study.

Research Question

This study answers the following research question:

What have been the lived experiences of superintendents in selected small, rural school districts in Indiana regarding the current state funding formula?

Limitations of the Study

This study examined the opinions and experiences of superintendents from small, rural school districts, who were chosen from a geographically diverse sample. One limitation of this study is the assumption that districts are appropriately and efficiently spending the funding they receive. This study did not examine how schools are allocating and using the funds provided. It is entirely possible that a district is receiving sufficient funding but is spending it inefficiently. Another limitation comes from the superintendent interviews, and the acknowledgement that these experienced school leaders may have based their responses to the interview questions on personal frustrations or concerns. While the questions used for the interviews were designed to keep the responses factual in nature, the superintendents still had the ability to respond in whatever way they choose. As a result, it is possible that a superintendent could have stated certain items as facts when they are actually opinions.

CHAPTER 2. REVIEW OF THE LITERATURE

To provide the reader with an understanding of how Indiana has arrived at its current funding formula, it is necessary to briefly review the history of public school funding in the United States. After this national historical overview, this chapter will next examine the history of school funding in Indiana, including the most recent iteration of the Indiana school funding formula, enacted through the passage of Public Law 146 in 2008. The chapter will then examine the existing literature as it pertains to how funding is affecting small, rural school districts in both the United States and the state of Indiana, and will also consider what the literature identifies as unique challenges that small, rural districts may face. The use of referenda as a funding source for schools will be reviewed, as this has become an increasingly frequent occurrence throughout the state of Indiana. Additionally, this chapter will review what has been studied regarding school consolidation, and what outcomes are achieved through that process. Finally, the chapter will conclude with a summary of a recent study completed by the Center for Evaluation & Education Policy, which analyzed the current funding formula to determine funding equity as it relates to Indiana's school corporations.

History of K-12 Funding in the United States

It would be a logical assumption today that public education is a guaranteed right in the United States of America, yet that right has never been established or guaranteed at the federal level. In fact, as established by the United States Supreme Court through the landmark case *San Antonio Independent School District v. Rodriquez* (1973), education is not considered a fundamental right, and thus is the responsibility of individual states to provide (Ramirez, 2002).

In spite of this, the federal government has encouraged and supported the creation and management of public education systems since the nation's earliest days, as explained below:

> Education has long been considered a national concern by the federal government… Article 1, Section 8 of the Constitution granted Congress the power to lay and collect taxes to provide for the general welfare of the United States. It is under this "general welfare" clause that the federal government has assumed the power to initiate educational activity in its own right and to participate jointly with states, agencies, and individuals in educational activities (League of Women Voters, 2011, p. 1).

While the charge of delivering education was left to the individual states, the method used in each state to develop, support, and implement public education was varied both in structure and in urgency. States in the northeast, such as Connecticut, New York, and New Jersey developed means to fund public schools through lotteries, liquor licenses, and other creative methods, starting in the latter half of the 18th century (Cubberley, 1948). During these formative years of the United States, fears were present that the young colonies and territories may encounter a variety of problems. In the eyes of the Continental Congress, there was very real concern regarding foreign influence, resulting in fears that natural resources and land could be lost, and that the newly established Union could crumble if non-democratic governments were formed (Onuf, 1987; Usher, 2011). To address this,

> …the Continental Congress decided to deal with it in two ways. First, the Northwest Ordinance specifically mandated that any new state, in order to be admitted to the Union, must adopt a Republican (i.e., democratic) form of government. Second, this Ordinance broadly declared that "schools and the means of education shall forever be encouraged." Many of the revolutionary leaders and Founding Fathers, most famously Thomas Jefferson, held a fervent belief in the importance of education. They felt that providing a public education was the only means by which to ensure that citizens were prepared to exercise the freedoms and responsibilities granted to them in the Constitution and thereby preserve the ideals of liberty and freedom (Usher, 2011, p. 5).

Through the Land Ordinance of 1785 and the Northwest Ordinance of 1787, processes for the designation of territories and a route to statehood were established, while also providing land for public schools (League of Women Voters, 2011; Usher, 2011). In all, 30 states received land for public schools from the federal government through this process; and while the process evolved and changed over time, these early practices set the stage for a system of public education throughout the nation (Usher, 2011).

A significant development in federal funding support occurred in 1965, when President Lyndon B. Johnson signed the Elementary and Secondary Education Act into law. This legislation was designed to provide additional financial resources to schools with higher levels of student poverty (Ramirez, 2002). The Elementary and Secondary Education Act was reauthorized in 2001 by President George W. Bush as the No Child Left Behind Act, and then again in 2015 as the Every Student Succeeds Act by President Barack Obama (U.S. Department of Education, 2018). Through this legislation, school districts are supplied with aid through a variety of programs, including the federal Title grants. These programs provide financial resources to address specific areas that the federal government has determined to be necessary, with a particular focus on student outcomes affected by poverty. Federal funding is also provided to support special education programming, as authorized through the Education for all Handicapped Children Act, first signed into law by President Gerald Ford in 1975, and later reauthorized as the Individuals with Disabilities Education Act. Even with this support, however, federal funding still only contributes less than eight percent of total K-12 funding in the United States (Cornman et al., 2018).

Due to the reliance on state support for the majority of public school districts' funding, there have been numerous lawsuits over the years that have shaped how financial support is distributed. In *Serrano v. Priest* (1971), the California Supreme Court found that the state's funding formula at the time resulted in discrimination based on wealth, as significant funding disparities existed between school districts. The court's decision also established that education was a fundamental right (Hanif, 1999). Although this decision would be questioned with the results of the previously mentioned case of *San Antonio Independent School District v. Rodriquez* (1973) two years later, the California Supreme Court upheld its decision upon review in *Serrano v. Priest II* (1976) by pointing out that their decision regarding education as a fundamental right had referenced not only the United States Constitution, but the California Constitution as well (Hanif, 1999). More recently, the case of *Gannon v. State of Kansas* found that the legislature had repeatedly failed to adequately fund public education in the state, a decision which had been reviewed by the Kansas Supreme Court on five separate occasions (*Gannon v. State*, 2017). In response, a study commissioned by lawmakers in Kansas found a strong correlation between educational spending and student academic outcomes, and the consultant recommended an increase of at least $1.7 billion during the next five years to simply reach established performance goals (Kansas City Star Editorial Board, 2018). Many other states are currently revisiting their funding formulas amid growing opposition and concerns regarding adequacy in public school funding (Burnette II, 2017).

History of School District Funding in Indiana

So that the reader can better understand how Indiana arrived at its current method for funding its public schools, a brief review of the historical changes to Indiana's funding formula is needed. Starting in 1949, Indiana funded its public schools through a foundation formula, with a guaranteed amount of per pupil funding as long as the school district established a minimum property tax rate (Lehnen & Johnson, 1989). This formula provided every district with a minimum amount of funding per student, regardless of how much property wealth existed. Under this model, districts with low assessed value received a larger percentage of their dollars from the state, while districts with higher assessed value would receive more of this funding from property taxes. While this system did guarantee that districts would receive a minimum amount of revenue, many districts found that it did not cover actual expenses; to cover these shortfalls, school districts had the option to generate additional revenue through property taxes (Lehnen & Johnson, 1989). This did provide school districts with a solution to the need for increased funding; however, it also created an imbalance between wealthy and poor school districts. Districts with a higher assessed valuation were able to raise significantly more funding with a much lower tax rate impact and understandably less taxpayer resistance as compared to districts with a lower assessed valuation, creating an imbalance of expenditures per student between school districts (Lehnen & Johnson, 1989). Generally speaking, however, prior to 1973, school corporations had the freedom to raise and lower their General Fund tax rates as much or as little as they wished (Michael et al., 2009).

In 1973, the Indiana General Assembly made changes to reform property taxes through the Bowen Tax Package, in an effort to reduce tax rates and limit the rate of increase (Faulk, 2004). Through this legislation, a freeze was placed on local general fund tax levies. This action resulted in districts with previously established high rates being able to maintain that higher rate, while districts who had kept a lower rate were now unable to raise it, thereby making these differences permanent (Lehnen & Johnson, 1989). The effects of this rate freeze were still felt by Indiana school districts many years later, as increases to local property tax levies were based on an increase to the prior year’s rate (Michael et al., 2009; Lagoni, 2011). Replacement credits were used to fund the shortfalls created by the property tax reductions, which were financed through an increase to state sales tax of two percent (Faulk, 2004). These changes did result in a reduction of property tax impacts on taxpayers, though they would not be permanent (Ryan, 2010).

In addition to the general fund property tax levy, schools also had a debt service property tax and a cumulative building fund property tax, each with its own unique tax rate. Starting in

1980, a transportation property tax was added, which also had a separate rate. The total of these four rates would equal the total property tax rate that was then imposed on Indiana's taxpayers (Lehnen & Johnson, 1989). Throughout the 1980's, a number of changes occurred that would continue to influence the ways school districts received and expended their funding. Starting in 1979 and continuing through 1989, the property tax levy restrictions began to lessen. In addition to several amendments being introduced which provided exceptions for certain taxing units, schools were authorized and assumed to increase their local property tax rates by specific amounts during the second half of the decade (Ryan, 2010; Lehnen & Johnson, 1989). While these increases were not mandated, less funding was provided through state funds; thus, any district that chose not to increase its property tax levy as described above would have received less total funding (Lehnen & Johnson, 1989).

In response to a lawsuit filed by the Lake Central School Corporation in 1987 (Bowling, 2017), the Indiana legislature made significant changes to the funding formula in 1993. These changes increased funding provided to school districts serving low-income students, and also created a target amount of funding per student (Toutkoushian & Michael, 2005). The At-Risk Index was established to provide additional funding for school districts serving families who contained adults without a high school diploma, living in poverty, or children who lived in homes with only one parent (Lagoni, 2011). This program would go through various iterations and adjustments through the years, and be renamed the Complexity Index; currently, it is called the Complexity Grant. The Complexity Grant, along with several other categorical grants such as the Enrollment Growth Grant, Academic Honors Diploma Grant, and Special Education Grant and several others, were attempts by lawmakers to provide additional funding to school districts for a variety of specific needs and situations (Toutkoushian & Michael, 2005).

During the early 2000's, lawmakers began to look at changing the funding formula again, due to continued concerns that the funding formula was not providing funding in an equitable fashion. Legislators expressed a desire to simplify the formula, increase equity for all students, and to ensure that funding follows each student (Toutkoushian & Michael, 2005). In 2008, the Indiana General Assembly enacted Public Law 146, a sweeping piece of legislation that drastically changed the way in which public schools receive their funding. Rather than have school districts continue to receive operational funding from both state and local property tax sources, the state of Indiana would now provide all of these funds. With the loss of property tax as a funding source, state sales tax was increased by one percent in order to provide the additional funding. In addition, property tax caps were put in place, referred to as the Circuit Breaker Property Tax Credit. These caps limit the amount of property tax that can be collected on specific types of property. The maximum amount that is able to be collected is a percentage of the gross assessed value of the property, in the amounts below (DeBoer, 2008):

- 1% for homesteads
- 2% for other residential property, agricultural land and long-term care property
- 3% for nonresidential real property and personal property

While these tax caps do not affect the General Fund for school districts as a result of the change from local to total state support, they do still have a financial impact on districts. Due to the fact that school districts are required by law to fully fund their debt service funds, these property tax caps limit the amount of funding that school districts are able to collect on their other local property tax funds, which include bus replacement, transportation, and capital projects (DeBoer, 2008). To compound the issue, the tax caps are based off of the total property tax rate, which includes other municipal tax rates. Therefore, if the other local taxing authorities' rates are too high, the tax caps may be triggered even if the school property tax rate is lower than the corresponding tax cap percentage (Department of Local Government Finance, 2018). Interestingly, these tax caps were added to the Indiana State Constitution, essentially making them permanent.

During the time that these changes were coming into effect, a lawsuit was brought forward that challenged how Indiana's schools were being funded. In *Bonner et al. v. Daniels et al.*, the plaintiffs attempted to challenge the funding formula, arguing that it provided differing levels of educational adequacy to different students, which they felt violated the state constitution. Interestingly, the court dismissed the case, issuing a ruling that because the state constitution does not guarantee that an adequate education is a right, the remaining claims in that case did not have merit (*Bonner et al. v. Daniels et al.*, 2009).

Following the changes to the funding formula in 2008, another lawsuit was initiated by three school corporations who felt that the adjustments that had been made through P.L. 146 were unfair. In *Hamilton Southeastern Schools et al. v. Daniels* (2010), the plaintiffs felt that the funding system favored urban school districts, and specifically took issue with the adjusted average daily membership and complexity index aspects of the formula, as well as the use of a lower foundational amount of funding per pupil and the use of restoration grants that lowered the funding reductions for schools with diminishing enrollment, as they claimed these were financially harmful to their districts. In addition, the plaintiffs challenged the new legislation's removal of property tax revenue as a funding source for the general fund. While governor Daniels asked that the case be dismissed, as had been the case in *Bonner et a. v. Daniels et al.*, the courts ruled that this case could proceed due to its focus on funding equality rather than adequate educational rights. Ultimately, the plaintiffs dropped the lawsuit in May 2011, following changes by the legislature that addressed their concerns by only providing funding for students currently enrolled in school districts, and by also removing the restorative grants (*Hamilton Southeastern Schools et al. v. Daniels, 2010*).

The Current School Funding Formula in Indiana

In 2018, the funding formula for public school districts in Indiana is based on a foundational amount per student. School districts are provided with a foundational amount of funding for each student enrolled on September 15th; this student count total is referred to as average daily membership, or ADM. In fiscal year 2018, the foundation funding amount per ADM was $5,273 (Indiana Department of Education, 2018). This funding is called Basic Tuition Support. In addition to Basic Tuition Support, districts could receive additional funds in fiscal year 2018 through four categorical grants, including the Honors Diploma grant, Special Education grant, Career and Technical Education grant, and the Complexity grant. Each of these grants provides additional funding per pupil based on specific criteria (Indiana Department of Education, 2018).

The total State Tuition Support for Indiana's public school districts is determined by finding the sum of the five components described above: Basic Tuition Support, Honors Diploma Grant, Special Education Grant, Career and Technical Education Grant, and the Complexity Grant. (Indiana Department of Education, 2018). As noted in the previous section, all of the funding for State Tuition Support comes from the state of Indiana, and is not supported by local property taxes. More detailed information on the Indiana School Funding Formula can be found in Appendix A.

Challenges for Small, Rural School Districts

Throughout the United States, small, rural school districts often face many challenges that are unique when compared to larger districts in more populated areas. While smaller districts sometimes offer the benefit of smaller class sizes and pupil to teacher ratios, a potential tradeoff is that teachers are often expected to teacher a wider range of courses and subjects (Monk, 2007). In rural districts with more remote locations, it can often be difficult to find qualified teachers to provide instruction (Monk, 2007). While these districts may not have the same tax base or socioeconomic climate to provide financial support for their programs, they are still expected, and often required, to offer the same rigorous and diverse programs as districts many times their size (Tierken, 2014). In light of these financial challenges, some states' funding formulas have been challenged through the courts by rural districts, including Georgia and Tennessee, in an attempt to secure more funding for these districts (Cornelius & Robinson, 2006).

While the changes to the funding formula made through Public Law 146-2008 have affected every district in Indiana in some way, Indiana's small, rural school districts have also faced challenges that are related to their size and district composition. As noted above, small, rural school districts are faced with many of the same costs as larger districts, but with proportionally less total financial resources to cover those expenses. In addition to the challenges already noted, another example of this is special education programming, which continues to grow in cost each year. While the current funding formula does provide additional funding for students who qualify with specific disability areas, these additional funds rarely cover the true cost of providing these services (Goodman, 2009). Due to challenges in providing specific services to smaller numbers of students, many small, rural Indiana school districts have found a benefit in joining with a local special education cooperative, which allows multiple school districts to pool their financial resources and offer a wider range of services to their students via shared staff, facilities, and programs (Goodman, 2009). While this helps ensure that student needs are met, these cooperative programs come with a cost. In addition to paying for the services delivered to students, member districts also pay administrative costs that allow the cooperative to cover its own costs of managing and implementing the programs. Rural districts in Indiana have also turned to similar cooperative agreements to fund other areas such as transportation and technology, though depending on the geographic location of the district, these cooperatives may not exist as options. In those cases, districts are left with the financial responsibility to still provide the full range of services needed to provide a quality education to all students.

Local School Funding Support

To address funding shortfalls, some states have historically used local tax increases through a referendum vote as a means of generating additional financial support for schools. In some states, such as New York, Ohio, Illinois, and Michigan, local tax support through this process is an assumed part of school funding (Ehrenberg, Ehrenberg, Smith, & Zhang, 2004; Ohio School Boards Association, 2018; Summers, 2017; Cauhorn, 2015). Under these systems, school districts are expected to levy financial support through local taxes by asking voters to impose additional taxes on themselves. Using New York, Ohio, Illinois, and Michigan as examples, the level of taxation is based on a mill, which is one tenth of one percent. The resulting rate is then calculated against the specified property being assessed, which varies between states (Ehrenberg et al., 2004; Ohio School Boards Association, 2018; Summers, 2017; Cauhorn, 2015). Districts that are unable to pass these levies successfully experience financial challenges, as a significant portion of their needed funding will not be provided.

This system of financing does create inequities between school districts, however. Even those districts that are able to successfully increase taxes to cover operational costs are still limited by the capacity of their local tax base. A community with a higher amount of property value can more easily generate additional funding with a lower direct tax impact on its residents, simply due to how the mill is calculated. In states such as Illinois, there has been an established record of the relationship between referenda outcomes and the demographic makeup of the school district (Lows, 1987; Lentz, 1999). Historically, this has created a wide disparity of funding between wealthy and poor districts, leading Cauhorn to state "the most important number in education is…a student's zip code" (2015).

In light of the current funding formula and property tax caps that took effect with the passage of Public Law 146 in 2008, a number of Indiana's school districts have found that they no longer receive sufficient funding to support their district's programming. Because Indiana school districts no longer have the option of supporting their General Fund by raising their property tax rate on their own following the changes enacted through Public Law 146, a growing number of Indiana's districts are starting to turn to an operational referendum as a possible solution (Gentry & Hirth, 2017). In Indiana, current law allows school districts to propose a maximum tax rate increase for up to eight years to their local taxpayers, who then decide whether to approve or deny the request through a referendum vote on the ballot. If a majority of taxpayers vote in favor of the referendum, the school will then be able to raise additional funds with a property tax increase up to the maximum rate specified on the ballot. If a majority of taxpayers vote against the referendum, the school district will receive no additional funding, and will need to continue to work with the funding provided by the state. Table 1 provides summary information for all General Fund referenda following the passage of P.L. 146-2008, as reported by the Center for Evaluation & Education Policy (2019):

Table 1

All General Fund Referenda from April 2009 through May 2019[1]

	Total Number of Referenda	Total Referenda Passed	Percentage Passed	Total Referenda Failed	Percentage Failed
Rural	38	27	71.1%	11	28.9%
Town	12	5	41.7%	7	58.3%
Suburb	41	32	78.0%	9	22.0%
City	29	18	62.1%	11	37.9%
Total	120	82	68.3%	38	31.7%

As displayed in Table 1, there have been 120 General Fund referenda placed on ballots from April 2009 through May 2019. Of those 120 referenda, 82 have passed, while 38 were defeated. Within those 120 referenda, cities, suburbs, and rural areas have seen success rates greater than 60%, while towns have seen a pass rate of approximately 40%. (Center for Evaluation & Education Policy, 2019).

While referenda seem to be an increasingly common option for schools to pursue as a means to increase funding, not all school districts have equal chances for success at the polls. As noted by Hiller and Spradlin (2010), “the contributing factors to school referenda outcomes are often subject to the individual communities; while a referendum with a high requested tax rate increase might fail in one community, the same referendum might pass in another” (p. 1). Several key factors that increase a school district’s chances of successfully passing a referendum include a unified school board (Holt, Wendt, & Smith, 2006), community trust in the School Board and administration (Godown, 2010), and developing a specific, clear message that can be communicated to the community that emphasizes the need for the increase (Sargent, 2014).

1 From *Database of Indiana School Referenda* [data file], by the Center for Evaluation & Education Policy, 2019, Bloomington, IN. Retrieved from http://ceep.indiana.edu/policy/tools_resources/index.html. Adapted with permission.

Even when these factors are considered and addressed successfully, however, there is no guarantee for success. Additionally, this shift towards a new reality of referendum use to fund schools has caused a shift in the role of the superintendent in states where this practice has become the norm. Due to the highly political campaigns that often accompany school district referenda, a study by Gentry (2016) found that superintendents who had successfully passed a general fund referendum in their districts felt that instead of being able to serve as instructional leaders, their role had become one more of lobbyist and politician. To increase the odds of passing a referendum, a growing number of districts are investing time and resources into hiring marketing firms and developing well-planned campaigns to ensure that the correct message is delivered to voters (Kowalski & Johnson, 2011; Ingle, Johnson, & Petroff, 2012). In rural communities, including the looming threat of consolidation in the message appears to garner support from taxpayers, who would often prefer to increase their taxes rather than lose their local schools (Yadavalli & DeBoer, 2014).

Consolidation

One strategy that has been suggested as an option to reduce expenditures for small, rural school districts is through the consolidation of schools and school corporations (Plucker, Spradlin, Magaro, Chien, & Zapf, 2007). The argument for consolidation focuses on the idea that larger districts are able to save funds by reducing the amount of administration, staff, and resources required to serve a larger number of students, thus increasing the efficiency of the school district (Gronberg et al., 2015). Various states, including Illinois and South Dakota, have offered financial incentives to entice school districts to consider consolidation (Zimmer, DeBoer, & Hirth, 2009). In Indiana, lawmakers have also recently considered offering per-pupil financial incentives as a way to encourage districts to take another look at consolidation, which could provide the resources to overcome possible financial hurdles that may be causing hesitation (Lange, 2017).

While the consolidation of districts has led to the desired outcomes in certain situations, research has also demonstrated that there is a range of total student enrollment that once exceeded, will begin to reintroduce inefficiencies into the budget and reduce or eliminate the potential savings generated by the consolidation (Gronberg et al., 2015; Zimmer et al., 2009). It has been established by research that increased enrollment can lead to decreases in student attendance, academic performance, and parental involvement (Zimmer, 2007; Gronberg et al., 2015). According to Zimmer (2007), the optimal student enrollment when considering cost per student is 1,942 students, with a range of 1,300 to 2,903 students being within a 95% confidence interval, while an optimal cost per pupil was determined to be $9,413.93. Zimmer goes on to conclude that the optimal enrollment range for school districts is 1,000 to 3,000 students, with diseconomies starting to appear once districts exceed 3,000 students.

In rural communities, consolidation is often resisted due to a concern over the loss of the local school. In rural settings, the local school is often the focal point of the community and is close-knit within the identity of the population (Tieken, 2014). It is relevant to note that when referendum campaigns have a message that implies consolidation could occur without additional support from local taxes, rural taxpayers appear more willing to approve the referendum to ensure that the local school district remains intact (Yadavalli & DeBoer, 2014).

Voucher Impact

In 2011, Indiana began its Choice Scholarship Program, commonly referred to as the voucher program. This program provides scholarships that help offset tuition costs at private schools for students who qualify. There are a variety of ways that a student can qualify for this financial assistance, which include household income and other factors. While the initial premise of the program was to provide families with options for students who may be in areas where only low-performing public schools were available, the aims of the program have changed over time. As a result, while the qualification tracks that were established in 2011 were fairly strict and geared towards areas with struggling schools, these tracks have gradually become available to more and more families who may or may not live in a school district with low-performing schools.

As of 2019, there are eight different paths that lead to qualification for a choice scholarship. Each track requires that families be below a specific financial threshold, and also at least one other criterion which ranges from living in a school district with a low performing school, to having a sibling who has previously received a Choice Scholarship in any prior year (Indiana Department of Education, 2019). As a result of these changes, the number of students participating has grown from 3,911 students during the 2011-12 school year, to 36,290 students during the 2018-19 school year (Indiana Department of Education). A study completed by Downs (2019) illustrates that when the costs of the voucher program are totaled based on these numbers, approximately $154 million was given towards the voucher program during the 2018-19 school year. Downs argued that this is funding that could be used to provide additional financial support to Indiana's public schools, and also expressed concern over the lack of transparency and oversight that is currently required with these funds.

Historical Funding Growth

In an attempt to address the rising costs and increasing financial needs of its public schools, Indiana has historically provided increases to the annual budget for the K-12 public education formula. While these increases have allowed for growth to the total dollars being put into the funding formula, Downs (2019) points out that the rate of increase between January of 2010 and

October of 2018 has not been sufficient to keep pace with inflation. Specifically, while the consumer price index has grown by 16.71% during that time period, financial support for the K-12 school funding formula has only grown by 12.12%. If the dollars going towards the voucher program are excluded from that calculation, the increase to funding that goes to public schools has only been 10.25%. Interestingly, during that same time period, the general fund for the state of Indiana has grown by 20.96%.

Recent Legislation

During the 2017 legislative session, the Indiana legislature passed House Enrolled Act 1009 (Indiana General Assembly, 2017). This bill changed the fund structure for Indiana's public schools, effectively eliminating the general, capital projects, bus replacement, and transportation funds, and restructuring those funds into the education and operations funds. Taking effect on January 1, 2019, the education fund is entirely funded through the state funding formula, while the operations fund is funded through property tax levies. This bill was designed to give schools additional flexibility in how they are able to spend their revenues, by providing districts with the ability to transfer monies between the two funds as necessary. However, in 2019 the Indiana legislature passed House Enrolled Act 1003, which was designed to limit the amount of funds being transferred from the education fund to the operations fund (Indiana General Assembly, 2019). Specifically, this bill seeks to limit the transfer of funds from the education fund to the operations fund to no more than 15% and requires school districts to publicly acknowledge if they transfer an amount greater than 15% in any given fiscal year.

In 2018, the Indiana legislature passed House Enrolled Act 1315, which established a new Fiscal and Qualitative Indicators Committee. The role of this new committee was designed to monitor the financial health of Indiana's public school districts, by monitoring and reporting on several key indicators that could potentially serve as early warning signs that a school district is headed for financial duress (Distressed Unit Appeal Board, 2019). Once the data has been collected, the fiscal indicators for every Indiana public school district are reported on the Distressed Unit Appeal Board website (Distressed Unit Appeal Board, 2019).

Equity Analysis

Concerns surrounding the equity of funding provided to Indiana's public schools have been present for several decades, as evidenced by the historical changes mentioned in previous sections. While Indiana's districts had the ability to raise property tax rates to support their General Fund prior to the changes made by Public Law 146 in 2008, not every district had an equal opportunity to do so. In districts with tax rates that were already high, taxpayer resistance created political conflict that discouraged school boards from pursing rate increases as a means to generate additional funding (Holscher, 1991). As Indiana made adjustments to the funding formula through the years, districts from different backgrounds found themselves benefiting or losing from the changes in ways that were not experienced equally among all districts, as disparities in per pupil funding persisted around the state (Holscher, 1991; Toutkoushian & Michael, 2008).

One of the primary goals promoted by Indiana legislators when developing the funding formula changes that would be implemented with the passage of Public Law 146 was the desire for a greater amount of equity between school districts (Toutkoushian & Michael, 2005). After the funding formula changes took effect in 2009, several school districts felt that the new formula was not providing equitable funding for their districts, and three districts filed a lawsuit against the state of Indiana in 2010 (*Hamilton Southeastern Schools et al. v. Daniels*, 2010). Since that time, several researchers have studied Indiana's current funding formula, in an effort to determine whether this new method of financing schools is having the intended effect of improving funding equity for all students.

A 2012 study by Hirth and Eiler examined horizontal and vertical equity as it pertained to the funding formula changes. After analysis of the distribution formula, Hirth and Eiler concluded that the current funding system provided a high level of equity when using traditional measures. A 2016 study by Sugimoto analyzed the equity of the Indiana school funding formula from 2015-2017, noting that funding per pupil increased annually during the period studied. Sugimoto also concluded that during that time period, horizontal and vertical equity improved (2016). Importantly, however, both Hirth and Eiler (2012) and Sugimoto (2016) acknowledge that while the current funding formula appears to be achieving its intended effect of improving equity, this does not necessarily mean that the funding formula is providing sufficient funding to ensure that schools have the financial resources available to provide an adequate education for all students. As a result, the question becomes not whether schools are being funded equitably, but rather if schools are receiving sufficient funding to provide all of the services and programs necessary at a level of quality that meets the needs of their students.

Summary

Although the federal government has supported a system of education for the public since the foundation of the United States of America, school funding has been primarily under state control since those earliest days of the nation (Usher, 2011). As a result, each state has developed its own unique method that delivers financial support to its school districts. While Indiana has historically made a variety of changes and adjustments to its funding formula, it has remained a system based on a foundational formula for over 60 years (Lehnen & Johnson, 1989; Michael et al., 2009; Lagoni, 2011). In its current iteration, the funding formula provides each school district with a foundational amount of funding per student, which was $5,273 in 2018. School districts are able to receive additional funding per student based on the number of honors diploma graduates, special education population, students enrolled in career and technical education courses, and students who meet the criteria of the complexity grant based on their socioeconomic status (Indiana Department of Education, 2018). All of this funding is provided directly from the state, and is no longer supported by local property taxes.

Following in the footsteps of many other states, an increasing number of Indiana school districts have encountered funding shortfalls after the passage of Public Law 146 in 2008, and have begun to turn to operational referendums as a potential source of additional income (Center for Evaluation & Education Policy, 2018). This process requires the school district to ask their local taxpayers for a property tax increase, which is then able to support the school district with additional funding. This process has become a potential lifeline for Indiana's small, rural districts, some of which face deterioration of quality or even closure or consolidation if additional funding is not able to be secured. The fear of consolidation and the loss of the local schools seems to encourage rural taxpayers to support these efforts, providing much-needed relief to rural districts' funding concerns (Yadavalli & DeBoer, 2014). This process has affected the role of the superintendent, however, taking their focus away from instruction and instead forcing them into the role of politician (Gentry, 2016).

Overall, the changes to the Indiana school funding formula appear to have achieved the desired effect of improving equity between schools throughout the state (Hirth & Eiler, 2012; Sugimoto, 2016). While this may be true, the question remains whether or not schools are being funded sufficiently to provide all of the services and support needed to truly help Indiana's students achieve success.

CHAPTER 3. METHODS

This qualitative study examines the lived experiences of five superintendents of small, rural school districts in Indiana in regard to the school funding formula. The information gathered from this study illustrates the financial experiences and decisions of superintendents of small districts and provides insight regarding how changes to the funding formula through the years have affected the educational services that they are able to provide for their students. Through the methodology of systematic grounded theory, this exploratory collective case study aims to understand the perspectives and experiences of superintendents who have navigated the recent changes to Indiana's funding formula.

Research Question

This study answers the following research question:

What have been the lived experiences of superintendents in selected small, rural school districts in Indiana regarding the current state funding formula?

Purpose of the Study

The purpose of this study is to describe how superintendents of Indiana's small, rural school districts have worked through the changes made to the school funding formula, and what effects these changes have had on their schools and communities. Using the semi-structured interview protocol illustrated in Appendix B, the superintendents provided their perceptions on a variety of topics, including perceived impacts of changes to the formula, consolidation of schools or districts, referenda, and recommended changes based on their personal experience. The results of this study provide insight into how the changes implemented through Public Law 146 have affected districts throughout Indiana and describe both the intended and unintended consequences of these changes.

Research Design

The research for this qualitative study follows an exploratory collective case study design. As explained by Zainal, "case study method enables a researcher to closely examine the data within a specific context", and often "selects… a very limited number of individuals as the subjects of study" (2007, p. 1). A case study typically examines a specific phenomenon within its original context, allowing the researcher to see factors that may influence the phenomenon being studied (Hancock & Algozzine, 2017; Stake, 1995). Stated another way, case studies allow for the study of a phenomenon, while still retaining the meaning behind what is being studied (Yin, 1994). To that end, case study is often used when the researcher feels that the context holds significance to the phenomenon being studied (Yin, 1994). An exploratory case study is used when the researcher hopes to generate further research and exploration by others in the future, and when examining research questions that focus on the "what" of a phenomenon (Zainal, 2007; Yin, 1994).

A collective case study is used when multiple individual case studies are conducted, allowing the researcher to theorize about how the phenomenon may be affecting a larger collective (Hancock & Algozzine, 2017; Stake, 1995). When considering this study, the time needed to study every small, rural school district in Indiana would have been prohibitive; thus, a diverse sample of districts was used, providing data that allowed the researcher to theorize how the findings from the sample may affect other districts of similar socioeconomic composition and geographic location throughout the state of Indiana.

Methodology

This study used a systematic grounded theory design, due to the nature of the topic and information being collected. Grounded theory was originally developed by Barney G. Glaser and Anselm L. Strauss and was first described in their 1967 book *The Discovery of Grounded Theory*. As explained by Creswell and Guetterman (2019), "a grounded theory design is a systematic, qualitative procedure used to generate a theory that… explains an educational process of events, activities, actions, and interactions that occur over time" (p. 434). Patton (2002) tells us that "grounded theory depends on methods that take the researcher into and close to the real world so that the results and findings are grounded in the empirical world" (p. 125). Grounded theory is intended to generate theory rather than starting with a specific theory in place for a given study (Patton; Creswell & Guetterman). It accomplishes this through a framework that uses "coding procedures" which "help provide some standardization and rigor" as the researcher follows the process (Strauss & Corbin, 1998, p. 13).

The use of a systematic design for grounded theory provides a structured framework for researchers to follow, outlining three key phases of data analysis through open, axial, and selective coding (Creswell & Guetterman, 2019). The theory generated through this process is grounded in the data, resulting in "a better explanation than a theory borrowed "off the shelf" because it fits the situation, … is sensitive to individuals in a setting, and may represent all the complexities actually found in the process" (Creswell & Guetterman, p. 434).

Population and Sample

The population studied for this qualitative study are Indiana superintendents who work in small, rural school districts. To be considered for this study, districts had to be located in rural areas, as defined by the National Center for Education Statistics, and have a total enrollment of

4,500 students or less. Additionally, to ensure diverse responses that consider multiple perspectives and situations, districts with declining student enrollment and also districts with increasing student enrollment were chosen. Purposeful sampling was used, as it was important for these superintendents to have a minimum of 10 years of experience as an administrator. Specifically, the study aimed to work with individuals who were in an administrative role prior to the funding formula changes that occurred with the passage of Public Law 146 in 2008, so that they are able to provide perspectives that reflect experience of both the previous and current formulas. This experience allowed them to reflect on the changes experienced by their districts as a result of the historical adjustments made to the state funding formula.

Five superintendents were selected and interviewed as part of this sample. The superintendents were invited to participate through the Indiana Small and Rural School Association. At the start of the 2018-19 school year, the Indiana Small and Rural School Association had approximately 90 member districts, which are located throughout the state. In order to recruit superintendents to participate in the study, an email was sent out to all member school districts to share the required criteria and background, with an invitation to participate if they were eligible. The email was sent out by the ISRSA, so that the identity of the researcher was not known initially by the superintendents who considered participating in the study. This was done to reduce bias from the pool of potential subjects. A copy of the email invitation can be found in Appendix C. Superintendents responded to the email to indicate their interest in participating. Due to a lower than anticipated response to the initial email, the director of ISRSA personally reached out to several superintendents to invite them to participate as well.

Responses were collected by the Indiana Small and Rural School Association, and a pool of potential subjects was created. From that pool of responses, five superintendents were chosen by the researcher, with input from the ISRSA. The selection was based on experience, demographic information, enrollment trends, and geographic location, to ensure that a diverse sample was achieved. All identifiable information of the superintendents and districts studied was removed, so that all responses remained anonymous. Approval was acquired through the Purdue Institutional Review Board prior to the initiation of the selection process for the research sample, to ensure that the study conformed to accepted research procedures and best practices for working with human subjects. Once approval was given by the Purdue Institutional Review Board, the researcher contacted the individual superintendents to coordinate their participation in the study.

Sample Background Information

To ensure that anonymity was maintained, ranges were used instead of exact figures for certain data points in the descriptions that follow so that specific districts cannot be identified. These data points include student enrollment, free and reduced percentage, certified assessed value, and the certified school tax rate for each corporation. The use of ranges instead of exact figures still allows for appropriate comparisons between districts of similar characteristics.

Superintendent 1 has worked at District 1 for a total of 43 years; 17 years as a teacher, 5 years as an elementary principal, and 21 years as the superintendent. Table 2 displays demographic and financial data for District 1.

Table 2

District 1 demographic and financial data for the 2017-18 school year

Demographics		Financial	
Student Enrollment (Range)	950-1000	State Funding per Pupil	$6,292
5-Year Enrollment Trend	Increasing	Certified Assessed Valuation (Range)	$150,000,000-$175,000,000
Free/Reduced Percentage (Range)	45-50%	Certified Assessed Valuation per Pupil	$171,036
Special Education Percentage	8.8%	Certified School Tax Rate (Range)	$1.20-1.30

Note. Data compiled from Indiana Department of Education (2018), and Indiana Gateway (2018).

Superintendent 2 served as superintendent of District 2 for six years, and served as superintendent of another district for five years prior to that. Superintendent 2 served a total of 23 years as an administrator, in four different school districts. Table 3 displays demographic and financial data for District 2.

Table 3

District 2 demographic and financial data for the 2017-18 school year

Demographics		Financial	
Student Enrollment (Range)	4200-4250	State Funding per Pupil	$6,865
5-Year Enrollment Trend	Decreasing	Certified Assessed Valuation (Range)	$850,000,000-$875,000,000
Free/Reduced Percentage (Range)	55-60%	Certified Assessed Valuation per Pupil	$202,066
Special Education Percentage	20.6%	Certified School Tax Rate (Range)	$1.10-1.20

Note. Data compiled from Indiana Department of Education (2018), and Indiana Gateway (2018).

Superintendent 3 has worked at District 3 as superintendent for 12 years, and has served a total of 35 years as a superintendent of four different school districts in Indiana. Table 4 displays demographic and financial data for District 3.

Table 4

District 3 demographic and financial data for the 2017-18 school year

Demographics		Financial	
Student Enrollment (Range)	1150-1200	State Funding per Pupil	$7,033
5-Year Enrollment Trend	Decreasing	Certified Assessed Valuation (Range)	$525,000,000-$550,000,000
Free/Reduced Percentage (Range)	55-60%	Certified Assessed Valuation per Pupil	$454,178
Special Education Percentage	20.2%	Certified School Tax Rate (Range)	$1.00-1.10

Note. Data compiled from Indiana Department of Education (2018), and Indiana Gateway (2018).

Superintendent 4 has worked at District 4 as superintendent for 19 years. Table 5 displays demographic and financial data for District 4.

Table 5

District 4 demographic and financial data for the 2017-18 school year

Demographics		Financial	
Student Enrollment (Range)	950-1000	State Funding per Pupil	$6,232
5-Year Enrollment Trend	Decreasing	Certified Assessed Valuation (Range)	$250,000,000-$275,000,000
Free/Reduced Percentage (Range)	25-30%	Certified Assessed Valuation per Pupil	$254,780
Special Education Percentage	12.3%	Certified School Tax Rate (Range)	$0.70-0.80

Note. Data compiled from Indiana Department of Education (2018), and Indiana Gateway (2018).

Superintendent 5 has worked at District 5 as superintendent for 7 years, and has worked in the school district for a total of 11 years as an administrator. Table 6 displays demographic and financial data for District 5.

Table 6

District 5 demographic and financial data for the 2017-18 school year

Demographics		Financial	
Student Enrollment (Range)	2700-2750	State Funding per Pupil	$6,969
5-Year Enrollment Trend	Increasing	Certified Assessed Valuation (Range)	$700,000,000-$725,000,000
Free/Reduced Percentage (Range)	60-65%	Certified Assessed Valuation per Pupil	$265,785
Special Education Percentage	16.7%	Certified School Tax Rate (Range)	$1.10.1.20

Note. Data compiled from Indiana Department of Education (2018), and Indiana Gateway (2018).

Data Collection

Data were collected for this study through interviews and the collection of financial and demographic data. The interview responses were collected from the five superintendents who were selected based on the previously outlined criteria. The interviews lasted approximately one hour and a half each, and took place at the office of the superintendent being interviewed or another location of their choosing. A copy of the interview protocol used can be found in Appendix B. Each superintendent was provided a copy of the interview protocol in advance, allowing time for them to consider their responses and also consult with their business official on any specific details necessary. The interviews followed a semi-structured format, allowing for further discussion and topics that may have emerged throughout the interview process. Although the superintendents had the opportunity to consult with their business official or other individuals prior to the interviews, only the researcher and subject were present during each interview. Follow up interviews were possible if clarification of the initial responses was needed.

In addition to the data gathered from interviews, financial and demographic data from the school district of each superintendent was collected as well. Per student funding provided by the Indiana school funding formula will be examined for the 2017-18 school year, as well as each school district's certified tax rate for the 2017-18 school year. Additionally, each district's wealth in terms of assessed property value per student was calculated, using enrollment data and assessed property values. The financial data were collected through the Indiana Gateway Report Builder website, which provides public access to financial data from all Indiana local government units, including public schools (Indiana Gateway, 2018). Demographic information for each school district, including student enrollment, special education percentage, and free and reduced population, was collected through the Indiana Department of Education Compass website (Indiana Department of Education, 2018).

Data Analysis

Following the procedures established by the use of systematic grounded theory design, the interview data were transcribed, broken down, and coded as appropriate through three series of coding. In the initial phase, open coding allows the researcher to take the collected data and break it down into small parts, which leads to the creation of preliminary categories by sorting the data by commonalities and differences (Creswell & Guetterman, 2019; Saldaña, 2009). This open-ended process allows the researcher to reflect on the data collected and consider the possible directions that exist for further analysis. The coded data were then further analyzed using axial coding, which allows the researcher to reconstruct data in a meaningful way as common characteristics arise (Strauss & Corbin; 1998; Saldaña). During the axial coding process, the researcher selected a key category from the previous open coding phase, establishing it as the primary phenomenon. A diagram, referred to as a "coding paradigm", was developed that provided a visual representation that "portrays the interrelationship of causal conditions, strategies, contextual and intervening conditions, and consequences" (Creswell & Guetterman, p. 439). Figure 1 provides a visual representation of the process followed when moving from open coding to the axial coding paradigm.

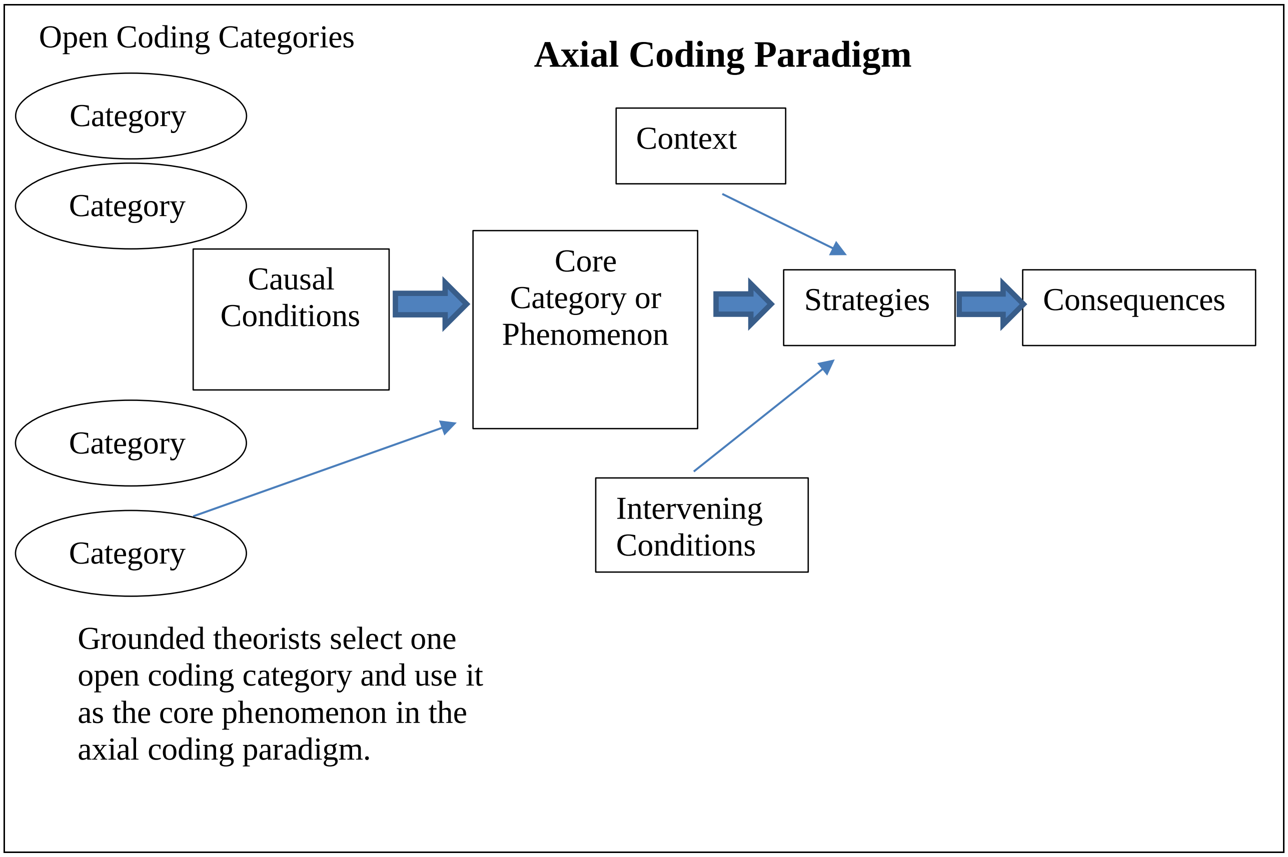

Figure 1. *Grounded theory coding from Open Coding to the Axial Coding Paradigm*[2]

As illustrated in Figure 1, and explained by Creswell & Guetterman (2019), there are six key categories in the axial coding paradigm:

[2] From *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (p. 439), by J. W. Creswell and T. C. Guetterman, 2019, New York, NY: Pearson. Copyright 2019 by Pearson Education, Inc. Adapted with permission.

1. Causal conditions: Categories of conditions that influence the core category
2. Context: The specific conditions that influence the strategies
3. Core category: The idea of phenomenon central to the process
4. Intervening conditions: The general contextual conditions that influence strategies
5. Strategies: The specific actions or interactions that result from the core phenomenon
6. Consequences: The outcomes of employing the strategies (p. 439)

The final phase, called selective coding, results in the writing of a theory based on the relationships discovered through the coding paradigm during the previous axial coding phase, which "provides an abstract explanation for the process being studied in the research" (Creswell & Guetterman, 2019, p. 439). The analysis and reconstruction of the data through this coding process provided an understanding of the lived experiences of superintendents, highlighting commonalities and disparities that exist between multiple districts, and developing a theory that provides an explanation for the effects of the funding formula on Indiana's small, rural school districts.

The financial and demographic data from the 2017-18 school year of the five school districts whose superintendents were interviewed were placed into a table, so that the data could be examined for similarities or differences. This year was chosen to use for the comparison as it was the most current and complete data set available at the time of this study. The data were also examined and compared to the responses of the superintendents, which helped illustrate the financial situations that were described through the interviews. While there was not a concern regarding the truthfulness of each superintendent's response, it was possible that their feelings and opinions may not align with the financial facts. The collection and analysis of this data provided an opportunity for data triangulation, a process used to verify and increase the credibility of data that may be considered unreliable on its own (Stake, 1995; Patton, 2002). The examination of the financial and demographic data from each district supported and verified the claims made by the superintendents through their interviews.

Reliability and Validity

The background of the researcher presented a threat to validity. As such, it was vital to check for bias throughout the study. As the researcher is currently employed as the superintendent of a small, rural Indiana school district, there was an inherent risk of bias entering the results of the study. This was controlled through the use of factual data and analysis, and by carefully constructed questions that avoid leading the respondents towards a particular response. Additionally, the school district that employs the researcher was not used as part of the study, nor did the researcher contribute to the study as a participant.

As with many case studies, there was a legitimate concern regarding the reliability of this study, due to the fact that it will be challenging to replicate this study by other researchers in the future. As recommended by Yin (1994), the procedures followed for this study have been well documented, allowing future researchers to replicate the process as closely as possible. However, it is also important to note that the purpose of qualitative inquiry is not necessarily to conduct a study that can be replicated, but rather to help improve the depth of understanding about an observed phenomenon.

CHAPTER 4. RESULTS OF THE STUDY

The lived experiences of five superintendents in selected small, rural school districts in Indiana regarding the current state funding formula were examined through the use of qualitative research methods. Each superintendent was interviewed, and each interview was transcribed to allow for coding and theme analysis. The data were then analyzed through the stages of open coding, the axial coding paradigm, and selective coding, to develop a theory that explains the phenomenon being studied (Creswell & Guetterman, 2019). The results have been reported through each of those stages: the emergent themes that arose from open coding, to share more specific information from each interview; axial coding, to illustrate how key findings are related to one another, and to establish the core phenomenon; and selective coding, to report the theory that emerged as a result of the analysis.

Demographic and Financial Data

In the tables below, ranges have been used instead of exact figures for certain data points in the descriptions that follow so that specific districts cannot be identified. These data points include student enrollment, free and reduced percentage, certified assessed value, and the certified school tax rate for each corporation. The use of ranges instead of exact figures still allows for appropriate comparisons between districts of similar characteristics. Table 7 illustrates a comparison of key demographic information for the five districts used for this study, while Table 8 illustrates a comparison of financial metrics for each district in the study.

Table 7

Demographic comparison of study sample districts from the 2017-18 school year

	Student Enrollment (Range)	Free/Reduced % (Range)	Special Education %
District 1	950-1000	45-50%	8.8%
District 2	4200-4250	55-60%	20.6%
District 3	1150-1200	55-60%	20.2%
District 4	950-1000	25-30%	12.3%
District 5	2700-2750	60-65%	16.7%

Note. Data compiled from Indiana Department of Education (2018).

Table 8

Financial comparison of study sample districts from the 2017-18 school year

	State Funding per Pupil	Certified Assessed Valuation (Range)	Certified Assessed Valuation per Pupil	Certified School Tax Rate (Range)
District 1	$6,292	$150,000,000-$175,000,000	$171,036	$1.20-1.30
District 2	$6,865	$850,000,000-$875,000,000	$202,066	$1.10-1.20
District 3	$7,033	$525,000,000-$550,000,000	$454,178	$1.00-1.10
District 4	$6,232	$250,000,000-$275,000,000	$254,780	$0.70-0.80
District 5	$6,969	$700,000,000-$725,000,000	$265,785	$1.10-1.20

Note. Data compiled from Indiana Department of Education (2018), and Indiana Gateway (2018).

Emergent Categories

Once the interviews were transcribed, the transcriptions were analyzed and coded to allow categories to emerge. Many of the categories were directly related to the question being asked by the researcher; however, several categories emerged due to similar experiences that were shared by two or more superintendents through their answers. The coded interview data were then organized by the common categories that emerged.

Category One – Financial History

When asked about the financial history of their district and if there had been any situations or events that were unique to their district, each school district leader shared a different account of the financial history of their individual school corporations. Superintendent 1 shared that in their district, they have experienced a continual increase of student enrollment over the past few years, so much so that their district has denied student transfer requests over their established capacity for several years. As a result, the district has been able to increase revenue at strategic times by increasing their maximum enrollment capacity as needed. This has allowed them to receive additional funds, which have helped with salary and other expense increases. Superintendent 1 also shared that several years ago, their district authorized a virtual charter school, which has led to an additional revenue stream that most districts do not receive, adding up to well over $2,000,000 over the last few school years. However, the district also has a large tax increment financing district, commonly called a TIF district. The superintendent shared that while the total district assessed value is within the range of $150,000,000 to $175,000,000, $28,000,000 of that is inside the TIF district. As a result, the school district loses a significant amount of revenue that would typically be used for needs in the operations fund. In addition to businesses, the TIF district also includes numerous residences. Uniquely, that TIF district retains 100% of the property taxes collected, meaning that the school district receives no property tax revenue from any property within that area. The superintendent shared that while new growth does improve the school district, the school does not benefit from any AV growth that occurs within the TIF district, making that situation complicated. To control costs as much as possible, the district has renegotiated several utility and insurance contracts, as well as joined consortiums in these areas when possible.

Superintendent 2 shared that their district has enjoyed a period of general financial stability during their time in the district. The superintendent gave a lot of credit for this to their outstanding central office staff, who possess a solid understanding of school finance. The district has consistently maintained a healthy cash balance in both the rainy day and general funds over the years. The most impactful financial issue that arose during the superintendent's tenure was a significant cut to special education funding that occurred in 2013, resulting in a loss of approximately three million dollars for the district. This led to a major staffing shift in the district; every teacher's license was reviewed through a matrix, and placements were adjusted to maximize the use of each staff member's certifications and abilities. Non-essential positions were eliminated through attrition. At the end of three years, the superintendent realized that they had eliminated approximately 60 positions, making up the three-million-dollar reduction without needing to lay off a single teacher.

Superintendent 3 shared that their district had made the difficult decision to consolidate with a neighboring district during their tenure. While the decision to consolidate is never easy, the superintendent shared that both communities were relatively supportive during the process, likely due to the understanding of what the financial alternatives were for each district. Following the consolidation, the new district had access to an increased assessed valuation, as each of the prior districts were combined into one. The district also realized the benefits of reducing and streamlining staff and programs now that the districts are combined. This has led to financial improvements for the district, primarily thanks to the pooling of financial resources of combining the two districts.

Superintendent 4 shared that the large reduction made by Governor Daniels to the education budget in 2010 had a strong negative impact on their district, and they relied on the rainy-day fund to get through that time. The superintendent shared that he tries to be as conservative as possible when budgeting and keeps a close watch on monthly expenditures to try to catch any anomalies or trends early enough to address them effectively. The school board has established a goal of maintaining a cash balance of between 8.5-10% in the general and rainy-day funds, to ensure financial solvency at all times. The superintendent shared that the lower assessed valuation of the district's property wealth has had a negative impact in regard to how much funding can be generated for capital projects, especially as compared to neighboring districts. The superintendent has worked to maximize the use of the district's funding by purchasing equipment through government surplus opportunities, for items such as technology and vehicles for the district. Additionally, the superintendent has also sold excess equipment through an online surplus website, which allows the district to generate additional funding by getting rid of equipment that is no longer in use.

Superintendent 5 also talked about the impact of the state education budget reduction in 2010, explaining that the superintendent at the time was extremely proactive and took steps to reduce costs by approximately one million dollars. Even with that reduction, however, the district still found a need to make additional cuts, resulting in another $800,000 in reductions. After working through those challenges, the district has recovered, and now has very healthy cash balances of approximately four million dollars in the general fund, and seven million dollars in the rainy-day fund. As a result, the district is able to generate additional funding through investments and interest, which provides opportunities to finance major capital projects in ways that other districts cannot. The district has been experiencing an enrollment increase over the past few years, and the superintendent shared that they also regularly receive requests from families in districts in a neighboring state to transfer. The superintendent shared that since there is no reciprocal agreement with that state that would allow those transfers, the district is missing out on the opportunity to increase enrollment even more than it currently is. Due to some uncertainty with two major employers within the county, the superintendent is a bit concerned about the future; if one or both of those employers find themselves in a situation that requires significant layoffs and/or closure, those outcomes would be extremely harmful to the school district. District 5 does experience property tax losses of approximately 15-20% each year due to a large TIF district within its boundaries.

Category Two – Loss of Local Financial Control

In regard to the loss of local property tax support following the passage of Public Law 146 in 2008, Superintendent 1 shared that their district felt a very immediate impact. Following the change to the funding formula, District 1 experienced a decline in per student revenue for several years, decreasing their available funding and making finances very tight. Superintendent 2 shared their concerns surrounding the loss of local control, which focused heavily on the increased difficulty in planning for the future. The superintendent felt that under the old system, when districts could establish their local property tax rate to provide financial support for the general fund, he was able to plan ahead several years and make sound financial decisions as a result. Under the current system, Superintendent 2 felt that he was unable to plan more than 13 months ahead, at best, and also expressed frustration that school funding currently feels more vulnerable to political whims and changes.

Superintendent 3 also expressed concern with the current system, sharing experiences when their finances were reduced by significant amounts from one year to the next based on declining student enrollment numbers. Superintendent 3 went on to explain that with the loss of approximately 10 to 15 students in a given year, which equates to 60 or 70 thousand dollars, a school district simply cannot cut that same amount of teacher salaries as easily since the students who have left are spread out amongst different grade levels and schools. Superintendent 3 felt that in light of their shrinking cash balances over the years, their community would have helped if they could through a tax increase under the old system; unfortunately, that option was no longer available.

Superintendent 4 felt that the change to revenue being tied to student enrollment had not necessarily hurt his district. However, District 4 has still experienced challenges under the new system, as the superintendent felt that their per-student funding had remained stagnant over the years. Thus, as costs increased, the amount of funding his district received was not increasing on a per-student basis. Superintendent 5 shared that the most significant change experienced in his district as a result of this change was a shift in how he planned out future projects that would impact the tax rate. The superintendent felt that in the past, schools had a monopoly in regard to seeking property taxes from their local communities. Under the new formula and tax cap structure, it forced his school district to engage in more open communication with the other local municipal entities on a regular basis, so that each organization was aware of what the other was doing and would not increase taxes in a way that would harm the others. However, in terms of general fund dollars, the superintendent had actually seen a benefit for his district, due to that the fact that the enrollment in District 5 is increasing.

Category Three – Circuit Breaker Tax Caps

When asked about the impact of the property tax caps put into place by the Indiana legislature in 2008, Superintendents 2, 3, and 4 all reported that their losses to the tax caps were minimal and did not have a significant financial impact in their districts. Superintendent 1 shared that District 1 currently loses approximately one third of its property tax funding to the tax caps, while Superintendent 5 shared that their losses to tax caps have varied between approximately 15 to 25 percent from year to year. For the two districts affected by the tax caps, both superintendents shared that these losses have had a significant negative impact on the funding available for capital projects and transportation costs. Superintendent 5 shared that as a result of these losses, he is forced to use funding through the debt service fund to cover many of their capital project expenditures.

Category Four – Impact of the Funding Formula Changes

In District 1, the superintendent shared that his district has benefited heavily from the ability to accept students who reside within other school districts but choose to transfer into his district. Without the benefit of the transfer students, Superintendent 1 shared that his district would be experiencing an enrollment decline; however, thanks to the transfer students, their enrollment is increasing, resulting in increased funding. The superintendent has begun to notice an increase in per-student funding in his district, which has also helped their financial situation. Overall, the superintendent feels that his district benefits the most when additional money is simply added to the formula, as the overall increase to the foundational amount helps increase their revenue. The superintendent noted his concerns surrounding the inequities that exist between districts as a result of the great variation present in terms of assessed valuation per student, and that the state formula does not address that concern. In districts with a high assessed valuation per child, the districts may enjoy a much higher amount of property tax funding, allowing those districts to not only build and maintain nicer facilities and equipment, but also offset costs which then free up tuition support dollars to give larger raises to teachers and staff.

Superintendent 2 felt that the loss of local property tax support really hurt his district's ability to plan for the future, due to the uncertainty that currently surrounds tuition support since student enrollment can fluctuate drastically from year to year. Rather than planning several years in advance for upcoming expenditures and changes, he felt that at most, he could plan 13 months ahead with reasonable certainty. The superintendent expressed concerns over what this financial uncertainty has done in regard to salaries over the years since this change, and shared examples of when his teachers and staff went multiple years with no increases in pay. The only positive aspect to this change, in the eyes of Superintendent 2, was the demonstration of just how committed and resilient his teachers and staff have been through all of the financial hardships and challenges. In spite of the lean financial times experienced by the district, the superintendent felt that his teachers and staff rose to the challenge and continued to improve student outcomes each year.

Superintendent 3 expressed concern over the loss of local property tax support for the general fund, and the difficulties his district has experienced in terms of recruiting and retaining teachers due to their low pay scale. In the past, the superintendent had been able to increase the local property tax slightly if more revenue would be needed in a given year, which was met with minimal resistance from the community. Now that this option has been removed, he feels that his district will continue to struggle in this area. The only positive aspect of the change observed by

Superintendent 3 is the relief that some taxpayers may feel knowing that they will pay lower property taxes, at least in terms of supporting education.

Superintendents 4 and 5 did not express any concerns directly related to the changes in the funding formula. Superintendent 4 felt that a significant positive outcome of the change was no longer needing to rely on their local county offices to deliver funding in a timely fashion. He had experienced issues in the past with property tax revenue not being deposited on time, which resulted in his district needing to take out loans to cover expenses until the funding was processed. Superintendent 5 felt that a positive outcome has been that it has forced an improvement in communication with the other taxing entities, so that property tax increases for specific projects are more intentionally planned out and timed with each other. The superintendent feels that this improved communication and coordination has been a benefit for their taxpayers and has allowed each taxing entity to be better informed regarding what the others are doing.

Category Five – Enrollment

In District 1, the enrollment is currently within a range of 950-1000 students. Interestingly, Superintendent 1 shared that over 40 percent of their students are now transfer students, meaning they live in another school district, but attend school in District 1 by choice. The district has experienced increasing enrollment for the last few years and has controlled that growth by establishing a maximum capacity each year. As a result, the district has maintained a waiting list of students wishing to transfer each year; at one point, the waiting list had over 100 students on it.

The enrollment in District 2 has experienced a steady decline over the past decade. Superintendent 2 shared that approximately 12 years ago, the district had over 5,000 students; currently, their enrollment is in the range of 4,200-4,250 students. The superintendent felt that this decline was due primarily to a lack of job growth, as well as a shortage of lower-cost housing options for families.

In District 3, the enrollment has been on a steady decline over the past several decades, from over 2,000 students between the two former school districts to the current range of 1,150-1,200 in the current consolidated district. Superintendent 3 attributes this decline to a combination of factors, most notably a lack of industry or business in the area, as well as a large increase in population by Amish families whose children do not attend public schools. Additionally, in response to the geography of the district, over 100 students transfer into other neighboring districts due to proximity.

District 4 has also experienced a slight enrollment decline, though the decline has not been as severe due to a large number of transfer students who choose to attend the district. The superintendent shared that during the 2017-18 school year, the district welcomed over 140 transfer students from other school districts, which represented a significant percentage of the total student enrollment which fell within the range of 950-1,000 students in that same year.

Superintendent 5 shared that when he first came to the district, the enrollment had been in a state of decline, getting as low as between 2,400-2,500 students at one point. He attributed the decline during that time period to a new school building in a neighboring school district, which tempted parents away from the aging buildings in District 5. To counteract this trend, the superintendent started an aggressive marketing campaign, and invested significant financial resources to remodel and replace several buildings. As a result, the enrollment trend has reversed, and has increased to the current range of 2,700-2,750 students. The superintendent expressed regret that his district had to spend resources and time to develop and implement a marketing campaign to combat this issue, but also felt that it was necessary to ensure the financial security of the district.

Category Six – Staffing Adjustments

Superintendent 1 did not feel that any significant staffing changes had been made as a result of the funding formula changes. Due to budget shortfalls, Superintendent 2 led his district through a three-million-dollar staffing reduction over a period of three years, eliminating 58 positions in the process. Superintendent 3 experienced a very drastic staffing adjustment during the consolidation process, completely eliminating many duplicate positions as the two school districts combined into one. This included a savings of over $100,000 by eliminating the second superintendent position, an additional $100,000 by eliminating one full extra-curricular pay scale, and other savings as services and programs were streamlined for the consolidated district.

Superintendent 4 shared that while his district has not necessarily had any drastic reductions in staffing, the current funding formula has caused him to become much more focused on employee costs. He watches every employee hire much more closely and keeps track of what benefits new employees choose so that he is aware of all financial changes that could impact his budget. In District 5, a total of $1.8 million in staffing reductions were made over a period of two years to adjust to the budget reductions that resulted with the funding formula change. Interestingly, the district has also added a public relations position, to help market the school district and attract students. While the position does cost the district valuable financial resources, the superintendent feels that this position pays for itself based on the number of new students that are coming to the district each year. The superintendent did share, however, that if the budget were to get tight again, this position would be the first one eliminated.

Category Seven – Significant Expense Increases

Superintendent 1 felt that the most significant expense increases have come as the result of new mandates from the Indiana legislature, such as training requirements for teachers and staff, new reporting requirements, student testing additions, and so on. The superintendent explained that because many of these mandates are unfunded by the state, the added time and expense are directly passed on to schools, which simply consumes resources that could be spent in other ways. The superintendent also mentioned fuel and utility costs as areas that have at times affected his budget significantly, as well as the need to recruit teachers in a competitive job market.

Superintendent 2 cited technology as the most impactful increase in expenses during his tenure at District 2. The district implemented one to one devices for all students; and while the purchase of the devices was paid for through a low-interest loan and partially offset by book rental fees, he shared that it was still an expense that continued to grow. Additionally, the staffing required to run and maintain the technology needs of the district sharply increased over the years as well. Superintendent 3 shared that transportation costs have increased as a consequence of the consolidation of districts and buildings.

Superintendent 4 shared that his district had recently made the decision to add a full-time school resource officer to their staff. This resulted in the addition of a salary for the position, as well as all of the upfront and ongoing costs associated with law enforcement equipment. The superintendent also felt that technology, special education, and construction had significantly added costs to their budget. Superintendent 5 shared that rising health insurance costs have been the most significant expense that has impacted his district.

Category Eight – Teacher Contract Negotiations

In District 1, the superintendent has had the benefit of a waiting list of students hoping to transfer into the district, allowing for strategic increases to enrollment, which in turn increase funding. However, Superintendent 1 shared that he feels his teachers have had lower salaries historically when compared to other corporations. In recent years, the contract has given teachers raises of approximately five percent annually. In the most recent negotiation cycle, the superintendent spent additional funding to make the pay scale more fair to specific teachers who had worked for the corporation longer than others who had come to the district after them. The superintendent shared that he has had to be direct with his teachers' association during negotiations, to help them understand that every financial increase means a decrease in another area.

Superintendent 2 shared that historically, teachers were almost always guaranteed some type of an incremental raise on the pay scale as long as they were doing acceptable work. However, in today's school finance environment, it has become increasingly common for teachers to work for several years with no increase in pay, simply because the district does not have additional funding to support an increase. The superintendent expressed his appreciation for a positive relationship with the teachers' association, and shared that he was fortunate to always have amiable contract negotiations. At District 3, the superintendent discussed the unique challenges that occurred as a result of negotiating with a district that was made up of teachers from two separate school corporations that had combined into one. This presented very unique challenges, as the overall compensation model, extra-curricular schedule, and contract language all had to be gradually combined into one agreement.

To help keep salary increases in line with available funding, Superintendent 4 negotiated language into the most recent contract that tied increase amounts to various levels of enrollment changes. A set amount would be given for raises if enrollment stayed the same or increased within a certain range; if enrollment was higher, an additional amount would be given for raises. If enrollment dropped from the year prior, the amount would be less, and also split between an increase to base salary and a one-time stipend payment. In this way, the contract allowed for teacher salary increases, while still protecting the financial stability of the district based on fluctuations in enrollment. The superintendent also shared that he has appreciated the additional flexibility when hiring that allows him to place teachers at different levels if necessary in order to hire certain positions, though he also lamented that this can sometimes result in a bidding war and increase costs more than it would have in the past. Superintendent 5 shared that while he knows his teachers would like more money, he also feels that they are blessed by the low class sizes that his district is able to provide. He shared that while his district still has a salary chart that uses letters instead of years of experience, the lack of a set salary schedule has allowed their general fund to grow a bit more, by not always guaranteeing increases.

Category Nine – School Board Involvement

Superintendent 1 shared that his school board typically stays hands-off when it comes to addressing financial issues. He feels that part of the reason for this is the trust that has been built over his 21-year tenure as superintendent, as the board has witnessed the superintendent guide the school district through difficult financial situations over the years. The superintendent works to keep the school board informed of any financial concerns that are on the horizon, though from his perspective, he feels that they are mostly uninterested and do not have a desire to be more involved. One factor that has helped build that trust has been the stability of the board during his time as superintendent; two of the current school board members were on the school board when he was hired, and the other positions have been very stable as well. This has helped the board become a strong team and has also developed a positive relationship between the board and superintendent over the years.

Superintendent 2 tried to get the school board more involved when difficult decisions had to be made during specific challenging times, but the board chose to stay uninvolved most of the time. The superintendent wished that they had been more involved at times, as it would have helped the school district to have the board speaking to the community about specific topics and sharing facts about how the district was addressing certain issues. However, the superintendent felt that the board would rarely get involved in this way and was not interested in learning about the specifics of financial concerns that may be going on. His main concern with this fact was that at times, members of the board would be asked questions by community members and would not be prepared to answer with facts or a solid understanding of the situation. This created frustration for both the board and the superintendent.

Superintendent 3 shared that his school board also tends to stay out of the financial decisions, and also felt that his many years of experience as a superintendent helped create the trust that allowed the board to feel confident in his abilities to address financial concerns effectively. The superintendent does try to keep the board well-informed about all of the financial matters of the school district, so that they are not caught off guard by any concerns that may arise. However, he felt that the school board does not have a strong interest in the budget, and that as long as the school can continue to operate without increases to costs, the board was satisfied.

Superintendent 4 explained that in order to keep his school board informed, he has developed a large spreadsheet that effectively illustrates all of the staffing costs for the district, and where the funding for each area is coming from. He also provides the board with copies of all of the financial forms that he is required to submit. Because of how informed he keeps the board on his process and projections, the board does not typically get involved beyond these steps. The superintendent did share that early in his career as a district administrator, he did have a few school board members who chose to be more involved. These individuals directed cuts to the budget that were harmful to the district's finances, primarily out of a lack of understanding. That experience helped the superintendent develop his current system for working on the budget and keeping the board informed, which he feels has been successful.

Superintendent 5 also shared that his school board stays uninvolved most of the time, but he also spends a lot of time communicating and meeting with school board members to keep them well-informed. He explained that prior to when he was superintendent, the board would sometimes get very involved in financial decisions, especially when cuts had to be made. The superintendent shared that when he was hired, he spent some time developing new relationships and processes with the board, to help them feel more informed as board members. This has resulted in much more unity between board members and the superintendent in public, as board members feel supported and educated, and potential issues and disagreements are discussed and worked out privately. Similar to Superintendent 1, Superintendent 5 shared that the stability of the school board has helped develop a positive working relationship. The board members who hired him are still on the board, which has allowed for that relationship to grow and trust to form.

Category Ten – Consolidation

Superintendent 1 shared that there had been talk over the years of his school district consolidating with other neighboring districts at various times. The talks had resulted in two separate votes to consider consolidation with one specific district approximately 40 years ago, but both votes failed. Approximately 10 years ago, community meetings were held to discuss the possibility of consolidation with that same district, but community members once again indicated that they were not interested in consolidation. The superintendent felt that community members appreciated the feel of their smaller school districts, and the ability to meet with their superintendent easily when needed. When the potential cost savings were analyzed, it appeared that some minor savings could occur; however, the anticipated savings would not be significant enough to make the decision to consolidate an obvious choice. The superintendent felt that the issue was settled for the time being but would certainly be revisited if the state started to force consolidations, or if the financial situation of either school district were to drastically change.

Superintendent 2 explained that his school district had been formed during the 1960's as a result of a consolidation of several small school districts throughout the county. Because of the large geographic size of the school district currently, there are no other districts close enough that would be likely to consider consolidation a viable option.

Superintendent 3 has led his district through a consolidation with a neighboring school district. The decision was a result of declining enrollments and tightening budgets at both corporations over a period of years. The enrollment declines naturally affected the revenue being received by each district, and with the loss of the small schools grant and other financial supports that had sustained each district previously, their options were extremely limited. At the time, the superintendent had a working relationship with both school district's school boards, and was able to help each community navigate the difficult conversations surrounding consolidation. While the school building configurations were unchanged during the first few years following the consolidation, the district has since reorganized those as well, combining high schools and middle schools to increase efficiency and maximize programming for students. One fact that has complicated matters financially for the school corporation is that with the consolidation, each township kept their debt from their previous school district. This resulted in different taxpayers in the current school district paying different rates, depending on where they live. Once the old debts are paid off, however, the district will only have debt that has been taken out under the current structure, so this is a temporary issue that will resolve itself over time. The district has been able to save a significant amount of money as a result of the consolidation; however, with enrollments continuing to decrease, and a lack of industry and employment opportunities in the area, the superintendent shared that there are still financial concerns present. He explained that unless those concerns resolve themselves, additional cuts to programs and staff will be necessary in the years ahead.

Superintendent 4 explained that while several neighboring districts have conducted studies to consider consolidation with each other, his school community has made it clear that they are not interested in consolidating with any other districts. So while he feels that it is certainly something that could feasibly happen with one or more of their neighboring districts, he knows that it is not something that his community would support. Superintendent 5 shared that consolidation has never been a serious discussion in his district, partly because his district is the largest district in the county. Similar to the experiences of other superintendents, he knows that neighboring districts have studied consolidations with each other; however, he also shared that nothing has come out of those conversations. He felt that whenever districts do make the decision to consolidate, many of the anticipated savings are lost due to increases in administrative needs that arise from the new larger district, including additional central office staff, increased transportation costs, and others. As a result, he was not sure that consolidation always produces the desired outcome of reduced costs.

Category Eleven – Consortiums/Cooperatives

Superintendent 1 shared that his district is part of a health insurance trust, which he feels has been a large benefit for the district's finances and for the benefits provided to his employees. They also participate in a consortium for special education services, and another consortium for career and technical education programming. Additionally, they work with the service center for cooperative purchasing opportunities such as school buses and other items that can be discounted through volume purchases.

Superintendent 2 shared that his district also participates in a health insurance trust; while initially that decision was met with resistance by some teachers and board members, it has ultimately been a very beneficial arrangement for the district. Additionally, they participate in a career and technical education consortium, which benefits approximately 200 of their students each year. Their district made the decision to leave a special education consortium approximately 10 years ago, however, so the district now provides all special education services on their own.

Superintendent 3 explained that his district participates in a health insurance trust, special education cooperative, and a cooperative for career and technical education programming, all of which have provided increased opportunities and benefits for staff and students at a reduced cost. Superintendent 4 shared that their health insurance trust has been a huge benefit for their budget and employees, with very low premium costs. While they continue to provide their own special education services, they do participate in a consortium to provide career and technical programs for students.

Superintendent 5 shared that when he first started as the superintendent, his district had been self-funding its health insurance plans. Due to some difficult years with very high insurance claims, the district was getting into financial trouble and needed to make a change. As a result, they joined an insurance trust made up of districts from a wide geographical area. This arrangement has allowed the district to better control its health insurance costs, and the superintendent shared that the group of trustees who make the decisions truly are focused on the best decisions for the group as a whole, rather than their individual school corporations. District 5 also participates in a special education cooperative, as well as a career and technical education cooperative. Each of these cooperatives have provided additional services and programs for students that are more cost-effective for the district.

Category Twelve – Referenda

District 1 has never pursued an operational referendum. Superintendent 1 felt that because of the high number of transfer students that come to the district, yet do not provide property tax revenue, the conversation with the community would be extremely difficult. Superintendent 2 shared that his district also has never pursued a referendum, and based on their current finances, would have no need to do so. He does feel, however, that the community would support it if the need could be demonstrated effectively.

Due to the makeup of the community in District 3, the superintendent does not feel that a referendum would be supported if it were proposed. Even though the district has lived through its share of financial troubles, and even navigated a consolidation as a result in recent years, the superintendent shared that no one ever proposed a referendum as a solution. He feels that is because the community knows it would not be supported, due to the large amount of farmland and increasing amount of poverty in the district.

District 4 has also never proposed an operational referendum, and the superintendent does not think it would be supported if it were placed on a ballot in the future. He shared a past experience with a building project that was proposed through a referendum, and the community voted against it. As a result, he feels that the community will not support anything that increases the tax rate. District 5 has also never considered an operational referendum, and the superintendents hopes they never do. Similar to the experience of Superintendent 4, Superintendent 5 explained that a previous superintendent had talked to the community about supporting a building project to replace a school in need of serious repairs. The community was extremely vocal in their opposition to the project, specifically in regard to the effect it would have on the tax rate. The superintendent shared that while he thinks that with the right messaging a referendum could be successful, he also shared that the vote would likely be extremely close due to the current divisions within the community.

Category Thirteen – New Fund Structure

At the time of the interviews, the two-fund structure enacted through HEA 1009 had just taken effect. Superintendent 1 shared that this new fund structure had already had an effect on their school district. He explained that in light of the ability to make transfers between the funds, they agreed to a higher increase to teacher salaries than they could have afforded otherwise if they were limited to using only state tuition support. In order to accommodate this, they chose to not replace a school bus that would have normally been replaced, and also did not transfer any funds into the rainy-day fund as they have done in the past. The superintendent acknowledged that he could see this new fund structure and ability to transfer between funds becoming a temptation for superintendents to neglect facilities in order to use those funds elsewhere.

Superintendent 2 did not think that the new fund structure and flexibility to move funding around would affect District 2 at this time, mainly because the leadership is conservative and very focused on sound financial practices. However, he also expressed concern that districts who may find themselves in financial duress would be tempted to move funding around to cover expenses rather than make cuts. Superintendent 3 felt that this change would affect how his district operates in a positive way. He shared that the ability to move funding in order to cover expenses in specific areas would help them avoid cutting programs. However, the superintendent went on to say that he sees that as a short-term solution, as eventually, the district will need to use those funds for the capital expenses that they were originally intended to cover. He also expressed skepticism regarding the intent behind this change; while he said that some superintendents seemed to be excited about this change, his experience has led him to believe that this adjustment will result in more state control rather than less.

Superintendent 4 expressed concerns regarding the new two-fund structure, specifically in regard to the temptations that will exist for some districts to over-spend out of one fund to cover expenses in the other fund. He does not think this will be an issue in his district because of how conservative he will continue to be with their finances but could see the temptation causing other districts to over-commit finances in ways that are not sustainable. Superintendent 5 shared that regardless of the new flexibility provided through this change, he will continue to follow the previous method of working the school budget. This will allow him to ensure that appropriate funds are still being used for their original purposes in capital projects, bus replacement, and transportation.

Category Fourteen – Recommended Changes

In regard to what changes, if any, they would recommend to the current school funding formula, Superintendent 1 expressed a desire to see a mechanism restored in the formula that would allow financial decreases as a result of declining enrollment to be implemented gradually, as had been done in previous funding formulas. The superintendent expressed concern for the hardship caused to districts when enrollment changes suddenly cause a significant loss of funding in a given year, with the understanding that it is not possible for districts to immediately cut that amount of money from their personnel budgets. He would also like to see the restoration of the small school grant that was in place previously, which provided additional funding for smaller districts. The superintendent also expressed interest in exploring the idea of giving additional funding to those districts with a lower assessed valuation per pupil, in an attempt to ensure that every district has ample resources to provide appropriate materials and equipment, as well as safe and acceptable facilities.

Superintendent 2 expressed a desire to see an increase in overall funding levels, as well as a restoration of local control of funding. The superintendent felt that harm has been done to students since the large funding changes in 2008, and that politics are negatively affecting the children of Indiana. Superintendent 3 also felt that a return to local control would be beneficial; specifically, an easier mechanism for local communities to support their schools through property tax support. Rather than the current divisive referendum process, the superintendent suggested that perhaps communities could provide additional financial support up to a certain percentage of their local district's education fund in any given year.

Superintendent 4 felt that a return to local control would be beneficial. He also stated that in order for teacher salaries to be increased in a meaningful way, additional funding should be put into the state formula rather than in specific grants such as the Teacher Appreciation Grant, since that grant is not guaranteed from year to year. The superintendent shared that he is not comfortable increasing base salaries based on funding that may or may not continue after a given year, and so increases to the state funding formula itself were the way to ensure that raises could happen that resulted in a permanent increase for teacher salaries. Based on the experience in his district, Superintendent 5 expressed a strong desire to see the removal of the circuit breaker tax caps. While he acknowledged that as a homeowner, he appreciates paying lower property taxes, he also re-stated the negative impact that the caps have had on District 5.

Category Fifteen – District Climate

In District 1, the superintendent shared that the board makes a strong effort to listen to the desires and needs of the teachers. He explained that in order to retain good staff members, it was important to maintain a positive working environment, especially if a school district does not have the financial resources to offer generous salaries or benefits. Superintendent 2 shared his commitment to openness and transparency with his teachers. In order to foster this environment of open communication, the superintendent developed a regular schedule of discussion meetings at both the district and building levels, to allow administrators and teachers to give each other updates and also discuss concerns that may otherwise go unnoticed. The superintendent felt that this system ensured that issues were resolved at the proper level, and also allowed both groups to stay more in tune with what the other was doing or thinking.

Superintendent 5 also talked about the importance of transparency in his daily role as a district leader. The superintendent felt that many of the veteran superintendents that he has worked with tended to be a lot more closed off and guarded, while he feels that most of those who have become superintendents in the last few years seem more comfortable being open and transparent. From his perspective, he feels that superintendents who have taken a more transparent path in their leadership style have enjoyed greater success in their role as a superintendent, especially when a referendum or other politically charged topic is on the line.

Axial Coding

Following the process of coding the interviews and sorting the data by common categories, the data were then organized through the axial coding paradigm described in chapter three. The emergent categories described in the preceding section were used as the causal conditions, which were found to influence the core category. Based on the interview data, the core category or phenomenon present in this study is a lack of sufficient funding to support Indiana's small, rural school districts. The context and intervening conditions were found to be the financial backgrounds of the districts who participated in the study, as well as the political and community climates that each district is forced to work within. The strategies that resulted from these factors were the unique ways that each superintendent has found to help their school district continue to operate successfully, in spite of the lack of sufficient funding. The consequences of those strategies were the sacrifices that were made by each school district as a result of the strategies used.

Selective Coding

As described by Creswell & Guetterman (2019), selective coding is used as the final step in the coding process to write a theory based on the interrelationships discovered through the axial coding paradigm. This theory is the result of the logical reconstruction of the data to describe the core phenomenon being observed. In the case of this study, the data being considered is the coded interview data from the five superintendents who participated in the study.

Each school district being studied has experienced its own unique financial challenges and successes during the varied tenures of their superintendents who participated in the study. However, each district leader shared that due to legislative changes to the way public schools are funded in Indiana, their districts are not receiving sufficient funding to effectively accomplish their goals without significant adjustments that have affected staffing and programming. In response, superintendents have looked for creative solutions to reduce costs, increase funding, or both, in an attempt to minimize the negative impact of these changes on their school districts and students. However, many of the solutions are temporary at best, and are still heavily dependent on variables outside of the direct control of each local school district, resulting in financial uncertainty.

Assertions

The data gathered for this study has provided insight into the lived experiences of five Indiana superintendents of small, rural school districts, as they have worked to make their schools successful during a time of financial change. Coupled with the financial and demographic data gathered, the interview responses of each superintendent have helped to illustrate some of the unique successes and challenges that have been experienced by each school district. The analysis of this data has led to the development of three assertions that should be used as a catalyst for further inquiry.

Assertion 1 – Sufficient school funding is not being provided through the Indiana school funding formula.

Following the passage of public law 146 in 2008, which removed local property tax support from Indiana school districts' general funds and shifted the responsibility of providing financial support to the general assembly, Indiana has not kept a sufficient rate of annual increase to offset inflation and rising costs for school districts. As a result, school districts around the state have been forced to either make continual cuts to staff and programs, find ways to reduce costs in other areas, or look for creative methods to increase revenue. While this situation has affected school districts with declining enrollments most significantly, even districts with growing enrollments have experienced financial concerns as well.

While each of the five school districts who participated in this study has their own unique financial history, the end results have been similar. Each superintendent shared one or more examples of ways that a lack of funding has affected their districts, and the sacrifices that had to be made as a result. These sacrifices involved cutting staff and programs, a lack of being able to recruit and retain teachers with competitive salaries, and in one extreme case, the consolidation of two school districts. Even though each district had unique circumstances that led to these sacrifices, and specific factors that influenced their decisions, the one constant in each story was a lack of sufficient financial support from the state of Indiana.

Assertion 2 – Superintendents are being forced to find creative ways to generate additional funding, cut costs, or both, in an effort to maximize funding available to provide a high-quality education to students.

As a result of the lack of sufficient funding over the past ten years, districts are being forced to look for ways to reduce costs, increase revenue, or both. Some school districts have turned to their local communities for help, asking for their taxpayers to consider approving a referendum in order to provide additional financial support for the district. In the case of the five school districts who participated in this study, none of them have pursued a referendum at this time, and have instead chosen to find other ways to address their financial shortfalls.

Looking at the five districts in this study, two of the superintendents described a series of drastic staff cuts over a series of years that helped them shore up their budgets; however, those reductions came at the cost of staff positions that affected programs and opportunities for students. Another district has been able to strategically allow additional transfer students into the district as a means to increase funding, and also has benefited from being the authorizer of a charter school. One district has stretched their dollars by utilizing government surplus opportunities to save on equipment. And one district has been forced to navigate the difficult process of consolidation between two struggling school districts, in an effort to streamline positions and save finances.

Assertion 3 – An increase to annual funding to the Indiana school funding formula is necessary to provide sufficient funding to schools.

If the cycle of cuts to programs and staff, and the need for schools to continuously look for ways to generate additional funding on their own is going to end, changes to the Indiana funding formula will be necessary. While the current funding formula has been shown to achieve its desired goal of being more equitable between school districts (Hirth & Eiler, 2012; Sugimoto, 2016), one is left to wonder if the current formula is designed to fund schools in differing geographical locations and socioeconomic situations in a sufficient manner. Regardless of how the formula is distributed, however, it is a fact that the costs of doing business will continue to rise each year for every school district. To at least maintain an equal amount of funding from one year to the next, Indiana must contribute an increase to the funding formula that is at least equal to the rate of inflation. Unfortunately, this has not happened in the years since the Indiana general assembly took over school funding, and many districts in Indiana have been forced into very difficult financial situations as a result.

Summary

This exploratory collective case study gathered financial and demographic information from five of Indiana's small, rural school districts, as well as interview responses from the superintendents in those districts. The interview data were coded and analyzed, in order to allow categories to emerge which highlighted similarities and differences between the lived experiences of each superintendent. In all, fifteen categories were identified, which were then analyzed using the axial coding paradigm. This process identified the core phenomenon as a lack of sufficient funding for Indiana's school districts, which then influenced the strategies used by each superintendent to address this phenomenon, as well as the consequences that resulted from their actions. From the theory that emerged from this research, three assertions were developed as a framework for further study and analysis:

1. Sufficient school funding is not being provided through the Indiana school funding formula.
2. Superintendents are being forced to find creative ways to generate additional funding, cut costs, or both, in an effort to maximize funding available to provide a high-quality education to students.
3. An increase to annual funding to the Indiana school funding formula is necessary to provide sufficient funding to schools.

These assertions emerged from the analysis of the responses given by the superintendents through their interviews.

CHAPTER 5. DISCUSSION AND RECOMMENDATIONS

With the passage of Public Law 146 in 2008, Indiana's legislature took over the responsibility of funding its public schools through the school funding formula. This change removed local property tax support as a funding source for school districts and replaced it with a formula that provides funding based on student enrollment numbers and a series of grants that are designed to distribute funding based on student need (Indiana Department of Education, 2018). While the funding formula has been determined to achieve the goal of being more equitable between school districts (Hirth & Eiler, 2012; Sugimoto, 2016) , concerns have arisen that the per-student funding provided through the formula has not be sufficient to support the increasing financial needs of Indiana's school districts. As a result, superintendents around the state have been using a variety of strategies to keep their districts financially viable. However, these strategies have not come without consequences, some of which have negatively impacted the affected school districts.

This exploratory collective case study used qualitative methods to explore the untold stories of five of these school districts, so that these strategies and the resulting outcomes could be better understood. The study answered the following research question:

> What have been the lived experiences of superintendents in selected small, rural school districts in Indiana regarding the current state funding formula?

Each superintendent who participated in this study had their own unique story to share as it relates to the Indiana school funding formula, and those stories were tied directly to the unique challenges and successes present in each superintendent's school district. Each district has encountered financial challenges during the tenure of these five superintendents, and each district leader developed their own strategy to overcome those challenges. While each superintendent's response to the unique financial challenges experienced by their district varied, common themes did emerge through their answers that help illuminate some of the financial realities faced by many of Indiana's rural schools.

Discussion of Findings

Through the analysis of the coded interview data, numerous categories emerged which helped identify common themes and experiences between individual school districts. The examination of these categories led to the development of three assertions, which helped to illustrate the experiences of each district, and how those shared experiences related to one another. The following sections of this chapter discuss the findings of this study as they relate to those assertions, recommendations for further research and study, and the limitations of the study.

Assertion 1 – Sufficient school funding is not being provided through the Indiana school funding formula.

As identified through the axial coding process described in chapter four, the core category or phenomenon that was identified through the interviews was that the superintendents felt that the Indiana school funding formula was providing an insufficient amount of funding to school districts. While the specific needs and areas of financial shortfall varied between each superintendent and their school district, each district leader shared one or more experiences that illustrated a time when their district experienced a significant financial shortfall during the years following the changes made to the school funding formula in 2008. Because the current funding formula is tied to student enrollment, it would seem logical that districts with declining enrollment would be more likely to experience financial shortfalls, while districts with increasing enrollment would not. Interestingly, two of the districts in the study were experiencing increases in enrollment and still experienced financial challenges, even though those shortfalls may not have been as significant as the districts with declining enrollments.

Regardless of the size of the district and its enrollment trends, all of Indiana's school districts are expected, and in some cases required, to offer a rigorous and diverse curriculum that meets the diverse needs of all students (Tierken, 2014). As described through the interviews, these financial shortfalls resulted in districts being placed in the difficult position of deciding which programs, staff, or both needed to be reduced or eliminated to help shore up the budget and avoid financial distress. While it is acknowledged that every district must sometimes make difficult budgetary decisions based on financial realities, the superintendents who participated in this study felt that some of the decisions that had to be made as a result of the current funding formula were harmful to their districts, and at times resulted in the reduction or loss of programs that were beneficial to their students. As a result, the districts were able to return to a place of financial stability, but several superintendents expressed that the cuts required to get there were not what was best for students.

A significant concern with this model of funding was raised by several superintendents, as it pertains to future planning. Under previous school funding models, districts had a reasonable idea of their future funding, which allowed for long-range planning several years in advance. Under the current model, which is tied to student enrollment and thus subject to change very quickly, districts are now only able to plan at most one year in advance with any certainty. This concern was raised throughout several questions as it greatly affects many areas of district operations, especially in terms of staff compensation and recruitment. Whereas several superintendents felt that in the past, they would have been able to offer a reasonable assurance to teachers and staff that they could expect at least modest salary increases from year to year, the current model limits their ability to do so. The superintendents shared that this uncertainty has led to more hesitance to increase base salaries during teacher contract negotiations, primarily out of fear that the funding to support an increase could easily disappear the following year if the student enrollment changes dramatically. While this conservative approach has helped protect their districts from additional financial concerns, the superintendents also acknowledged that this has led to frustration and concern from teachers who feel that they are not being adequately compensated. Many rural districts already face an uphill battle when attempting to recruit qualified teachers for their schools (Monk, 2007). Studies have suggested that student performance can be correlated to teacher pay; academic performance appears to increase in schools where teachers are paid more and decrease in schools where teachers are paid less (Clotfelter, Ladd, & Vigdor, 2010; Leigh, 2012; Ordway, 2018). In light of this, concern was expressed by several superintendents that their districts are having an increasingly difficult time recruiting and retaining high quality teachers, which is made even more challenging by the current teacher shortage in Indiana.

One variable that was not specifically addressed through the interview protocol is the extreme variation of property wealth that can exist between school districts. Table 9 illustrates the property wealth of the five districts who participated in this study.

Table 9

Property wealth comparison of study sample districts from the 2017-18 school year

	State Funding per Pupil	Certified Assessed Valuation (Range)	Certified Assessed Valuation per Pupil
District 1	$6,292	$150,000,000-$175,000,000	$171,036
District 2	$6,865	$850,000,000-$875,000,000	$202,066
District 3	$7,033	$525,000,000-$550,000,000	$454,178
District 4	$6,232	$250,000,000-$275,000,000	$254,780
District 5	$6,969	$700,000,000-$725,000,000	$265,785

Note. Data compiled from Indiana Department of Education (2018), and Indiana Gateway (2018).

As illustrated in table 9, property wealth per pupil can vary between districts significantly, which can in turn affect the amount of capital expenditures available to districts through their operations fund. In light of the ability for districts to transfer monies between the education and operations funds as allowed by HEA 1009, this reality will have an increasingly significant impact on the financial options available to school districts. Districts with a lower assessed valuation per pupil will generate less revenue towards their operations fund in their budgets, reducing or even eliminating the ability to transfer funds if needed. The issue of property wealth disparity and its effect on school funding opportunities is not unique to Indiana. In addition to the basic math of generating more revenue per mill based on a higher certified assessed valuation, studies have shown that referenda outcomes can often be predicted by the demographic composition of the school district (Lows, 1987; Lentz, 1999). This reality illustrates the fact that in many districts, the property wealth of a school district is an important factor which influences the quality of education a student may receive (Cauhorn, 2015).

Assertion 2 – Superintendents are being forced to find creative ways to generate additional funding, cut costs, or both, in an effort to maximize funding available to provide a high-quality education to students.

Due to the funding shortfalls experienced by the districts in this study, their superintendents found it necessary to explore new and creative methods to increase their revenue, reduce or eliminate expenditures, or both. The districts who participated in this study have done this through a variety of ways, including staffing and program reductions, increasing transfer student enrollment, authorizing a virtual charter school, using government surplus options to purchase equipment, and even consolidation with another school district. While each of these strategies have achieved the desired effect of shoring up the budget and avoiding financial duress, many of these strategies have also resulted in additional challenges for the districts. It would not be illogical for the reader to wonder how effective each superintendent is able to be as the instructional leader of their school corporation if an increasing amount of their time is spent looking for new and creative ways to reduce costs and/or increase revenues. This constant focus and stress regarding the financial future of their school district may have the unintended consequence of distracting Superintendents from their primary responsibility of improving the academic outcomes of students. To that point, a study by Gentry (2016) found that superintendents who had been involved in referenda campaigns to raise needed funds for their schools felt that their role had morphed into more of a politician and lobbyist than an instructional leader.

All five superintendents who participated in this study shared that their districts participated in one or more consortiums or cooperatives for services including health insurance, special education, and career and technical education programs. These arrangements allow multiple school districts to increase the return on their investment by combining their financial resources and sharing services that they would otherwise need to provide on their own. While these arrangements may be an effective option that can help control costs for school districts, the total expense often exceeds the funding provided to school districts for these services and programs, especially in the area of special education (Goodman, 2009).

Several superintendents discussed the new fund structure that went into effect during the time of this study as a result of HEA 1009, which allows Indiana's school districts to transfer funds between the education and operations funds (Indiana General Assembly, 2017). One superintendent shared that his district had already taken advantage of this new flexibility, by committing more funding than they would have in the past towards teacher contract negotiations as a result of the ability to transfer funds. While this has allowed the superintendent to give a larger salary increase to their teachers for that contract year, the superintendent did acknowledge that the transfer between funds for that purpose would likely not be sustainable long-term. It was a common understanding by each superintendent that while the flexibility allowed by this new fund structure could be useful in certain situations, it could also become a temptation that leads to more districts ending up in financial duress due to over-spending without enough reserved for other purposes. Specifically, concerns were raised that districts may be tempted to transfer increasing amounts into the education fund to provide compensation increases to teachers, but in exchange, capital needs may start to be neglected as those funds would now be used elsewhere.

In Indiana, a growing number of school districts have asked their taxpayers to consider providing additional financial support through an operational referendum (Gentry & Hirth, 2017). As of May 2019, 120 operational referenda to support local school districts had been proposed to taxpayers throughout the state, with a 68.3% pass rate (Center for Evaluation & Education Policy, 2019). While many school districts in Indiana have turned to their communities to ask for financial help through an operational referendum, it is interesting to note that none of the districts who participated in this study have pursued this as a funding option. As each superintendent discussed the possibility of a referendum with the researcher, the reasons for this were varied; however, most of the responses seemed to center of the concern that their communities simply were not likely to support a tax increase. Referenda can become extremely polarizing events within a community, and not every community has an equal chance for success (Gentry, 2016; Hiller & Spradlin, 2010). Concerns were also raised regarding the divisive nature of the referendum process, and several superintendents pointed to examples of past issues that created conflict within their community as reasons why a referendum would likely not be successful. As result, while that opportunity does exist for the school districts in this study, none of the superintendents indicated a desire to pursue that option in the near future.

Assertion 3 – An increase to annual funding to the Indiana school funding formula is necessary to provide sufficient funding to schools.

In response to the experiences shared by each superintendent who participated in this study, the assertion developed that indicated a need to increase the amount of funding being contributed by the Indiana legislature to the school funding formula. As shared by Downs (2019), the rate of funding increase by the Indiana legislature to the school funding formula has not kept pace with inflation, growing only 12.12% between January of 2010 through October of 2018. During that same time period, the consumer price index grew by 16.71%. Several superintendents expressed a desire to return to the previous school funding model that allowed for increased local control through the use of local property tax to support the education fund. However, it appeared to the researcher that the superintendents felt that this was an unlikely outcome. Due to the remote locations of some rural districts, recruiting teachers can sometimes be even more challenging than it is for districts located near more populated areas (Monk, 2007). Rural school districts are expected to still offer the same rigorous academic programs as other districts (Tierken, 2014), and thus need ample financial resources to do so. The superintendents who participated in this study expressed a need for additional funding to be placed into the funding formula so that their districts would be able to respond to the current needs of their students by recruiting and retaining the best teachers, and offering the programs needed for students to be prepared for the world of tomorrow.

During the time that this study was being conducted in the first half of 2019, a large amount of public interest developed on the issue of teacher pay. Increased pressure was felt by the Indiana legislature to address the perceived issue of low teacher compensation, which resulted in several new pieces of legislation in response. House Enrolled Act 1003 (Indiana General Assembly, 2019) seeks to limit transfers from the education fund to the operations fund to no more than 15%, under the assumption that doing so will ensure that more funding is available for teacher compensation. House Enrolled Act 1001 (Indiana General Assembly, 2019) made an adjustment to the teacher appreciation grant, giving local school districts the option to set aside up to 20% of teacher appreciation grant monies to give specifically to teachers with less than five years of experience in the classroom. And Senate Enrolled Act 390 (Indiana General Assembly, 2019) made adjustments to the teacher contract bargaining process by requiring a public hearing prior to the start of contract negotiations to allow for public input, and a public meeting to share the proposed contract with the public prior to its ratification by the school board. All of these changes appear to indicate a desire by the Indiana legislature to place additional pressure on addressing teacher pay at the local level, by forcing local school boards to address decisions regarding teacher contract negotiations more publicly than ever before.

Perhaps in response to the increased pressure felt by the Indiana legislature to support public schools and teachers, the state budget established through House Enrolled Act 1001 included a significant increase for K-12 funding of over $760 million during the 2019-2021 biennium (Indiana General Assembly, 2019). This increase in funding included $539 million towards tuition support and an increased allocation to the Teacher Appreciation Grant, as well as $150 million to pay down pension liability that will reduce future expenditures by Indiana school districts towards required retirement contributions for certified staff members. When considering the findings of this study, these budgetary increases would appear to be a positive step for Indiana's schools. However, as noted by Downs (2019), Indiana school funding has fallen significantly behind the rate of inflation over the past decade. While the increase provided in the 2019-2021 biennium budget is a step in the right direction, it still does not make up the historical shortfall that has developed over that time period. It remains to be seen if the Indiana legislature will continue to increase funding for public schools in future years, or if this is simply a short-term answer in response to the current political pressure being felt by elected officials.

Implications

As the reader considers the findings and assertions described in the previous sections of this chapter, one may wonder what is truly at stake for small, rural school districts who may face similar financial challenges as the districts who participated in this study. As described through several of the responses by the five superintendents who were interviewed, and also based on the experience of the researcher, it is often the programs that give individual schools and districts their identity that face reductions or elimination when budgets are tight. Programs and activities such as athletics, fine arts, and enrichment programs that enhance a child's education and development are often the first to face cuts, so that districts can continue to support those subjects which are required. With the rise in accountability and resulting consequences for schools who do not perform well on standardized tests required by the state, it is easy to understand why subjects measured on those tests remain a financial priority at all costs.

One topic that was not specifically explored through the interview protocol is the constant stream of unfunded mandates that seem to increase each year following the close of each legislative session. In recent years, Indiana school districts have been tasked with tracking a new, complex series of requirements that will now be required for students to graduate; testing and identifying students for dyslexia, and providing the necessary supports if they are identified; additional required trainings for teachers and staff in the areas of suicide prevention, homelessness, reporting child abuse and neglect, school safety, and testing security; and the list goes on. Each of these new mandates requires a significant amount of time and money to implement and track, yet no additional funding has been provided by the state. The end result is that Indiana's school districts are constantly being asked to do more with less, leading either to the hiring of more staff to complete these additional duties, or adding these responsibilities to the job duties of current employees.

Another topic that did not come up directly through the interviews were the implications felt in the aftermath of the Affordable Care Act, first enacted in 2010. Under the requirements established by the ACA, health insurance is now required to be offered to employees who work 30 or more hours per week. This change was significant for many school districts, who suddenly found themselves being required to offer health insurance to many employees that had not had this option before. To minimize the financial impact of this change, many school districts adjusted several positions to part-time status, ensuring that their total hours per week would no longer reach 30 hours. One position that has been affected by this change in many districts are paraprofessionals, who are frequently hired to provide additional academic support to students who often have some of the greatest needs. While this adjustment has certainly helped districts limit the financial consequences of this change, it has not come without a cost. Many districts have recently experienced difficulty hiring and retaining qualified individuals as paraprofessionals, which results in less support for students.

It is worth noting that through the discussions with the five superintendents who participated in this study, several of the cuts to programs and/or staff that were shared did not appear to be as harmful to students as others. Indeed, it can be acknowledged that there are times when programs have simply become outdated or are in need of reduction or elimination so that other programs can use those resources to expand and improve. One of the defining differences when cuts were made often seemed to be whether the superintendent was looking at programs in need of reduction, which then resulted in staff reductions, or rather the superintendent needed to reduce staff costs, which in turn reduced programs. While the end result may have been similar in terms of financial savings, the intent and rationale behind those cuts resulted in different outcomes. When cuts were made to programs because the program itself was overstaffed or simply no longer in the best interests of the school, reductions could happen without a loss of opportunities for students. However, when the cuts were being made simply as a way to eliminate staff and save money, programs may have been reduced or eliminated that were meaningful to children. While financial challenges do require difficult decisions at times, it is always unfortunate when a program that is beneficial to students faces elimination for no reason other than the need to reduce costs.

After hearing the stories of these five school districts and exploring their experiences and financial concerns, the reader may wonder what the correct amount of money would be to run a school district in Indiana. Unfortunately, that question is likely impossible to answer. Unlike many businesses, schools are based around people, both in terms of the staff they employ and the students they serve. Each school district has a unique student population and community, which can result in a wide variation of financial needs. The driving force behind a school district's financial decisions should always be focused on meeting the needs of their unique student population and ensuring that every student is receiving what he or she needs to be successful. The challenge comes in the wide range of needs that may be present, and how quickly those needs can change. At any time, a student with extremely challenging needs may enroll in a school, resulting in a dramatic increase to operational costs that cannot be ignored. This example is even more pronounced for Indiana's small, rural school districts, as they may not have a properly trained staff member or program to address those specific needs unless they already happen to have other students with those same needs. The result would be a desperate attempt to find an appropriate solution as quickly as possible, to ensure that the student is getting the services and support that he or she needs; and just as importantly for the school district, those services that are required by law. As a result, it is not uncommon for the financial needs to change within the same school district from year to year, simply based on the needs of the current student population. This reality creates an additional challenge for districts as they attempt to plan for the future; even though the financial needs of the district may drastically change in the middle of a school year, there may or may not be a corresponding increase in funding to support those changes. Consequently, the school district may be forced to make difficult financial decisions on short notice to ensure that all student needs are being met, and to ensure the financial stability of the district.

Recommendations

This study has identified the lived experiences of five rural school superintendents in Indiana, and how their school districts have been affected by the Indiana school funding formula. Further research would be beneficial to explore the experiences of other districts throughout the state, in an attempt to learn more about how other districts have operated under the current funding formula. It would be beneficial to learn more about the consequences faced by Indiana's small, rural school districts in the face of financial shortfalls due to a lack of sufficient funding. This could be done through a poll of all of Indiana's superintendents, which could then help establish a subset for further study based on the responses provided. A mixed-methods study that more closely examined the financial data of those districts in the study, along with the responses of superintendents, could lead to more understanding of this issue. By examining the challenges and successes of additional districts throughout the state, more broad assumptions may be possible if other districts identify similar challenges as the ones identified by the superintendents who participated in this study.

In consideration of one specific area, it would also be relevant for a future study to examine how the increasing costs of health care have affected school districts in Indiana, in terms of financial costs and also the recruitment and retention of staff. Health insurance is an important benefit to many individuals, and one of the fastest growing costs for employers and employees alike. In addition to the challenges described in the previous section regarding changes made to employment status of specific positions to limit required health insurance offerings, it would be insightful to also explore how districts are making decisions regarding the health care plans they offer, and how much funding is being directed towards those benefits.

With all of the recent legislative changes to Indiana's funding structure, it will also be important for further research to examine how these changes affect schools in the coming years. Several of these changes appear to be financially beneficial to Indiana's public schools; however, it will be vital for other researchers to study and assess these changes once they have been fully implemented so that their effects can be fully understood. It would be relevant for future research to examine the impact these legislative changes have had on the financial stability of school districts in future years, and how these changes have impacted student programs.

Limitations

As is the case with many qualitative studies, there are several limitations to this study. The first limitation to emerge occurred at the onset of the selection of the study sample. The pool of candidates for the study who met all of the desired qualifications was smaller than anticipated, resulting in a limited number of participants who were eligible to participate. Specifically, it was challenging to find superintendents who had worked as a superintendent for the desired length of time who also met the other requirements of the study. Initially, the aim was to find superintendents who had worked in the same district for the length of time desired; however, the researcher found that there were very few rural school superintendents in the state of Indiana who had remained in one district for that length of time. As a result, the requirements were adjusted to allow for a larger pool of participants. This discovery highlighted a separate concern not necessarily related to this study: rural school district leaders are often not staying in the same position or district for extended lengths of time. This study did not explore the reasons behind this phenomenon or the resulting consequences, but the trend of leadership being in a state of transition every few years in Indiana's rural schools is likely to not have a positive effect on local school districts.

Another limitation of this study is that the experiences shared by the study sample were very specific to each superintendent's experience in their school district. This limitation was inherent in the design of the study, as the research question explored the lived experiences of each superintendent. As a result, it cannot be assumed that these experiences would be the same for every rural school district in the state of Indiana. However, several common themes emerged through their responses, which suggests that the root cause of many of their financial challenges may be the same.

A third limitation of this study is the fact that every school district is unique by design, with so many variables present that it is impossible to compare districts in a manner that will draw absolute conclusions in terms of financial revenues or expenditures. From the varying student count numbers which can swing revenues from year to year, to local financial challenges including TIF districts and property tax caps, to programming needs based on local needs and community norms, each district has its own specific challenges that must be addressed with the financial resources provided through the funding formula. Because of this reality, there can be no one absolute correct method or financial plan that works in every district, leaving it up to each local district leader to make decisions that they feel are best for their schools and community. While this study attempted to understand the history of each district and some of the primary challenges and rationale behind financial decisions that were made by each superintendent, it is also understood that there are many other factors at play in each district that have influenced financial decisions which may not be easily identified or compared between school districts.

Conclusions

Based on the lived experiences of five Indiana public school superintendents who have spent their careers in small, rural school districts, Indiana's current school funding formula is not providing sufficient funding to meet the financial needs of its public schools. As a result, Indiana's small, rural districts are finding themselves faced with difficult financial shortfalls, resulting in the need to reduce or eliminate staff, programs, or both. With the passage of Public Law 146 in 2008, the Indiana legislature ultimately took over the responsibility of funding public schools; however, increases to the amount of dollars put into the funding formula have not kept up with inflation historically, and this cumulative lack of financial support has created financial hardships for school districts. In order to provide the financial support needed to allow Indiana's small, rural school districts to offer the best academic programming and opportunities for students, additional appropriations in the state budget for the school funding formula will be necessary.

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APPENDIX A. INDIANA SCHOOL FUNDING FORMULA

The 2017-2019 School Funding Formula in Indiana

At the time this paper was published, the funding formula for public school districts in Indiana was based on a foundational amount per student. School districts are provided with a foundational amount of funding for each student enrolled on September 15th; this student count total is referred to as average daily membership, or ADM. In fiscal year 2018, the foundation funding amount per ADM was $5,273 (Indiana Department of Education, 2018). This funding is called Basic Tuition Support. In addition to Basic Tuition Support, districts could receive additional funds in fiscal year 2018 through the following four categorical grants:

- Honors grant: $1,100 per student that earns an Academic Honors diploma, or the Core 40 diploma with Technical Honors. Students who earn one of these diplomas, and who also received support through SNAP, Foster Care Assistance, or TANF will earn the district an additional $400.
- Special Education grant: school districts receive additional funds based on the number of students coded under specific disability categories. The values are below:
    - $8,976 multiplied by the unduplicated count of students with severe disabilities.
    - $2,300 multiplied by the unduplicated count of students with mild and moderate disabilities.
    - $500 multiplied by the duplicated count of students with communication disorders.
    - $500 multiplied by the duplicated count of pupils in homebound programs.
    - $2,750 multiplied by the special education preschool education program pupil count.

- Career and Technical Education grant: school districts receive additional funds based on the number of students enrolled in career and technical education courses. The specific amounts provided for each course are defined annually by the Indiana Department of Workforce Development and are based on job demand and wage potential. For fiscal year 2018, the amount of additional funding per student enrolled in each course ranges from $150 to $500.
- Complexity grant: in fiscal year 2018, school districts receive additional funding for each enrolled student eligible for SNAP, TANF, or Foster Care Assistance, through a formula using a multiplier of $3,539. School districts are also able to receive a $128 increase for students who are English Language Learners.

APPENDIX B. SUPERINTENDENT SURVEY

Research question:

What have been the lived experiences of superintendents in selected small, rural school districts in Indiana regarding the current state funding formula?

Interview questions:

1. Demographic information:
    a. Years of experience as a superintendent
    b. Years employed at current school district
    c. Five-year trend of student enrollment of the school district
    d. Five-year trend of free/reduced lunch percentage of the school district
2. Can you give me a brief history of the financial situation of your school district?
3. Have there been any unusual or unique financial events that are specific to your district?
4. With the passage of Public Law 146, major changes happened to the school funding formula, as well as how property taxes are collected. One of those changes was the loss of property tax support for the general fund for local school districts. How has the loss of local control of this funding affected your school district?
5. How has your district been affected by the circuit breaker tax caps first enacted in 2008?
6. As an experienced superintendent of a small, rural district in Indiana, how have the changes to the school funding formula affected your district?
7. Thinking about the current funding formula, what positive changes has your district experienced?
8. Thinking again about the current funding formula, what negative changes has your district experienced?

9. What adjustments have you made to staffing and/or programs as a result of the current funding formula?
10. During your time as superintendent in your district, what specific expense increases have affected your district most significantly?
11. Have the historical changes to teacher contract negotiations had an impact financially on your district?
12. What has been the involvement of your school board when addressing financial concerns?
13. Has your school board ever considered consolidation with a neighboring school district? Why or why not?
14. Has your school district ever participated in any consortiums for special education, career and technical education, health insurance, or others? If so, how has that experience affected your district? If not, is this something your district has previously considered, or would consider in the future? Why or why not?
15. Has your school district ever pursued an operational referendum? If so, was it successful? If not, is this something that you feel your community might support?
16. How do you think the new fund structure of the Operations and Education funds, which provides new options for movement of monies between each fund, will affect your school district? Will this change how your district spends funds in the areas of transportation, bus replacement, and facilities? Why or why not?
17. Would you recommend changes to the current funding formula? If so, what changes would you recommend, and why?
18. How would your proposed changes affect your district?

APPENDIX C. EMAIL INVITATION TO PARTICIPATE

Dear Superintendents,

A doctoral candidate from Purdue University is looking for a diverse sample of Indiana Superintendents who would be willing to be interviewed for a study that considers the implications of the current funding formula on Indiana's small, rural school districts. The researcher would like to find Superintendents who have served in a district-level position for at least 10 years, in an attempt to learn from their experiences both prior to and following the changes made by Public Law 146 in 2008. Superintendents who have recently retired may also be considered for this study.

As this is a qualitative study, the researcher intends to travel to the district of each Superintendent to conduct the interviews, which will last approximately one hour. No prior preparation will be required to participate. The responses of each participant will remain anonymous, as well as the identity of each district being studied.

If you have the required experience and would have interest in participating in this study, please respond to this email. Selection of the sample will be made by the researcher and ISRSA, and those chosen will be contacted directly to schedule their interview.

Thank you for your consideration,

Indiana Small and Rural Schools Association

VITA

Daniel G. Hile

Education

PhD	Purdue University, Educational Leadership	Dec 2019
MS	Purdue University, Fort Wayne; Educational Leadership	May 2009
BME	Indiana University, Music Education Choral and Instrumental	Dec 2002

Professional Experience

Smith-Green Community Schools, Churubusco, IN — July 2017 to Present
Superintendent of Schools

Churubusco Elementary School, Churubusco, IN — July 2016 to June 2017
Elementary Principal

Churubusco Jr-Sr High School, Churubusco, IN — Aug. 2013 to June 2016
Assistant Principal

Northridge High School, Middlebury, IN — July 2011 to July 2013
Assistant Principal

Churubusco Jr-Sr High School, Churubusco, IN — Aug. 2003 to July 2011
Director of Choirs

Presentations

Indiana School Boards Association 2019
Indiana Small and Rural Schools Association Conference 2019
Forecast5 Indiana State Conference 2019
"Using Data Analytics to Tell Your Referendum Story"
Forecast5 National Conference 2018
"Pitching Your Idea to the Studio"

Honors and Awards

Project of the Year – Forecast5 2018