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Factors that affect the outcome of a general fund referendum in Indiana

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FACTORS THAT AFFECT THE OUTCOME OF A GENERAL FUND REFERENDUM IN INDIANA

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ABSTRACT

Sargent, Andrew C., Ph.D., Purdue University, December 2014. Factors that Affect the Outcome of a General Fund Referendum in Indiana. Major Professor: Marilyn A. Hirth.

School finance elections in Indiana were a relatively rare occurrence prior to a series of new legislation enacted in 2008 that, through the imposition of property tax caps statewide, resulted in sweeping reforms to education funding. These new laws coupled with a national recession resulted in many school districts not having the necessary financial resources to maintain programming and personnel consistent with their needs. With this in mind, many of these districts turned to the General Fund referendum as a mechanism to raise more revenue for their districts through an increase in local property taxes as decided by the voters through an election process.

This research study sought to examine the factors that influence the outcome of General Fund referenda in Indiana. The quantitative study examined factors from two distinct areas: demographic variables and campaign strategies. The demographic variables studied for the forty-two school districts were socioeconomic status, student achievement, and community setting type. Additionally, campaign strategies were examined and statistically analyzed for

their use and their relative importance as reported by those superintendents who had led their districts through the General Fund referendum process.

Analysis of the demographic factors revealed that suburban districts were most likely to have a successful referendum as compared to other community setting types. Additionally, high achieving districts and non-low income districts saw greater success at the polls than their counterpart districts. As for the individual campaign strategies employed by districts, using paid promotional information, using existing school-based organizations in the campaign, involving community leaders in key campaign roles, and distributing information through social media were all shown to have a statistically significant impact on the outcome of referenda. Further analysis of the campaign strategies revealed two that were deemed statistically significant in their mean importance rating when comparing successful and unsuccessful districts. Focusing communication efforts on the high quality of educational programs found within a district and emphasizing the above average student achievement within a district were strategies that were both shown to be rated significantly more important in those districts that won their referendum as compared to those districts that failed.

In the end, a truly successful referendum campaign likely reflects a balance of the science of winning school finance elections and the art of convincing the citizens of a community that a wise investment in the future comes in the form of a properly-funded education for all children.

CHAPTER 1

INTRODUCTION TO THE STUDY

Public schools in the State of Indiana have traditionally been funded through one of the most stable forms of revenue, local property taxes. In 2008, the State Legislature enacted laws that shifted the bulk of the funding for schools from local control to state control. Through this legislation, the State of Indiana agreed to fund schools based on a complex formula that sends money to schools that is collected through statewide income, sales, and a few other assorted taxes and removed the responsibility from local school districts to collect these monies through property taxes. The legislature left in place the ability for local schools to use funds collected from local property taxes to support much smaller pieces of a school district's budget such as transportation operating expenses, bus replacement, and the capital projects fund which covers building maintenance and repair. Unfortunately, as the state began to take over the control and funding for each school district's general fund (which usually encompasses about 90% of the total budget for a school district) the national economy and statewide economy began to suffer from a recession. This resulted in less revenue for the state and translated into less revenue for local school districts' operating budgets.

Many local school districts began to suffer from severe financial crises as the support money that was now coming from the state was less than what they had been

used to in the old system and even less because of the downturn in the economy. Even more disappointing was the fact the locally produced funding sources coming in from property taxes were placed in protected funds (transportation, capital projects, bus replacement) that could not be used for everyday operating expenses of the school district. Without the ability to use local property tax funds to support the general fund, districts were forced to turn to a means of generating local revenue to support the operating budget through a mechanism created by the Indiana State legislature called a School Tax Levy Referendum, or more commonly known as a General Fund referendum (I.C. 20-46-1-8). This process requires the school district to ask the community to approve an increase in local property taxes so that the money can be used for the operating expenses of the school district through a vote on a referendum question.

The purpose of this research study is to examine the relationship of community and school district variables such as socioeconomic status, level of student achievement, and district setting (urban, suburban, rural) to the outcome of a General Fund referendum in those Indiana school districts that have attempted a General Fund referendum. Additionally, this study will examine the relationship between campaign strategies, as determined by superintendents' perceptions, and the success or failure of a General Fund referendum.

Statement of the Problem

School districts began organizing local referendum campaigns hoping to be able to convince voters that the increase in local property taxes was necessary in order to keep the school district operating and providing the quality of education to which the

community had grown accustomed. As Dr. Wally Bourke states in Hiller and Spradlin (2011), "school districts in Indiana are forced to seek referenda in order to retain teachers, programs, and important services to families" (p. 5). A wide variety of social, community, and educational factors influenced the voters in the decision to pass or defeat local General Fund referenda. Since the law was passed creating the General Fund referendum mechanism for generating additional operating funds for school districts, forty-two school districts in Indiana have attempted the General Fund referendum. Of those forty-two districts, only about half were successful in their referendum campaign. With only a roughly fifty percent success rate for referendum passage, many districts were left with few other choices but to cut programs, teachers, and services for students in order to maintain a balanced budget. Given the relative difficulty associated with passing a General Fund referendum and the significant impact such a success or a defeat could have on the school district and the students that it serves, a close examination of factors that influence the outcome of a General Fund referendum is warranted.

Significance of the Study

Education is not only a basic and fundamental right of young people but it also makes for a more informed and productive citizenry that benefits all of society. In order to provide an education, tax dollars must be collected and then redistributed to the local school districts to pay for the goods and services that are necessary to efficiently run a school system. Each of the fifty States has its own unique policies and rules that govern the funding practices for schools and school districts. In Indiana, those rules recently changed leaving local school districts, in some cases, at the mercy of a referendum vote

in order to decide if there would be sufficient monies to maintain the current levels of education through a fully funded operating budget. A review of the current research reveals a significant gap in the understanding of the specific factors that may influence the outcome of a referendum that is specifically geared toward the operating budget for a school district as opposed to the repair of buildings or construction of new buildings – commonly referred to as "bond" referenda (Carter, 1995; Erickson, 2011; Godown, 2010; Holt, Wendt, & Smith, 2006; Lifto & Seneden, 2004).

The purpose of this study is to examine a variety of factors that have influenced a referendum vote that ultimately directs the financial future of a school district as it pertains to the operational funds for the district. The study will first examine the characteristics of the community and the school district for those school systems attempting a General Fund referendum. This examination will include a description of several factors associated with the communities or school districts as they relate to success or failure of a General Fund referendum. Additionally, predictive statistics will be presented relating these community and school district factors and the outcome of a General Fund referendum.

In addition to the examination of general community and school district factors, this study will examine the individual factors associated with referendum campaigns in local school districts that influenced the outcome of General Fund referendum. The superintendent is the ultimate leader for any school district and must advise the school board and lead the community through the referendum process in an effort to make more operating funds available to the district to carry out the educational mission. In order to better understand the characteristics of a referendum campaign and how they influence

the outcome of a General Fund referendum, superintendents' perceptions of these factors will be examined closely so that others can learn from the successes and failures of previous attempts at the General Fund referendum.

Research Questions

This quantitative study of the factors that influence the outcome of General Fund referenda in Indiana seeks to answer the following critical questions:

1. What are the factors that have an impact on the outcome of school finance elections?
2. What are the general characteristics of Indiana school districts that have been successful in a General Fund referendum with respect to school setting, socioeconomic status of the school community, and student achievement level of the district?
3. What are the general characteristics of Indiana school districts that have failed in a General Fund referendum with respect to school setting, socioeconomic status of the school community, and student achievement level of the district?
4. Is there a statistically significant predictive relationship between the demographic factors of a school district and the success or failure of a General Fund referendum?
5. Is there a statistically significant predictive relationship between superintendents' perceptions of referendum campaign factors and the success or failure of a General Fund referendum?

Hypotheses

As a result of the research questions, the following hypotheses will be tested:

$H0_1$: There is no statistically significant predictive relationship between socioeconomic status of the school community and the success or failure of a General Fund referendum in Indiana.

$H0_2$: There is no statistically significant predictive relationship between the school district setting and the success or failure of a General Fund referendum in Indiana.

$H0_3$: There is no statistically significant predictive relationship between the level of student achievement within a school district and the success or failure of a General Fund referendum in Indiana.

$H0_4$: There is no statistically significant predictive relationship between superintendents' perceptions of campaigning through the use of a specific message of a high quality education provided by the school district and the success or failure of a General Fund referendum.

$H0_5$: There is no statistically significant predictive relationship between superintendents' perceptions of campaigning through the use of a specific message of the impact of a potential failure of a referendum and the overall outcome of a General Fund referendum.

$H0_6$: There is no statistically significant predictive relationship between superintendents' perceptions of establishing and effectively utilizing a campaign committee and the success or failure of a General Fund referendum.

$H0_7$: There is no statistically significant predictive relationship between superintendents' perceptions of hiring a consultant and the success or failure of a General Fund referendum.

$H0_8$: There is no statistically significant predictive relationship between superintendents' perceptions of the role of the school board and the success or failure of a General Fund referendum.

$H0_9$: There is no statistically significant predictive relationship between superintendents' perceptions of a communications and public relations plan and the success or failure of a General Fund referendum.

$H0_{10}$: There is no statistically significant predictive relationship between superintendents' perceptions of tax implications for citizens and the success or failure of a General Fund referendum.

$H0_{11}$: There is no statistically significant predictive relationship between superintendents' perceptions of the use of social media and the success or failure of a General Fund referendum.

$H0_{12}$: There is no statistically significant predictive relationship between superintendents' perceptions of community participation and the success or failure of a General Fund referendum.

$H0_{13}$: There is no statistically significant predictive relationship between superintendents' perceptions of targeting specific voter groups and the success or failure of a General Fund referendum.

$H0_{14}$: There is no statistically significant predictive relationship between superintendents' perceptions of having a strategic plan in place and the success or failure of a General Fund referendum.

Definition of Terms

General Fund referendum: In Indiana, a school tax levy referendum that seeks to raise additional tax dollars through local property taxes that are outside the constitutional tax caps to support the operating budget for the school district is commonly referred to as a General Fund referendum.

School district setting: A description of the school community size and type as determined by the U.S. department of the Census locale coding structure. Four possible codes exist for school districts and they are town, urban, rural, and suburban.

Socioeconomic status of a school district: The Small Area Income and Poverty Estimates (SAIPE) program from the U.S. Census Bureau will be used to determine whether a school district is considered low income or not low income. Low income will be defined according to the rules for Title I funding from the U.S. Department of Education that sets the threshold at 40% of students coming from low income families.

Student achievement level of a school district: Overall letter grades determined by the Indiana Department of Education formula for A-F grading will be used to determine one of five levels for student achievement based on the letter grades for the district including A, B, C, D, and F letter grades. Districts with grades of "A" or "B" will be considered as high student achievement, those districts with grades of "C" will be considered as average student achievement, and those districts with grades of "D" or "F" will be considered as low student achievement districts.

Conclusion

This study seeks to examine the factors that have influenced the outcome of a General Fund referendum in those forty-two Indiana districts that have attempted such an Election Day request of voters. The General Fund referendum has become a necessary practice for some districts that suffered from cuts in state funding amounts. These reductions left districts scrambling to raise revenue outside the tax caps in order to support the operating budget of the school district. The factors influencing the General Fund referenda will be studied on two fronts. First, the basic demographic factors of the school district communities will be studied as they relate to the success or failure of a General Fund referendum. Second, specific campaign factors – measured from the perceptions of superintendents – will be scrutinized to determine if there is a predictive relationship in the use or non-use of these factors and success in a General Fund referendum. Generalized themes and statistically significant results may help future school districts and school district leaders develop campaign strategies that put them in a better position to win a General Fund referendum with their community of voters. Ultimately, every General Fund referendum is unique and there is certainly no modus operandi in K-12 education that will always be successful in school finance elections; successful campaigns will be those that master the balance of science and art that surrounds school finance elections (Lifto & Senden, 2004). This research seeks to contribute to the science that provides a foundation for the art that will come in the form of educational leadership resulting in success at the polls and future educational opportunity for students.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The Indiana State Constitution, in Article 8 section 1, establishes the language by which the General Assembly must provide a general and uniform system of public schools that do not charge tuition and which are equally open to all (Indiana Const. art. 8, § 1). In order to provide this benefit to the young people of Indiana, financial resources must be spent on everything from pencils, computers, bricks and mortar to salaries and benefits of the thousands of employees that work for school districts across Indiana. According to Michael, Spradlin, and Carson (2009), prior to 2009, a significant percentage of the revenue that supported the General Fund for local school districts was collected from local property taxes, a traditionally stable form of revenue. However, the Indiana General Assembly passed Public Law 146 in 2008 that shifted the source of the funding of the General Fund for local school districts from local property taxes to the state's revenue collection through sales and income taxes (Michael, Spradlin, & Carson, 2009).

In addition to shifting the funding source for the General Fund, Public Law 146 also established referenda for both school construction projects as well as General Fund levies as a way to provide additional school funding beyond what the state provides

(Michael, Spradlin, & Carson, 2009). Any public school district seeking to raise additional tax dollars to support the operating budget for the school district can now only do so through the General Fund referenda process which allows school districts to raise local property taxes beyond the constitutionally established tax caps for a maximum period of seven years, should the referendum win a majority vote (Michael, Spradlin, & Carson, 2009).

The shift in funding sources for public schools in 2008, from local property taxes to the State of Indiana through income and sales taxes, coupled with a sluggish economy resulted in local school districts having less revenue than expected to support their programs. In 2009, the then Governor of Indiana, Mitch Daniels, announced he would be cutting the financial support slated for K-12 education by at least $300 million (Bradner, 2009). With school districts held at the mercy of state revenues which were underperforming, many districts were forced to turn to a General Fund referendum in order to attempt to raise additional tax dollars to support the operating budget for the local schools. As Dr. Wally Bourke states in Hiller and Spradlin (2011), "school districts in Indiana are forced to seek referenda in order to retain teachers, programs, and important services to families" (p. 5). Since the law establishing the General Fund referendum in 2008, a total of 42 school districts have attempted to raise local property taxes to support the operating budgets of the school district by placing the yes or no question on the ballot and allowing voters to decide (Department of Local Government Finance, 2013). Of these school districts that took the question to voters through a General Fund referendum, only 51% were successful, allowing districts to tax local

residents beyond the tax caps in order to generate more revenue to operate the schools. A multitude of factors affect how voters will answer the question of whether to raise taxes to support local schools when the General Fund referendum question appears on the ballot on election day. This review of the related literature will closely examine many of the factors that influence the outcome of school finance elections.

General Communication Processes and Procedures

One of the most prevalent factors in school finance elections noted in the literature surrounds the concept of communication to the community. As Erickson (2011) states, "providing communications to voters is critical for a successful referendum" (p. 17). Blanchfield (1998) adds to that when he states, "The major difference between people accepting referendums or rejecting them is whether or not they are fully informed" (p. 20). The first aspect of overall communications to be explored is the general communication process and procedures that deliver the message of the referendum to the constituents. One type of communication from the district to the voters may take the form of written communication distributed in hard copy or through technology. The literature developed for the finance campaign must be generated months before the election and distributed in conjunction with other activities throughout the campaign that support the cause ("Ohio Voters," 2005). In addition to having hard copy documents available to the public in the form of newsletters, brochures, yard signs, advertisements, and news releases, Erickson (2011) also recommends placing information on the district website that includes the planning process for the referendum, timelines, tax impacts, and other pertinent financial information. Moreover, Erickson

(2011) identifies social media as a form of communication that has a place in referendum campaigns.

Beyond the written communications that come from the district or the campaign committees, there is also a need to make presentations to a variety of local community groups in an effort to generate support, refute the opposition, and answer questions (Erickson, 2011; Hiller & Spradlin, 2011). It is incumbent upon the district and the campaign committee to communicate a message to the voters that demonstrates how the passage of the referendum will provide community benefits that are derived from providing a quality education to the students (Carter, 1995). According to Superintendent Dr. Teresa A. Eineman of Crown Point Community Schools in Indiana, during a period of just eight months of referendum campaigning, over 400 community meetings took place to get the message of the referendum campaign out to the constituents (Hiller & Spradlin, 2011). Erickson (2011) also notes that some of this communication in the form of meeting presentations and verbal communication of support for the referendum needs to be led by non-educators in the form of citizens that are active on the campaign committee and that should include active public support from the school board members. Utilizing non-educators as lead presenters can help the community members see that even those who do not have a direct financial stake in the form of a salary or a higher salary due to the outcome of the referendum still support the measure. Terrence Blanchfield (1998) summarizes this point well when he states:

> Have the committee members – true stakeholders for the desired initiative – present information at hearings or presentations. A community will accept the words and rationale from its neighbors much better than if it comes from the administration. (p. 20)

These supporters help to show the rest of the community that the benefits are for the students which transfers to the community at large, not merely the employees that work for the district.

Developing the written communications (both hard copy and digital) and combining them with the variety of strategies used in verbal communications creates a need for a clear structure for organizing and managing the communications process. This need should be filled by the development of a communications plan for supporting the referendum. Superintendent Eineman from Crown Point Community Schools in Indiana indicated that during the planning phase of the referendum process when she conferred with colleagues across the state, she learned the value and importance of a communications plan that connected the community to the message of the school corporation (Hiller & Spradlin, 2011). In Hiller and Spradlin (2010), Dr. Libbie Conner, Superintendent of Noblesville Schools in Indiana stated that "it is essential to have a good communication plan and timeline before you begin the campaign" (p. 7). In the past, schools in most communities were well-supported by community leaders and they were a popular way for these leaders to gain more supporters and maintain those that were already supportive (Humprhrey & Weber, 1985). However, schools today do not always garner that type of unconditional support and especially when the district is looking to increase tax contributions from local citizens in order to support the schools. With this in mind, school districts should pay more attention to a comprehensive public relations plan (Humphrey & Weber, 1985) that will likely provide needed structure to a communications plan when the time comes to go before the voters to ask for additional

tax dollars in the form of a General Fund referendum. As Carter (1995) clearly states, "the public expects clarity, consistency, brevity and sincerity" (p. 291). These essential components should be strongly considered when developing the overall communications plan for the district in their effort to support a General Fund referendum. To coordinate all of the efforts of the communications team that is responsible for developing and implementing the communications plan, Erickson (2011) recommends establishing a central media coordinator to oversee the media and communications function of the referendum campaign. Lifto and Senden (2008) provide a good reminder that one of the most influential aspects of a school finance election campaign is the good feeling within the community that is "created by clear, concise information about the district's needs and its tax proposal" (p. 44).

The general communications processes and procedures are an essential component to the success or failure of a school finance election. Written communication in the form of newsletters, brochures, yard signs, print articles, web site articles and information, and social media postings help to get the message of the district to the voters in the community. In addition to traditional and digital forms of written communication, presentations to a variety of community and civic groups is also an integral factor to getting the message of the referendum to the voters and also can provide them with the opportunity to ask questions and voice their concerns. As a systematic approach to generating support for school finance elections, the school district should develop a comprehensive communications plan well in advance of the decision to take a referendum question to the voters. Designating a media coordinator may be in the best

interest of the school district in an effort to have a central point of contact as well as to provide some oversight as to the implementation of the overall communications plan. Ultimately, the tax-payers will decide the outcome of the referendum, but a well-developed communications plan will be critical in order to coordinate the multitude of communications that will expose voters to the issues and factors upon which they will base a decision for their vote.

Communicate a Specific Message – High Quality Education

Through an established communications plan, the general processes and procedures can be put into place for developing, organizing, and disseminating communications to the general public and the voters for a school finance election. The content of these communications will likely vary across districts based on a variety of specific demographic or regional factors that pertain to towns, cities, or regions. However, the literature does reveal some common themes regarding specific messages communicated to voters during school finance elections.

The first theme identified involves communicating the message to the public of the quality of the educational programming within a district. Citizens who are willing to support the schools with an increase in tax dollars that are coming directly from their pockets, are more likely to do so when they perceive a high quality output from the schools (Cataldo & Holm, 1983). The task for the school district is to make sure that the message is being clearly communicated to the public regarding the quality of the

educational programming. Quality educational outputs may be identified as outstanding student academic achievement, various school district honors or awards, athletic successes, or other state and national recognitions (Hiller & Spradlin, 2011). The specific message of quality educational outputs that is communicated to the community may be a single measure or a combination of measures but that message must be one that truly resonates with voters. Holt, Wendt, and Smith (2006) note that the importance of the message the school district projects to the voters is critical to the outcome of a school finance election. For some school districts, emphasizing a long-standing tradition of educational success may be a message that provides voters with a good reason to support a referendum and for other districts, recognition of *improvement* may be a message that is communicated to voters. In Toledo, Ohio the urban school district decided on a strategy of emphasizing the higher academic achievement attained by students as a message to voters during a referendum campaign ("Ohio Voters," 2005). The district was able to pass a tax levy through a voter referendum with 64% of the voters agreeing to the additional tax support with the success largely attributed to the district's improved academic performance ("Ohio Voters," 2005). In other districts, spending time to communicate the message of high achievement and high quality education may not be enough to sway voters to support a referendum. Superintendent Wylie Sirk, from North Adams Community Schools in Indiana, emphasized the high quality of education offered in his district along with high levels of academic achievement reached by the students of the district, yet a General Fund referendum was defeated with a no vote of 85% as compared to the yes vote at only 15% (Hiller & Spradlin, 2011).

Communicating a Specific Message – Impact of an Unsuccessful Referendum

Reminding the community of the quality education that is being delivered to the students of the school district can elicit a sense of pride among the public. This pride in the school system may be overshadowed by the prospect of paying higher taxes which could result in the need to clearly and carefully describe the impact on the school community if the referendum is not passed by the voters. A well-planned referendum campaign begins with the district administration sharing with the employees of the district the financial status of the school district and how that can be improved with the passage of a referendum and how the district may struggle should an operating referendum fail. In Toledo, Ohio, a school levy referendum passed with 64% of the voters supporting the measure and one of the key components to the referendum campaign was getting the teachers to understand the impact upon employees should the levy measure fail on Election Day ("Ohio Voters," 2005).

Dr. Teresa Eineman outlined the process she led her school district through in the passage of a General Fund referendum in 2011. She began the process by sharing with the 900 faculty and staff the hardships the district was facing financially due to a sluggish economy and the property tax reforms in Indiana (Hiller & Spradlin, 2011). In Hiller and Spradlin (2011), Dr. Eineman stated, "Communication within our school corporation created the foundation for expanding that message later" (p. 4). The expansion of the specific message in Crown Point took the form of having experts in finance and policy from outside the district explain the mounting pressure on the General Fund to the public at large. These outside-the-district experts provided revenue and expense projections for

the next seven years, revealing major problems if the district wished to continue to offer the same educational programming with similar staff that it was currently using. These experts also provided the impact of several different tax rates that could be employed on the property taxpayers (Hiller & Spradlin, 2011). Ensuring communication about financial struggles begins within the school district organization provides a firm foundation for the expansion of the message to the voting public and helps to build grass-roots support for a referendum from those who may be most directly impacted through continued gainful employment, or the lack thereof.

A wide-range of factors likely influence the specific messages school districts attempt to disseminate through their referendum campaigns. For some districts, simply reminding the general public of the great accomplishments of the district and the high achievement of the students it serves is enough to gain support for any referendum proposal. For other districts however, it may be necessary to fully and clearly indicate the negative impact that would result from the failure of a referendum campaign. As Carter (1995) discusses, oftentimes voters go to the polls not for the purpose of voting "for" an issue or a person, but rather voting "against" the alternative. In the case of school finance elections, voting "against" the alternative is a vote for fully funding the proposal. With that voting mentality in mind, school districts need to communicate a specific message to voters that they can easily rally behind voting against, such as layoffs of teachers and other staff, reduction in programs, or increases in class size. Voters must be shown that there is actual value in voting against *not* passing a referendum (Carter, 1995). This becomes the responsibility of the school district and its communication plan

to ensure that on election day, voters can enter the voting booth with a clear picture of what they want to vote against (teacher cuts, elimination of programs, and larger class sizes) resulting in an affirmative vote for the referendum. Convincing voters to increase taxes to support the school district may be a tougher sell than convincing voters the alternative to higher taxes and a failed referendum is wholly undesirable.

Preparing voters by communicating the impact on the school community if a referendum is not passed must be carefully balanced with an equally clear message about the benefits to the education of the students and the community at large of passing a referendum. Resorting simply to scare tactics will not serve the referendum campaign well and will instead irritate voters, giving them a solid reason to vote down the measure (Carter, 1995). Steve Klink, political strategist, underscores this point by advising districts to be very careful not to communicate a message that appears as a "threat" to the voters as they may vote down a referendum just to see if the district will really carry through on the statements (Hiller & Spradlin, 2011). Balancing the need to educate the public on the possibilities should a referendum fail with the knowledge that too much of a negative message may appear as "threats" to the citizens demands a well-developed communications plan, a solid sense of the attitude of the community, and artistic delivery of the message to voters.

Establish a Campaign Committee

Creating a communications plan, identifying media coordinators, and developing specific messages to be disseminated to the public establishes a solid foundation for any referendum campaign. Building on that solid foundation, school districts must look to establish campaign committees to serve as vehicles for getting the message to the voters and for providing needed feedback from the public. A campaign committee is established by selecting a diverse group of individuals who share the common goal of passing a school finance referendum and are willing to assist in the process of making a case to the community for the additional tax revenue. According to Holt, Wendt, and Smith (2006), it is important to make sure that the committee is made up of a diverse section of the community, including those well-respected and trusted citizens as well as ordinary people who could help convey the message to voters. Terrence Blanchfield (1998) goes so far to suggest that in addition to the traditional members of such committees such as parents, business leaders, and school employees, districts should consider students and anti-tax members as potential campaign committee members. Erickson (2011) considers the traditional members of the campaign committee and also suggests senior citizens, government officials, and community leaders as important members to consider when formulating a campaign committee. Erickson (2011) further notes that, "Early in the process, identify citizens who can become strong proponents for the referendum" (p. 15). Clearly, it is necessary to organize a campaign committee that is representative of the community at large and those identified members need to be friends of the referendum and be willing to support the measure as a needed increase in taxes for

the school district. Taking the time to make sure the campaign committee represents all aspects of the school district community is essential to being able to have a voice in all the neighborhoods and within all the different sub-cultures of the community and thus provide access to communicate the message to voters.

For some school finance elections, the established committees have a more narrow focus than others. For example, one district formed a Political Action Committee in preparation for the campaign that had a central purpose of identifying potential supporters and making sure they voted (Hiller & Spradlin, 2011). In some cases, task forces or committees are established prior to the decision being made to seek a referendum from the voters. These task forces or committees may be involved in intense study of the financial situation within a district to help provide advice to the superintendent and school board regarding the need for or the ability to seek additional tax dollars from the public to support the operating budget of a school district. One such case was identified by Hiller and Spradlin (2011) where a school district in Indiana appointed a General Fund Referendum Committee that was representative of both school district employees and community citizens. This group then conducted a four-month study of the need for and prospects for a General Fund referendum in their community. Ultimately, they did make a recommendation to the school board that placing a referendum question on the ballot was in the best interest of the school district.

Hire a Consultant

Organizing and managing all the important aspects of running a referendum campaign can be an all-consuming process. Couple the added pressure of a referendum campaign with the ordinary responsibilities of running a school district and one could easily see why hiring a consultant to assist with the campaign would be a wise use of district resources. Erickson (2011) suggests "hiring a consultant to guide the process" (p. 15) of a referendum campaign and further details how the consultant will help to facilitate the process of planning as well as implementation of an effective referendum campaign. Superintendent Dr. Rocky Killion from West Lafayette School Corporation in Indiana cited the decision by his district to hire a political strategist as a contributing factor to the success of their General Fund referendum (Hiller & Spradlin, 2010). Similarly, Dr. Teresa Eineman from Crown Point Schools in Indiana decided to hire a consultant who was a political strategist as she perceived the need for help in managing what she determined was a political campaign to win the voters over in favor of a General Fund referendum (Hiller & Spradlin, 2011).

A Targeted Campaign

School districts that are engaged in a referendum campaign will need to highlight the accomplishments of the district and emphasize the quality of education that is delivered by the programming in the district. Districts should also ensure that their referendum campaign is presented with a positive message and has an overall feel of

optimism (Hiller & Spradlin, 2011). This outward message to all of the voting public is but one piece of a targeted marketing campaign designed to truly convince voters to vote yes on Election Day in support of the referendum. Steve Klink, political strategist, details how the district must also find ways to collect data on voters to establish a database of likely supporters of the referendum (Hiller & Spradlin, 2011). Klink then suggests that this group of likely supporters gets its own targeted marketing campaign, tailored to the specific aspects of the issue that will give them enough information to both support the referendum and show up on Election Day to vote (Hiller & Spradlin, 2011).

Analyze the Results of a Referendum

Going into Election Day, school officials are hopeful that their referendum will pass with the voters of the community but there is always the uneasy question of what will happen if the referendum is unsuccessful. Nearly half of the school districts in Indiana that attempted General Fund referenda since 2009 have failed in their attempt. Some districts have then decided to run additional campaigns and go back to the voters with another referendum question asking for additional tax dollars after the minimum one-year time requirement between referendum questions has been satisfied. Lifto and Senden (2004) believe that school districts should spend time immediately following a school finance election determining what worked and what did not work in the referendum campaign. Lifto and Senden (2004) state, "Most school districts squander a key strategic opportunity when they fail to collect, analyze and archive valuable data after school finance elections – equally important following successful or losing campaigns"

(p. 31). In some cases, spending time after a defeat in a referendum may provide guidance to a district should they choose to embark on another referendum campaign. Conversely, spending time reviewing the campaign and ensuing data after a successful referendum campaign may benefit school districts that need to plan for a construction bond referendum in the future or for the possibility that after the number of years agreed to by the voters for the General Fund referendum run out, the district may need to consider another referendum campaign. Either way, despite the exhaustion that must be felt by many following a referendum campaign, it may be worth the time to collect and analyze the data from the campaign in order to be prepared for future school finance elections.

Resistance to Higher Taxes

Many of the factors that lead to the success or failure of a school referendum can be controlled and managed by the school district, its communication plan, and its campaign organization. However, there are some aspects of voter behavior that are difficult to control for the school district such as a general resistance to paying higher taxes. Certainly the economic conditions during the time of a school finance election may influence how some voters feel about paying higher taxes, but research and literature that spans the decades provided evidence that a general resistance to taxes may exist for voters and is an issue that may need to be contended with for school districts seeking a referendum. Humphrey and Weber (1985) reported that one of the top two reasons that voters reject a school referendum is because “the public feels taxes are already too high

and would oppose an increase for any reason" (p. 30). Cataldo and Holm (1983) note that "there is considerable evidence of widespread citizen resistance to higher taxes" (p. 622) and further discuss tax revolts from the 1970's that included opposition to additional school taxes.

The faltering economy of our nation and many states in recent years has also provided added momentum to the resistance to higher taxes in school finance elections. The August of 2005 tax levy referendum in Cleveland, Ohio was defeated soundly by the voters and one of the main reasons for the defeat as provided by voters was a resistance to paying even higher property taxes (Gewertz, 2005). Even more recently, Charlie Kyte, executive director of the Minnesota Association of School Administrators, commented that many of the referenda failures in Minnesota were more due to citizens being concerned about higher tax bills and less about being displeased with the schools (Toporek, 2010). In Indiana, former superintendent of MSD Franklin Township, Dr. Wally Bourke, admits that the size of the tax rate increase proposed in his district during an unsuccessful 2011 General Fund referendum was so large that it was too difficult for the citizens of Franklin Township to support (Hiller & Spradlin, 2011). While economic conditions and general voter resistance to paying increased taxes may not be within the direct control of a school district or a school district's referendum campaign, they can be key factors that are worthy of consideration by the school district as they prepare a timeline for a referendum election and as they prepare a message to voters who may be particularly sensitive to paying higher taxes. Several strategies have been utilized by districts in Indiana that recognized a sensitivity by their communities to higher tax rates.

Several school districts have placed a General Fund referendum on the ballot that asks for a tax rate increase for fewer years than the maximum amount permitted by law which is seven. Other districts have actually placed two referendum questions on the ballot during the same election with different tax rates listed in each referendum, essentially giving voters the option to pick between a lower or a higher tax rate should they decide to vote in the affirmative for the operating fund referendum.

Organized Opposition

No referendum question placed on a ballot for voters to decide would ever win with 100% of the vote. There will always be those citizens who, for whatever reason they choose, will be opposed to a school referendum. For school districts and campaign committees, it is important to keep a finger on the pulse of the opposition to decide how to react to or be proactive against the concerns and issues raised by the opposition. In some cases, organized opposition can be a significant factor in the demise of school referenda. Humphrey and Weber (1985) report that after a resistance to higher taxes, the second most significant reason that referendum campaigns fail is that there is organized and influential opposition to the referendum. In the 2005 defeat of the referendum tax levy in Cleveland, Ohio, the organized opposition printed signs that read, “Don’t Reward Failure” as a way to persuade voters to reject the $45 million levy sought by the district (Gewertz, 2005). Opponents of the Cleveland levy sighted academic, financial, and student-discipline reasons for not supporting the levy, contending they were not getting what they were paying for in terms of education for the students (Gewertz, 2005).

Acknowledging that the opposition to a school funding referendum may organize into a formidable opponent is important because a plan for counteracting those who are attempting to defeat the referendum should be developed. Lifto and Senden (2008) provide a brief list of suggestions for managing organized opposition. They suggest:

1. Make sure the campaign sticks to the campaign and the communications plan.
2. Respond to items the opposition introduces in a way that keeps the primary message in front of voters. Consider the 80/20 rule: 80 percent of your responses should present the primary argument for the tax proposal while only 20 percent of your responses should be used to address the opposition's arguments.
3. Do not be afraid to dismiss the opposition as individuals who are opposed to all tax proposals. Never assume that the voters of the district know that what at first appears to be new ideas introduced by the opposition might actually be long-standing anti-tax or antigovernment arguments.
4. Remember that all of your actions are part of a political campaign and the goal is to win on Election Day – ensure all your actions are planned and executed to move the proposal one step closer to that goal. (p. 45)

In a difficult financial climate, it is almost a given that organized opposition to a school tax referendum will develop. It is the responsibility of the school district and the campaign committee to plan and prepare for managing this organized opposition.

Role of the School Board

As the established governing body for the school district, the School Board plays a significant and influential role in the referendum process, development and campaign. According to Cataldo and Holm (1983), attitudes toward specific government officials may affect voting by local citizens. Considering the ultimate financial responsibility for a school district is placed in the School Board, a significant factor in the position of voters on school tax issues is the trust and confidence they have in the local School Board and their ability to manage resources appropriately (Cataldo & Holm, 1983). In his dissertation on school finance elections in New Jersey, Michael Godown (2010) found that the factor of trust and credibility was important in successfully passing school bond referenda and that trust in the superintendent and the School Board is the most influential.

In addition to a general notion of trust and credibility in the School Board as an influential factor in school finance elections, there is also evidence that having unanimous board support is important to the outcome of referenda (Holt, Wendt, & Smith, 2006; Erickson, 2011). Dr. Henry Boer (2001) states, "successful referendum plans begin with a strongly unified board" (p. 7). Boer (2001) goes on to point out that serious problems can arise in a referendum campaign if even one board member is not fully supportive of the referendum. Having unanimous board support is critical so that the opposition cannot make the argument that the referendum should be voted down because not even all of the School Board members can agree that there is a need to raise taxes to support the referendum initiative (Holt, Wendt, & Smith, 2006). Initiating a successful school tax referendum takes careful, long-range planning and should be

undertaken by a trusted and credible school board and when the entire school board can unanimously support the proposal to increase tax contributions from local citizens.

Conclusion

The many and varied factors that contribute to the success or failure of a school finance election create a complex web of issues that must be negotiated by school districts and their leaders when a decision is made to take a referendum question to the voters. However, despite the numerous school finance elections that have taken place across our nation, no two are exactly alike because of the unique issues and characteristics that exist in every State, town, community, and school district. Lifto and Senden (2004) state:

> Research and practice have yet to yield a modus operandi in K-12 education that always produces winners on school bond and tax measures. Whether it's bricks and mortar or requests for more operating money, each election type and context are unique with no guarantee that a set of campaign strategies – even if successful in one district – won't fail in your community. (p. 30)

In Indiana, public policy changes led to an increase in the use of the General Fund referendum which allows school districts to ask voters for additional operating funds for a finite number of years and these additional funds are not subject to the constitutional limits on tax caps. A number of Indiana school districts have attempted the General Fund

referendum as a way to obtain more operating revenue for their school district and some have been met with great success, and others have been met with a difficult defeat. Finally, should a school district and its leaders decide to explore the concept of a General Fund referendum, it is essential to look critically at how the research treats the many factors that could potentially influence the outcome of such a referendum.

In many states, school finance elections are common ways for local districts to seek additional tax funds from constituents in support of new construction projects, building renovation projects, and general operating budgets. There is some research that examines school finance elections from a general perspective and some more detailed research that specifically examines school construction bond referenda – though mostly from the qualitative approach - that has been referenced in this review of the literature. However, there is very limited current empirical research in the literature that examines the referendum process specifically targeting operating or general fund-type finance elections. This review of the literature exposes that void in the research and supports the need for empirical research on referenda that attempt to raise additional tax dollars from local property tax payers that is specifically designated for the operating budget, or general fund, of the school district.

This review of the literature has provided a rich list of factors that impact school finance elections and several categories of strategies can be generated by examining themes found across the many factors detailed in the literature. One of the purposes of this study is to determine whether these category groups – as measured by superintendents' perceptions – have a predictive relationship with the outcome of a

General Fund referendum. Additionally, this study will utilize a set of standardized independent variables that measure demographic factors to determine whether they have a predictive relationship with the success or failure of a General Fund referendum. Therefore, factors that impact the referendum process have been identified through the literature and they will be studied carefully as to their predictive value relative to the outcome of referendum votes. The results of this study will provide school district leaders with research-based empirical evidence that may help guide their decision-making as they move forward in a quest to collect additional tax dollars from their constituents in support of local schools.

CHAPTER 3
METHODOLOGY

The purpose of this research was to study and describe those Indiana school districts that have attempted a General Fund referendum and determine the predictive relationship of community and school district variables to the outcome of the referendum. This chapter describes, in detail, the methodology that was used to complete this study. The research design is presented first, followed by a definition of the population and a rich description of the sample utilized. Following an explanation of the instrumentation used and an outline of the general research procedures, the chapter concludes with a discussion of the strategies that were deployed to analyze the collected data.

Research Design

This study focused on the Indiana school districts that have attempted a General Fund referendum since the law changed in 2008 increasing the number of such questions placed on the ballot for voters to decide whether or not to raise local property taxes to support the operating budgets of local school districts. In addition to an examination of the communities that attempted General Fund referenda, this study also examined the perceptions superintendents had on the relative importance of a variety of campaign

strategies to the success or failure of a General Fund referendum in their school district. This study addressed the following research questions:

1. What are the factors that have an impact on the outcome of school finance elections?

2. What are the general characteristics of Indiana school districts that have been successful in a General Fund referendum with respect to school setting, socioeconomic status of the school community, and student achievement level of the district?

3. What are the general characteristics of Indiana school districts that have failed in a General Fund referendum with respect to school setting, socioeconomic status of the school community, and student achievement level of the district?

4. Is there a statistically significant predictive relationship between the demographic factors of a school district and the success or failure of a General Fund referendum?

5. Is there a statistically significant predictive relationship between superintendents' perceptions of referendum campaign factors and the success or failure of a General Fund referendum?

Hypotheses

As a result of the research questions, the following hypotheses will be tested:

$H0_1$: There is no statistically significant predictive relationship between socioeconomic status of the school community and the success or failure of a General Fund referendum in Indiana.

$H0_2$: There is no statistically significant predictive relationship between the school district setting and the success or failure of a General Fund referendum in Indiana.

$H0_3$: There is no statistically significant predictive relationship between the level of student achievement within a school district and the success or failure of a General Fund referendum in Indiana.

$H0_4$: There is no statistically significant predictive relationship between superintendents' perceptions of campaigning through the use of a specific message of a high quality education provided by the school district and the success or failure of a General Fund referendum.

$H0_5$: There is no statistically significant predictive relationship between superintendents' perceptions of campaigning through the use of a specific message of the impact of a potential failure of a referendum and the overall outcome of a General Fund referendum.

$H0_6$: There is no statistically significant predictive relationship between superintendents' perceptions of establishing and effectively utilizing a campaign committee and the success or failure of a General Fund referendum.

$H0_7$: There is no statistically significant predictive relationship between superintendents' perceptions of hiring a consultant and the success or failure of a General Fund referendum.

$H0_8$: There is no statistically significant predictive relationship between superintendents' perceptions of the role of the school board and the success or failure of a General Fund referendum.

$H0_9$: There is no statistically significant predictive relationship between superintendents' perceptions of a communications and public relations plan and the success or failure of a General Fund referendum.

$H0_{10}$: There is no statistically significant predictive relationship between superintendents' perceptions of tax implications for citizens and the success or failure of a General Fund referendum.

$H0_{11}$: There is no statistically significant predictive relationship between superintendents' perceptions of the use of social media and the success or failure of a General Fund referendum.

$H0_{12}$: There is no statistically significant predictive relationship between superintendents' perceptions of community participation and the success or failure of a General Fund referendum.

$H0_{13}$: There is no statistically significant predictive relationship between superintendents' perceptions of targeting specific voter groups and the success or failure of a General Fund referendum.

$H0_{14}$: There is no statistically significant predictive relationship between superintendents' perceptions of having a strategic plan in place and the success or failure of a General Fund referendum.

Setting: Indiana School Districts Attempting General Fund Referenda

Since the Indiana State law changed in 2008 which resulted in an increase in districts seeking referenda in order to support the operating budget for the local school district through an increase in property taxes over a period of years, forty-two school districts from across the state have attempted General Fund referenda. Of those forty-two districts, three of them have attempted multiple General Fund referenda. Mount Vernon Community School Corporation attempted two General Fund referenda, one in 2010 and one in 2012 with both failing. Zionsville Community Schools attempted and failed in a General Fund referendum in 2010 but came back to the voters in 2012 and was successful in the referendum. Franklin Township Community School Corporation has attempted a General Fund referendum multiple times, failing in all of their attempts. In 2009, Franklin Township attempted a General Fund referendum and actually placed two different General Fund referendum questions on one ballot on Election Day in November of 2009, giving voters an opportunity to cast a vote on both a $0.33 and $0.17 per $100 of assessed valuation question. Both of these referenda questions failed in 2009 and Franklin Township again tried a General Fund referendum in 2011 which was defeated by the voters. Considering the uniqueness of the Franklin Township case from 2009, this study treated those two referenda questions from the November 2009 ballot as one

referendum campaign as the district prepared for the vote by using a novel strategy of placing two questions on the ballot during the same election – this has only been used as a campaign strategy by Franklin Township and it was unsuccessful. Thus, this study included two distinct referendum campaigns for Franklin Township (2009 and 2011) as well as two distinct referendum campaigns for Zionsville (2010 and 2012) and two distinct referendum campaigns for Mount Vernon Community Schools (2010 and 2012). These six plus an additional thirty-nine separate school districts comprise a total of forty-five referendum campaigns (generated by forty-two school districts) that provided the research basis for this study.

Description of the School Districts

The following section will attempt to provide some description and context for the Indiana school districts that have attempted a General Fund referendum since the change in state law that gave rise to an increase in the number of referenda of this type. Three demographic factors were selected to provide additional standardized description and comparison of the school districts involved: community setting, socioeconomic status of the school district, and level of student achievement within the school district. Again, three districts (Franklin Township, Mount Vernon, and Zionsville) appear two times each in the data set for description because they each ran multiple General Fund referendum campaigns (see Appendix A).

Community Setting

The first demographic factor studied for the school districts was community setting. To define community setting, Urban-Centric Locale Codes, developed in 2006 by the U.S. Census Bureau with support from the National Center for Education Statistics, were used. The four basic categories for the Urban-Centric Locale Codes are defined as "City", "Town", "Suburb", and "Rural". The locale codes for all school districts across the United States can be retrieved from the National Center for Education Statistics (NCES). After retrieving the data from the NCES on the Indiana school districts that were the basis for this study (see Appendix A), it is possible to demonstrate some comparisons of those districts that were successful versus those districts that failed in their General Fund referendum attempts. The majority of the referendum attempts came from districts classified as rural (17 out of 45). The second highest number of referenda came from suburban districts (16 out of 45) with an additional 7 coming from city districts and only a total of 5 coming from districts labeled as "town". With this breakdown in mind, the greatest chance at a successful referendum came from the "suburb" classification with a 69% passage rate (11 of 16 suburban districts) and the least successful classification came from the "town" designation with only 20% passing (1 of 5 town districts). The rural districts fared somewhat better than the town districts, but were still well under fifty percent for a passing rate. For the rural districts, only 41% (7 of 17) were able to pass a referendum, with 59% of rural districts failing the referendum process. Slightly above the fifty percent mark were the city districts at 57% passing (4 of 7) and 43% failing.

Socioeconomic Status

The second demographic factor examined was that of socioeconomic status for students in the school district. Data from the Indiana Department of Education detailing the free/reduced lunch population for individual school districts was used to determine low-income status for each school district and 2012 data was used as the 2013 data has not yet been released at the time of this writing. For the purposes of this study, any district that has a greater than 40% free/reduced lunch population of students will constitute "low-income" status for the district. Any district that has a student population of less than 40% receiving free/reduced lunches will constitute the "non-low income" group. Table 1 provides a list of the districts and their respective status for this variable. For comparative purposes, there were 23 districts that passed a referendum with seven coming from the low-income category and sixteen coming from the non-low income category. On the other hand, 22 districts failed a General Fund referendum and of those failures, nine were low-income districts as compared to 13 coming from non-low income districts. Thus, of the 45 total referenda, 36% (16 of 45) came from districts labeled as low-income based on their student population receiving free/reduced lunch. The remaining 64% of districts that attempted a referendum came from non-low income districts (see Table 1). To break down this variable even further, 44% (7 of 16) of low income districts that attempted a referendum were successful with the remaining 56% (9 of 16) of low-income districts having a failed result in their referendum campaigns. On the other hand, 55% (16 of 29) districts that were non-low income were able to pass their referendum with only 45% (13 of 29) of non-low income districts failing their

referendum. In summary, nearly two-thirds of the Indiana districts that have attempted a General Fund referendum so far have come from non-low income districts and well over half of those districts were successful as compared to less than half of the low-income districts finding success at the polls for a General Fund referendum.

Table 1 – Socioeconomic classification of districts

Low-income districts	Non-low income districts	
16	29	Total Referenda = 45

Level of Student Achievement

The final demographic variable to be addressed is the level of achievement for students within the district. The Indiana Department of Education (IDOE) provides an overall school district letter grade (A-F) based on a combination of factors which mostly includes the level of achievement for the students in the district. The 2012 A-F data form IDOE (see Table 1) was used for the purposes of this research as the appeals process for the 2013 data is not yet complete, making that data not fully reliable at the time of this writing. Those districts that had achieved a letter grade of "A" or "B" were labeled as high achievement districts, those with a letter grade of "C" were labeled as average achievement districts, and those labeled with a "D" or an "F" were labeled as low achievement districts. For this data set, 67% of the districts that attempted a General Fund referendum were from high achievement districts with only 18% coming from average achievement districts and 16% coming from low achievement districts. For the

high achievement districts, 57% passed their referenda with 43% failing. The average achievement districts saw an exact split in success rate with 50% passing the referenda and 50% failing. The final grouping labeled low achievement districts revealed only a 29% passage rate with an overall failure rate of 71% for those low achievement districts that had attempted a General Fund referendum. In summary, the overwhelming majority of districts that attempt a General Fund referendum come from the high achievement status and those districts with the high achievement label have a better than 50% chance of passing their referendum as compared to lower rates of passage for the districts with average or low achievement status.

Superintendents

The superintendent is the ultimate educational leader for any school district. One of the purposes of this study is to determine the predictive relationship that exists between referendum campaign strategies and the outcome of a referendum. To test this predictive relationship, a survey was administered to the forty-two Indiana superintendents that were leading their respective school districts when the General Fund referendum was attempted. These superintendents were surveyed using an electronically delivered survey that required only ten minutes or less to complete and submit back to the research electronically. These superintendents represent all the districts that have attempted a General Fund referendum in Indiana since the law changed in 2008 resulting in a significant increase in the number of General Fund referenda attempted. Three superintendents required careful handling of the survey data. These superintendents all

were leaders of school districts that attempted multiple referenda in different years, with some failing in one year and succeeding in another. Thus, each superintendent (Zionsville, Mt. Vernon, and Franklin Township) was asked to complete two separate surveys based on the year of the referendum campaign. For example, Dr. Scott Robison, Superintendent of Zionsville Community Schools, was asked to complete one survey about campaign strategies from the fall of 2010 referendum failure in Zionsville and a second survey about campaign strategies from the 2010 referendum which was successful in Zionsville. Similar treatment was given to Dr. Wally Bourke, former Superintendent of Franklin Township Schools and Dr. Bill Riggs, Superintendent of Mt. Vernon Community School Corporation. Superintendents participated on a fully voluntary basis, though it was hoped to get a large percentage of these leaders to participate as their perceptions of campaign factors could lead to important conclusions that could substantially assist other school district leaders that venture into the General Fund referenda process in their respective districts.

Instrument

The instrument used to collect the data from the superintendents relative to their perceptions of how a variety of campaign factors contribute to the success or failure of a General Fund referendum was a survey that was originally developed by Dr. Brian Kraus (2009) and adapted slightly to fit the specific nature of this study. This 32-item written survey (see Appendix C) collected numeric information based on the responses provided by the participating superintendents. The formatting of the survey was originally created

by Dr. Kraus (2009) and first asks superintendents to identify whether or not their district used the particular campaign strategy detailed in the question. The superintendents are then asked how important the strategy was, or would have been, in influencing the results of the General Fund referendum, based on their professional and/or personal perceptions (Kraus, 2009). The vast majority of the items on the survey were adapted slightly from Kraus (2009) to fit an operating referendum rather than a bond referendum, but the content integrity of the questions remained the same. A few items from the original Kraus (2009) survey were not applicable to the General Fund referenda process in Indiana, and were thus not included for this study. A couple of additional questions were added by the researcher to fully complete coverage of the key themes that emerged from a review of the literature on school finance elections. The written survey ultimately had 32 items that were combined and organized into eleven basic grouping variables of campaign strategies based on the professional literature and were as follows:

1. campaigning through the use of a specific message of a high quality education provided by the school district
2. campaigning through the use of a specific message of the impact of a potential failure of a referendum
3. establishing and effectively utilizing a campaign committee
4. hiring a consultant
5. the role of the school board
6. a comprehensive communications and public relations plan

7. tax implications for citizens
8. use of social media
9. community participation
10. targeting specific voter groups
11. having a strategic plan in place prior to the referendum

These eleven categories provide the basis for the grouping variables that were used during the statistical analysis portion of this research study. One open-ended question was included at the end of the survey to allow responding superintendents to include additional information they deem important to the referendum in their district that may not have been specifically addressed in the survey. This open response portion was used to provide some context to the study for the researcher, assist with generalizability, and perhaps lead to suggestions for future inquiry and research into the topic of school finance elections.

Instrument Validity and Reliability

The original survey created by Dr. Kraus (2009) was vetted for validity through a process of jurying that was conducted to determine content validity. Kraus utilized a panel of six experts ("jury of administrators") in the field of educational administration to review the items on the survey and help establish validity (2009). To further validate the items for this adapted survey, additional educational administrators and experts in Indiana

will review the questions and provide feedback relative to the applicability of the items as well as to suggest items that should be considered for addition to the survey. Reliability of the instrument was also established by Kraus (2009) through the use of statistical measures. Kraus (2009) first ran a principal component analysis of the survey items which resulted in eleven different factors that appeared to be related. Next, he measured internal consistency through the use of Cronbach's alpha which resulted in a range of coefficient alphas for the eleven factors from 0.844 to 0.496 (Kraus, 2009).

Procedures

The survey instrument that was used to collect data from the superintendents was provided to all superintendents in an electronic version for convenience and efficiency as Superintendents are very busy professionals and their time must be respected. An email was used to communicate with the superintendents about the research study and its significance to the General Fund referendum process in Indiana and school finance elections in general. Included in the brief email was a link to the electronic survey which they were able to complete and submit fully and securely online. Electronic results were then available for analysis by the researcher.

Data Analysis

This study used a quantitative design and the purpose was both descriptive and predictive in nature. The descriptive components included an organized presentation of

three independent variables related to community and school district demographics and how they compare between districts that had been successful or unsuccessful in the General Fund referendum process. Data were collected through governmental web sites, both Federal web sites (NCES) and State web sites (IDOE) and presented earlier in this chapter using some simple mathematical calculations to group like school districts (e.g. percentage of low-income districts that had been successful in the General Fund referendum).

The first set of data that describes the community setting for each of the forty-two school districts (rural, town, suburban, or city) combined with the results of each referenda for the forty-two districts were analyzed using a Chi-Square test of goodness of fit. The community setting variable is the independent variable and is categorical, but nominal in nature because there is no intrinsic order to the four types of community settings. The outcome of the referenda (pass or fail) is the dependent variable and is categorical as well as dichotomous. A contingency table was developed for this data and the Chi-Square analysis administered to determine whether the two variables are independent of each other or not.

The predictive aspects of the study were presented from two different perspectives. First, two of the three community and school district demographic factors (student achievement and socioeconomic status) were statistically analyzed using multiple logistic regression to determine whether there is a statistically significant predictive relationship between the two independent variables (SES and level of student achievement) and the outcome variable (passing or failing a General Fund referendum).

The regression model being used was logistic because the dependent variable is categorical and dichotomous, thus only having two possible values: passing a referendum or failing a referendum. Second, the superintendents' perceptions of various referendum campaign strategies were collected through the survey instrument. Individual item level statistics were calculated from the data collected by the participating superintendents. Item-level statistics included mean, median, standard deviation and range for each item. Additionally, coefficient alpha were calculated for the overall survey with a close examination of item-total correlations in order to determine the contribution of each item to both the full survey as well as well as within the groupings. The individual items on the survey were grouped according to the previously established eleven grouping variables. Multiple logistic regression was again used to determine whether there was a statistically significant predictive relationship between the eleven independent grouping variables and the outcome variable (passing or failing a General Fund referendum). Beta weights were calculated for all of the predictors (six category variables) and then analyzed for significance. Those predictors that were determined to be significant were then be further analyzed through the use of the Student's t-test on each individual survey item that comprises the grouping variable. The t-test allowed the researcher to further examine individual components of the categories to determine whether certain individual items within the grouping variable contributed more significantly to the overall significance of the predictor variable.

Conclusion

This quantitative study set out to provide both description as well as predictive application to the variety of factors that influence the outcome of a General Fund referendum in Indiana. The data set was limited to the forty-two districts that have attempted the forty-five General Fund referenda in Indiana since the law passed in 2008 allowing the question of raising local property taxes to be placed on the ballot for Election Day. The descriptive features of the study presented the quantitative data associated with three demographic and school district variables as they relate to the passage or failure of a General Fund referendum. The predictive features of the study used multiple logistic regression to determine whether there is a statistically significant predictive relationship between these various predictor variables and the outcome of a General Fund referendum. Data on the importance of certain referendum campaign strategies was collected through a survey of the perceptions of those superintendents that attempted a General Fund referendum. Both the descriptive and predictive aspects of this study may assist future educational leaders that have a need to attempt a General Fund referendum as they plan and implement campaign strategies in their local school community.

CHAPTER 4

REPORT OF DATA AND DATA ANALYSIS

This study investigated the factors that impact school finance elections in Indiana. The specific type of school finance election that was examined in this study is commonly known as the General Fund referendum and had just recently come to the forefront of education funding in Indiana after State laws were changed and enacted in 2008 that greatly changed the landscape of public school funding for Indiana districts. As is the case with any public election, there are a multitude of factors that will influence the outcome of the election and school finance elections are no exception. The data presented in this chapter includes both demographic data from communities and school districts that have participated in a General Fund referendum as well as data from a survey of superintendents who have run General Fund referenda for their respective school districts. The data analysis found within this chapter will focus on the significance of the use of certain campaign strategies as well as the predictive relationship between various factors and the outcome of a General Fund referendum.

Descriptive Analysis – Demographic Data

The demographic data collected and analyzed came from forty-two Indiana school districts that have run General Fund referendum campaigns since 2009. While this data comes from forty-two districts, three districts ran multiple General Fund referendum campaigns during that time span and have thus been included twice each to account for the multiple referenda. Thus, the total sample size for the data analyzed in this section totals forty-five school districts. Data were collected that is publicly available and pertained specifically to three distinct demographic factors found within school district communities: community setting, student achievement, and socioeconomic status. Community setting was described as being rural, town, suburb, or city as coded by the federal government. Student achievement was described as being high, average, or low depending on the letter grade assigned to the district by the Indiana Department of Education. Socioeconomic status was described as being either low income or non-low income as determined by the percentage of students in a district receiving free or reduced priced meals.

The data pertaining to the community setting can be found below in Table 2 and the data indicates the greatest number of referenda were attempted by districts classified as rural (17 out of 45) with the second highest number stemming from districts classified as suburban (16 out of 45). Seven districts were classified as city districts with the final group of five districts listed under the classification of "town". To further break down this data, it is valuable to examine the success or failure of the General Fund referendum relative to the community setting classification. Data analysis of the forty-five districts

reveals that the greatest chance of passing a referendum came from the "suburban" classification with a 69% passage rate (11 out of 16) and the lowest chance of passing a General Fund referendum came from the "town" classification with only 20% (1 out of 5) passing. The rural districts also came in under a 50% passage rate with an overall of only 41% (7 out of 17) passing the referendum. The city districts fared somewhat better with an overall passing rate of 57% (4 out of 7).

Table 2

Community Setting Data and Referendum Outcome

		Pass-Fail		Total
		Fail	Pass	
Type of setting	rural	10	7	17
	town	4	1	5
	suburban	5	11	16
	city	3	4	7
Total		22	23	45

Further analysis of the student achievement data indicates that 67% of the districts that attempted a General Fund referendum were districts with high student achievement (district letter grade of and "A" or a "B"). Those districts assigned a letter grade of "C" by the IDOE accounted for only 18% of the referenda campaigns and the final 16% of

referenda campaigns came from districts marked as below average student achievement ("D" or "F" letter grade). When combining student achievement with passing or failing a General Fund referendum, 57% of the high achieving districts were successful with an even 50% of the average districts showing success at the polls. The below average achievement group showed the poorest performance on election day with only 29% of the referenda passing. Thus, most of the districts that have attempted the General Fund referenda have been high achieving districts and they enjoy a better than fifty percent passing rate with the average and below average achieving districts struggling to pass the referenda less than half the time.

Socioeconomic status was the third demographic variable examined and for the purposes of this study, placed districts into one of two categories: low income or non-low income. Of the forty-five districts attempting referenda, 64% of districts were classified as non-low income and the other 36% were classified as low income districts. When combined with the outcome variable of passing or failing the General Fund referendum, data analysis indicates that 55% of the non-low income districts that attempted a referendum were successful as compared to only 44% of low income districts achieving success in the referendum. Thus, nearly two-thirds of the districts attempting this type of referendum were classified as non-low income districts and well over half of them were successful while the low income districts attempting a referendum were less able to achieve a successful result less than half the time.

Statistical Analysis – Demographic Data

The three types of demographic data (community setting, student achievement, and socioeconomic status) were all further analyzed as to their relative influence on the outcome (passage or failure) of a General Fund referendum through the use of statistical testing. The independent variable of "community setting" was analyzed using the Chi Square test of goodness of fit because the variable while categorical, is nominal in nature due to the lack of intrinsic order in the data labels of town, city, rural, and suburban. The Chi Square analysis will attempt to determine whether the two variables (community setting and outcome of referendum) are independent of each other, based on the data. The other two types of demographic data (student achievement and socioeconomic status) were analyzed together in a regression model in an attempt to determine if there is a statistically predictive relationship between the two independent variables (student achievement and socioeconomic status) and the dependent variable (outcome of a General Fund referendum). The regression model used for this set of demographic variable and the 45 sets of data was a multiple logistic regression.

Community Setting

As previously stated, the community setting classifications of city, suburb, town, and rural are all Urban-Centric Locale Codes that are assigned to school districts across the nation by the U.S. Census Bureau. These four coding labels do not have an intrinsic order, and thus provide the basis for an independent variable that is nominal in nature. A

Chi Square analysis with a contingency table (results shown below in Table 3) was used to test the following null hypothesis for community setting:

> Ho: The outcome of a General Fund referendum election is independent of the school district's community setting.

The results from the Chi Square test of the forty-five district settings and corresponding referenda outcomes failed to indicate a significant result, $\chi^2(3) = 4.702$, $p = 0.195$. An alpha level of 0.05 was adopted for this statistical test as well as all subsequent statistical tests. The p-value obtained in this Chi Square test was greater than the established threshold and thus the null hypothesis will not be rejected in this case. Therefore, based on this data, there is insufficient evidence to claim that community setting and the outcome of a General Fund referendum are related.

Student Achievement and Socioeconomic Status

The two independent variables of student achievement and socioeconomic status were combined into a multiple logistic regression analysis to determine whether there is a statistically significant predictive relationship between these two independent variables and the dependent variable which is the outcome of a General Fund referendum (pass or fail). The data from all 45 school districts were included in the logistic regression analysis completed using the statistical software package SPSS version 21.

Logistic regression allows researchers to predict the odds of certain events occurring given the influence of independent variables. In the case of this analysis, the dependent

variable was encoded so that passing the General Fund referendum would be the successful outcome event and thus the odds that are calculated from the regression results are predicting the odds of passing a General Fund referendum after taking into account the two independent variables.

One of the independent variables (student achievement) in this multiple logistic regression analysis was a categorical variable with more than two categories and thus, SPSS created constant dummy variables to establish baseline comparison categories. Table 3 from the SPSS output shows this established category coding structure for this analysis of forty-five school districts.

Table 3

Categorical Variables Codings for Referendum Data

		Frequency	Parameter coding	
			(1)	(2)
School Letter grade	low	7	1.000	.000
	average	8	.000	1.000
	high	30	.000	.000

SPSS provides several tables in the output for a logistic regression analysis listed under the heading of “Block 0: Beginning Block” and these tables show values for a model that intentionally excludes the predictor variables, in this case the two independent

variables of socioeconomic status and student achievement. This output is sometimes referred to as a null model. Table 4 below from the SPSS output in Block 0 shows the overall predictive ability of a model without the inclusion of the predictor variables. The table indicates the value for correctly predicting the outcome of General Fund referendum without the independent variables is 51.1% of the time. After adding the independent variables into the model, the new model will be compared to this original model indicating an overall percentage of 51.1%.

Table 4

Classification Table from Block 0 – Referendum Data

	Observed		Predicted		
			Pass-Fail		Percentage Correct
			Fail	Pass	
Step 0	Pass-Fail	Fail	0	22	.0
		Pass	0	23	100.0
	Overall Percentage				51.1

After including the independent variables in the regression model, SPSS provides output in the form of tables listed under the general heading “Block 1: Method = Enter”. The table below labeled Table 5 shows the overall predictive ability of the model that includes the two independent variables of socioeconomic status and student achievement.

The model shows that 57.8% of the time the outcome of a General Fund referendum can be predicted when the two explanatory variables of the districts socioeconomic status and overall student achievement are included.

Table 5

Classification Table from Block 1 – Referendum Data

	Observed		Predicted		
			Pass-Fail		Percentage Correct
			Fail	Pass	
Step 1	Pass-Fail	Fail	7	15	31.8
		Pass	4	19	82.6
	Overall Percentage				57.8

Also stemming from the Block 1 data from SPSS, the results of a Hosmer-Lemeshow Test provide some data relative to the overall fit of the model, once the predictor variables are added into the model. The Hosmer-Lemeshow Test is one measure of goodness of fit and was used for this purpose in the logistic regression model. The results of the Hosmer-Lemeshow test indicate an overall significance level of $p = 1.000$ which is greater than an established threshold of 0.05. This Hosmer-Lemeshow goodness of fit test statistic has a significance larger than 0.05 which provides one indication of a well-fitting model. The contingency table for the Hosmer-Lemeshow Test also shows that the regression model fits the data well as shown, for example, in the

column for passing the referendum where in the fourth row of predictive probabilities the observed value for districts passing the referendum was 14 and the expected passing rate using the regression model and according to the Hosmer-Lemeshow Test is listed as 14.005 districts. Table 6 below shows the results of the Hosmer-Lemeshow Test showing a significance value and Table 7 below shows the contingency table for the Hosmer-Lemeshow Test. It should be noted that the Hosmer-Lemeshow Test is quite sensitive to sample size and the sample size for this research is fairly low, a point that will be discussed further in the next chapter.

Table 6

Hosmer and Lemeshow Test
Referendum Data

Step	Chi-square	df	Sig.
1	.009	3	1.000

Table 7

Contingency Table for Hosmer and Lemeshow Test of Referendum Data

		Pass-Fail = Fail		Pass-Fail = Pass		Total
		Observed	Expected	Observed	Expected	
Step 1	1	5	5.000	2	2.000	7
	2	2	2.055	2	1.945	4
	3	2	1.945	2	2.055	4
	4	11	10.945	14	14.055	25
	5	2	2.055	3	2.945	5

The final table to be included from the Block 1 output from the SPSS logistic regression model is Table 8 included below. This table includes values for significance levels as well as values that can be used for describing the odds ratios for passing a General Fund referendum when the influence of socioeconomic status and student achievement are controlled for in the model.

Table 8

Variables in the Equation for Referendum Data

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	ses	-.110	.814	.018	1	.893	.896	.182	4.413
	achieve			1.255	2	.534			
	achieve(1)	-1.276	1.139	1.255	1	.263	.279	.030	2.603
	achieve(2)	-.305	.843	.131	1	.718	.737	.141	3.847
	Constant	.360	.773	.217	1	.642	1.433		

The first row of data in Table 8 refers to the independent variable of socioeconomic status and its influence on the outcome of a General Fund referendum. The significance level for this explanatory variable is well above the standard established threshold of 0.05 with a p-value of p=0.893. This indicates that the null hypothesis will fail to be rejected for the independent variable of socioeconomic status. The B coefficient is listed as -0.110 which is close to zero and the odds ratio value is listed as 0.896 which is close to one, both being additional indicators of the failure to reject the null hypothesis and reason to conclude that for this data set, socioeconomic status is not a particularly good predictor of the outcome of a General Fund referendum.

The next three rows provide information about the influence of the second independent variable, student achievement, on the outcome of a General Fund referendum. Again, the significance level for this explanatory variable is above the acceptable threshold with a p-value of p=0.534 and thus the null hypothesis will fail to be rejected for the independent variable of student achievement. Acknowledging there is a lack of statistical significance as indicated by the p-value, the B coefficient values are not as close to zero and the odds ratios are not as close to one as was the case for the socioeconomic status variable, thus the odds ratios for student achievement will be reported. In Table 8, the third row variable is listed as achieve(1) and is the coding for the low achieving school districts as the independent variable. While the significance level is p=0.263 for this variable and thus the null hypothesis is failed to be rejected, the odds ratio listed in the Exp(B) column has a value of 0.279 which indicates the odds of a low achieving district passing a referendum are 0.279 times the odds of a district with high student achievement. Therefore, the odds of passing a referendum by districts in the low achievement group are lower than the odds of passing a referendum in the comparison variable category, which in this case is coded as "achieve" and corresponds to the high achieving districts in this study.

Additionally, the odds for the low achieving districts to pass a referendum are not only lower than the high achieving districts, but they are even lower than the odds of an average achieving district passing a referendum. The fourth row variable listed as achieve(2) represents the average achieving districts. The significance level for this variable is p=0.718 which is greater than our acceptable threshold and thus the null

hypothesis would fail to be rejected. However, the odds ratio for the average achieving districts has a listed value of 0.737 which means that an average achieving district has odds of passing a General Fund referendum that are 0.737 times the odds of a district with high student achievement. Thus, the odds of passing a referendum by average achieving districts are higher than for the lowest achieving districts, but still remain lower than the odds of the high achieving districts passing a General Fund referendum.

Statistical Analysis – Superintendent Survey Data

The second data set analyzed for this research came from a survey of all superintendents that had run a General Fund referendum campaign since 2008. The survey was format was originally developed by Dr. Brian Kraus (2009) for use in his study surrounding construction bond referenda in Kansas. The survey questions were adapted to fit the research questions posed for this study of the General Fund referendum in Indiana. The survey was sent to superintendents in April of 2014, thus any General Fund referendum elections that occurred after April of 2014 are not included as part of this study. While a total of forty-five school districts ran General Fund referendum campaigns during the aforementioned time frame, the survey was only sent to thirty-nine superintendents due to several extenuating circumstances. Four superintendents ran multiple referendum campaigns (Dr. Robison-Zionsville, Dr. Burke-Franklin Township, Dr. Riggs-Mount Vernon, and Dr. Smith-Southwest Allen County & Hamilton Southeastern), one superintendent was out of the country and one superintendent was unreachable. Thus, the survey was sent to the thirty-nine superintendents through

electronic mail with an internet link to the survey designed using Qualtrics. Ultimately, twenty-five of the thirty-nine superintendents (response rate of 64%) responded and completed the survey which consisted of thirty-one questions and one open-ended optional response item at the end of the survey. One of the questions on the survey simply asked the superintendent whether they had won or lost the referendum and of the twenty-five responses, fourteen were from districts that were successful on their referendum campaign as opposed to the remaining eleven superintendents who led districts that lost their referenda. The survey can be found in Appendix C and the aggregate response data (anonymous) for the entire survey can be found in Appendix D.

Survey Results – Strategy Use

For each of the first thirty items on the survey, superintendents were asked to specify whether the campaign strategy was used or not used by their district during the General Fund referendum. Additionally, they were asked to rate the relative importance of the strategy, based on their professional perceptions as leader of the school district during the referendum. After compiling the results, a frequency table was developed to illustrate the use, or lack of use, of the thirty campaign strategies based on the feedback from the superintendents. Table 9 provides a list of the thirty campaign strategies (which correspond to the question number in the survey) arranged in descending order of the most frequently used strategies down to the least used strategies.

Table 9

Factors that Influence a General Fund Referendum

Superintendent Survey Results: Frequency of Campaign Strategy Use

Strategy #	Strategy Description	FRU
5	Provided detailed information to citizens working on the campaign.	25/25
6	Developed detailed campaign literature with facts about the referendum.	25/25
12	Made use of unpaid media coverage to disseminate information	25/25
14	Provided information on tax increase for the average home	25/25
16	Provided opportunities for patrons to discuss information about the referendum.	25/25
17	Identified and contacted special interest groups to gain their support	23/25
22	Established a citizens' committee to involve the public in election activities.	23/25
24	Disseminated specific information to the public of an unsuccessful referendum	22/25
25	Conducted special community events for the referendum.	22/25
26	Utilized existing school-based organizations in the campaign	22/25
27	Involved community leaders in key campaign roles.	22/25
28	Obtained a unanimous vote of support from the school board	22/25
23	Secured support from local newspapers	19/25
3	Assessed community opinion about controversial school issues before referendum.	18/25
20	Made personal contact with identified "undecided" voters.	18/25
29	Emphasized the above average student achievement within the district	18/25
19	Conducted a direct mail campaign to "Yes" and "undecided" voters	17/25

30	Distributed information through the use of social media	15/25
18	Identified potential yes/no/undecided voters by telephoning individuals	14/25
1	Completed a formal or informal community voter survey prior to the election.	13/25
7	Focused communication efforts on the high quality of the educational programs	23/25
15	Had a long-range or strategic plan in place before referendum	21/25
8	Demonstrated responsiveness to the opposition	19/25
9	Attempted to neutralize "No" voters by pointing out negative effects of defeat.	17/25
11	Had an ongoing, positive public relations program in place before referendum.	16/25
2	Hired a professional campaign consultant	11/25
13	Made use of paid promotional information to disseminate information	9/25
4	Surveyed the community to assess what increase in the tax rate would be acceptable.	8/25
21	Established and used a tax rate threshold through public input	7/25
10	Presented the referendum to the public as a "tax rate neutral" referendum	2/25

FRU = Frequency of Use

In fact, the first five strategies listed in the table were used by twenty-five out of twenty-five superintendents, thus these strategies were used in every referendum in this sample and are as follows:

Table 10

Strategy #	Strategy Description
5	Provided detailed information and in-service to citizens working on the General Fund referendum campaign.
6	Developed detailed campaign literature with facts about the General Fund referendum and what it would provide and distributed it to the community.
12	Made use of unpaid media coverage to disseminate information about the General Fund referendum issue (letters to the editor, interviews, etc.).
14	Provided information on tax increase for the average home.
16	Provided opportunities for patrons to receive and discuss information about the referendum.

The last strategy in Table 9 was the least frequently used strategy and was marked by only two superintendents as one that was used during the referendum campaign. This strategy was number ten in the survey and read, "Presented the referendum to the public as a 'tax rate neutral' referendum (i.e. promises were made to reduce the tax rate in other funds to offset the impact of the proposed additional tax rate increase added to support the General Fund)".

Survey Results: Strategy Use based on Referendum Outcome

Table 9 shows the responses from all the superintendents relative to the use or non-use of the thirty campaign strategies, but does not differentiate between those superintendents who had run successful campaigns versus those who had not. Table 11 shows a disaggregation of the strategy use data by separating the responses into two general categories based on outcome of the referendum (won or lost) and then lists the frequency of use by those districts for each of the thirty campaign strategies.

Table 11

Factors that Impact a General Fund Referendum

Strategy Use for Successful vs. Unsuccessful Districts

Succ. Dist.					Unsucc. Dist.		
Y	N	U		**Strategy Description**	Y	N	U
9	5	0	*1*	Completed a formal or informal community voter survey prior to the election.	4	7	0
7	7	0	*2*	Hired a professional campaign consultant	4	7	0
9	5	0	*3*	Assessed community opinion about controversial school issues before referendum.	9	2	0
3	11	0	*4*	Surveyed the community to assess what increase in the tax rate would be acceptable.	5	6	0
14	0	0	*5*	Provided detailed information to citizens working on the campaign.	11	0	0
14	0	0	*6*	Developed detailed campaign literature with facts about the referendum.	11	0	0
13	1	0	*7*	Focused communication efforts on the high quality of the educational programs	10	1	0
11	3	0	*8*	Demonstrated responsiveness to the opposition	8	2	1

10	4	0	*9*	Attempted to neutralize "No" voters by pointing out negative effects of defeat.	7	4	0
2	12	0	*10*	Presented the referendum to the public as a "tax rate neutral" referendum	0	11	0
8	6	0	*11*	Had an ongoing, positive public relations program in place before referendum.	8	3	0
14	0	0	*12*	Made use of unpaid media coverage to disseminate information	11	0	0
8	6	0	*13*	Made use of paid promotional information to disseminate information	1	10	0
14	0	0	*14*	Provided information on tax increase for the average home	11	0	0
10	4	0	*15*	Had a long-range or strategic plan in place before referendum	11	0	0
14	0	0	*16*	Provided opportunities for patrons to discuss information about the referendum.	11	0	0
14	0	0	*17*	Identified and contacted special interest groups to gain their support	9	2	0
10	4	0	*18*	Identified potential yes/no/undecided voters by telephoning individuals	4	7	0
10	4	0	*19*	Conducted a direct mail campaign to "Yes" and "undecided" voters	7	4	0
10	4	0	*20*	Made personal contact with identified "undecided" voters.	8	2	1
4	10	0	*21*	Established and used a tax rate threshold through public input	3	8	0
14	0	0	*22*	Established a citizens' committee to involve the public in election activities.	9	2	0
10	4	0	*23*	Secured support from local newspapers	9	2	0
12	2	0	*24*	Disseminated specific information to the public of an unsuccessful referendum	10	1	0
12	2	0	*25*	Conducted special community events for the referendum.	10	1	0
14	0	0	*26*	Utilized existing school-based organizations in the campaign	8	3	0
14	0	0	*27*	Involved community leaders in key campaign roles.	8	3	0
13	1	0	*28*	Obtained a unanimous vote of support from the school board	9	2	0
12	2	0	*29*	Emphasized the above average student achievement within the district	6	5	0

11	3	0	*30*	Distributed information through the use of social media	4	7	0

Succ. Dist. = District won the referendum

Unsucc. Dist. = District lost the referendum

Y = yes strategy was used

N = strategy was not used

U = unknown if strategy was used

The data coming from the breakdown of successful and unsuccessful districts and the thirty campaign strategies were then analyzed using a Chi Square test to determine whether there was any statistical significance to the relationship between use of a particular strategy and the outcome of a General Fund referendum election. The basic null hypothesis to be tested for each of the thirty strategies is as follows:

> H_O: The outcome of a General Fund referendum election is independent of the use of the campaign strategy.

The results from each of the thirty Chi Square tests can be found in Appendix E. Table 12 lists all thirty campaign strategies and the p-values associated with each of the thirty Chi Square tests. Of the thirty campaign strategies tested, four of the strategies had p-values that were below the established threshold of $p<0.05$ and were thus deemed statistically significant.

Table 12

Factors that Impact a General Fund Referendum

Chi Square analysis for strategy use/non-use Successful vs. Unsuccessful districts

	Strategy Description	Chi Square p-value
1	Completed a formal or informal community voter survey prior to the election.	0.165
2	Hired a professional campaign consultant	0.495
3	Assessed community opinion about controversial school issues before the referendum.	0.332
4	Surveyed the community to assess what increase in the tax rate would be acceptable.	0.201
5	Provided detailed information to citizens working on the campaign.	NA
6	Developed detailed campaign literature with facts about the referendum.	NA
7	Focused communication efforts on the high quality of the educational programs	0.859
8	Demonstrated responsiveness to the opposition	0.514
9	Attempted to neutralize "No" voters by pointing out negative effects of defeat.	0.678
10	Presented the referendum to the public as a "tax rate neutral" referendum	0.191
11	Had an ongoing, positive public relations program in place before the referendum.	0.420
12	Made use of unpaid media coverage to disseminate information	NA
13	Made use of paid promotional information to disseminate information	0.013
14	Provided information on tax increase for the average home	NA
15	Had a long-range or strategic plan in place before referendum	0.053

16	Provided opportunities for patrons to discuss information about the referendum.	NA
17	Identified and contacted special interest groups to gain their support	0.096
18	Identified potential yes/no/undecided voters by telephoning individuals	0.080
19	Conducted a direct mail campaign to "Yes" and "undecided" voters	0.678
20	Made personal contact with identified "undecided" voters.	0.460
21	Established and used a tax rate threshold through public input	0.943
22	Established a citizens' committee to involve the public in election activities.	0.096
23	Secured support from local newspapers	0.546
24	Disseminated specific information to the public of an unsuccessful referendum	0.692
25	Conducted special community events for the referendum.	0.692
26	Utilized existing school-based organizations in the campaign	0.037
27	Involved community leaders in key campaign roles.	0.037
28	Obtained a unanimous vote of support from the school board	0.399
29	Emphasized the above average student achievement within the district	0.085
30	Distributed information through the use of social media	0.032

Strategy number thirteen had the lowest p-value of all thirty strategies and a Chi Square value of $\chi^2(1) = 6.173$, $p = 0.013$ indicating a statistically significant difference. For this strategy, the null hypothesis that the outcome of a referendum and the strategy of using paid promotional information to disseminate information about the referendum issue are independent would be rejected. This does not necessarily indicate they are related or the nature of any type of a relationship they may have, simply that the hypothesis that they are fully independent can be rejected based on this data.

Strategy number twenty-six had a Chi Square and corresponding p-value of $\chi^2(1) = 4.339$, $p = 0.037$ indicating a statistically significant difference. For this strategy, the null hypothesis that the outcome of a referendum and the strategy of utilizing existing school-based organizations for assessing, planning, and promoting the referendum are independent would be rejected. This does not necessarily indicate they are related or the nature of any type of a relationship they may have, simply that the hypothesis that they are fully independent can be rejected based on this data.

Strategy number twenty-seven also revealed a significant result with a Chi Square and corresponding p-value of $\chi^2(1) = 4.339$, $p = 0.037$ indicating a statistically significant difference. Coincidently, the strategy use for strategy twenty-seven for both successful and unsuccessful districts was identical to the data collected for strategy twenty-six, hence the identical numbers for the Chi Square results. For this strategy, the null hypothesis that the outcome of a referendum and the strategy of involving community leaders in key campaign roles are independent would be rejected. This does not necessarily indicate they are related or the nature of any type of a relationship they may

have, simply that the hypothesis that they are fully independent can be rejected based on this data.

The final strategy with a significant result on the Chi Square test was number thirty with a Chi Square and corresponding p-value of $\chi^2(1) = 4.573$, $p = 0.032$ indicating a statistically significant difference. For this strategy, the null hypothesis that the outcome of a referendum and the strategy of distributing information regarding the referendum through the use of social media are independent would be rejected. This does not necessarily indicate they are related or the nature of any type of a relationship they may have, simply that the hypothesis that they are fully independent can be rejected based on this data.

Aside from these four strategies which show a statistically significant result indicating the null hypothesis for each can be rejected, the other twenty-six strategies had p-values that were above the accepted threshold, and thus the null hypotheses for these twenty-six failed to be rejected. Failing to reject the null hypotheses for these strategies does not necessarily mean that these twenty-six campaign strategies did not have an impact on the outcome of the referendum election, it simply means that based on the sample data collected, there is no statistically significant difference between the number of districts that won referenda and the number that lost referenda when factoring in the use of these strategies.

Survey Results – Importance of Campaign Strategies

The previous section provided data about how the twenty-five superintendents listed the *use* of the campaign strategies by their districts as they were included in the survey. In addition to asking the superintendents if they used the strategy or not during their General Fund referendum, the survey also asked the superintendents to provide a rating of the importance of the various strategies listed in the survey, based on their perceptions. For the questions about rating the importance of the strategies, superintendents were asked to select from five possible responses listed on the survey for each strategy: not important, somewhat important, average importance, very important, and critical. All of the data from the twenty-five superintendents was analyzed and Table 13 shows the results of the calculation of the mean rating for each of the thirty campaign strategies, ranked in order from greatest importance to the least important. When taken as a whole, the twenty-five superintendents rated strategy twenty-eight as the most important, based on the calculated means. Strategy twenty-eight referred to the campaign practice of obtaining a unanimous vote of support from the school board before proceeding with a General Fund referendum.

Table 13

Factors that Impact a General Fund Referendum

Mean importance rating for each strategy

Strategy #	Strategy Description	Mean
28	Obtained a unanimous vote of support from the school board	4.72
22	Established a citizens' committee to involve the public in election activities.	4.6
5	Provided detailed information to citizens working on the campaign.	4.6
6	Developed detailed campaign literature with facts about the referendum.	4.56
14	Provided information on tax increase for the average home	4.52
16	Provided opportunities for patrons to discuss information about the referendum.	4.48
17	Identified and contacted special interest groups to gain their support	4.28
12	Made use of unpaid media coverage to disseminate information	4.08
7	Focused communication efforts on the high quality of the educational programs	4.08
27	Involved community leaders in key campaign roles.	4.04
15	Had a long-range or strategic plan in place before referendum	3.92
11	Had an ongoing, positive public relations program in place before the referendum.	3.92
30	Distributed information through the use of social media	3.88
25	Conducted special community events for the referendum.	3.88
24	Disseminated specific information to the public of an unsuccessful referendum	3.8
29	Emphasized the above average student achievement within the district	3.76
26	Utilized existing school-based organizations in the campaign	3.76

3	Assessed community opinion about controversial school issues before the referendum.	3.68
23	Secured support from local newspapers	3.64
20	Made personal contact with identified "undecided" voters.	3.64
8	Demonstrated responsiveness to the opposition	3.64
1	Completed a formal or informal community voter survey prior to the election.	3.52
19	Conducted a direct mail campaign to "Yes" and "undecided" voters	3.32
18	Identified potential yes/no/undecided voters by telephoning individuals	3.32
4	Surveyed the community to assess what increase in the tax rate would be acceptable.	3.28
2	Hired a professional campaign consultant	3.08
21	Established and used a tax rate threshold through public input	3
13	Made use of paid promotional information to disseminate information	2.88
9	Attempted to neutralize "No" voters by pointing out negative effects of defeat.	2.88
10	Presented the referendum to the public as a "tax rate neutral" referendum	2.56

5 = critical

4= very important

3 = average importance

2 = somewhat important

1 = not important

Survey Results: Importance of Strategies between Successful and Unsuccessful Districts

Each of the twenty-five superintendents rated the thirty campaign strategies on an importance scale based on their expert knowledge, experience, and perceptions of running a General Fund referendum campaign. Of the twenty-five superintendents that

participated in the survey, fourteen ran successful campaigns and eleven ran failed campaigns. The importance ratings were given a value ranging from 1 to 5 (not important to critical) and the mean was calculated for each of the thirty strategies for both successful and unsuccessful districts. In Table 14, the compiled list of each of the thirty campaign strategies was broken down with a mean importance rating for the unsuccessful districts and for the successful districts. These values were then further analyzed using an independent samples t-test. The t-test was selected so that the means of the two groups (successful vs. unsuccessful) could be tested to determine if they are statistically different from each other. The standard null hypothesis to be tested for each of the thirty strategies is as follows:

> H_O: There is no difference in the mean importance rating for the campaign strategy between successful and unsuccessful districts.

To test these hypotheses, the t-test was performed using SPSS and the results for all thirty campaign strategies can be found in Appendix F. Several of the t-tests produced results that were statistically significant and those will be described in greater detail.

Table 14

Factors that Impact a General Fund Referendum

Mean importance rating for each strategy for successful vs. unsuccessful districts

Successful Dist. Mean		**Strategy Description**	Unsucc. Dist. Mean
3.64	*1*	Completed a formal or informal community voter survey prior to the election.	3.36
3.00	*2*	Hired a professional campaign consultant	3.18
3.57	*3*	Assessed community opinion about controversial school issues before referendum.	3.82
3.00	*4*	Surveyed the community to assess what increase in the tax rate would be acceptable.	3.64
4.79	*5*	Provided detailed information to citizens working on the campaign.	4.36
4.71	*6*	Developed detailed campaign literature with facts about the referendum.	4.36
4.43	*7*	Focused communication efforts on the high quality of the educational programs	3.64
3.71	*8*	Demonstrated responsiveness to the opposition	3.55
2.79	*9*	Attempted to neutralize "No" voters by pointing out negative effects of defeat.	3.00
2.36	*10*	Presented the referendum to the public as a "tax rate neutral" referendum	2.82
3.79	*11*	Had an ongoing, positive public relations program in place before referendum.	4.09
4.07	*12*	Made use of unpaid media coverage to disseminate information	4.09
2.93	*13*	Made use of paid promotional information to disseminate information	2.82

4.43	*14*	Provided information on tax increase for the average home	4.64
3.71	*15*	Had a long-range or strategic plan in place before referendum	4.18
4.64	*16*	Provided opportunities for patrons to discuss information about the referendum.	4.27
4.50	*17*	Identified and contacted special interest groups to gain their support	4.00
3.43	*18*	Identified potential yes/no/undecided voters by telephoning individuals	3.18
3.14	*19*	Conducted a direct mail campaign to "Yes" and "undecided" voters	3.55
3.71	*20*	Made personal contact with identified "undecided" voters.	3.55
2.64	*21*	Established and used a tax rate threshold through public input	3.45
4.79	*22*	Established a citizens' committee to involve the public in election activities.	4.36
3.71	*23*	Secured support from local newspapers	3.55
4.07	*24*	Disseminated specific information to the public of an unsuccessful referendum	3.45
4.00	*25*	Conducted special community events for the referendum.	3.73
3.93	*26*	Utilized existing school-based organizations in the campaign	3.55
4.29	*27*	Involved community leaders in key campaign roles.	3.73
4.57	*28*	Obtained a unanimous vote of support from the school board	4.91
4.36	*29*	Emphasized the above average student achievement within a district	3.00
4.07	*30*	Distributed information through the use of social media	3.64

5 = critical

4= very important

3 = average importance

2 = somewhat important

1 = not important

Question number seven on the survey asked the superintendents to consider the campaign strategy of focusing communication efforts on the high quality of the educational programs found within the district. The t-test results showed that there was a significant difference in the scores for unsuccessful (M=3.64, SD=0.67) and successful (M=4.43, SD=0.65) districts: t(23) = -2.99, p = 0.007. The null hypothesis would be rejected, and these results suggest that the relative importance of this particular campaign strategy was rated significantly higher by successful districts as compared to their unsuccessful counterparts.

The t-test results for campaign strategy number seventeen indicated that there was not a significant difference in the scores for unsuccessful (M=4.00, SD=0.63) and successful (M=4.50, SD=0.65) districts: t(23) = -1.93, p = 0.066. The null hypothesis would fail to be rejected for this strategy based on the p-value being greater than the acceptable threshold of 0.05. However, the p-value of p=0.066 is close to 0.05 and may be considered borderline. While not statistically significant, the practical significance to this finding may be of value when coupled with other statistical tests on the data set.

The final campaign strategy meriting discussion based on the t-test results was strategy number twenty-nine that asked superintendents to rate the importance of the strategy of emphasizing the above average student achievement within the district. Clearly, this strategy is very similar to strategy number seven previously discussed. The t-test results showed that there was a significant difference in the scores for unsuccessful (M=3.00, SD=1.18) and successful (M=4.36, SD=0.63) districts: t(23) = -3.69, p = 0.001. Therefore, the null hypothesis would be rejected and the test data would suggest that this

strategy was regarded with greater importance for successful districts as compared to the unsuccessful districts.

Survey Results: Importance of Campaign Strategies and Predictive Relationships

Superintendents were asked to rate the relative importance for thirty different campaign strategies. The group of thirty campaign strategies can be broken down and categorized into different groups based on their common themes. Informed by the literature on the topic of school finance elections, the thirty campaign strategies listed in the survey for this research can be placed into eleven different basic groups. Table 15 illustrates how the thirty campaign strategies were organized into the eleven categories listed.

Table 15

Group Number	***Category Description***	***Question numbers from Survey***
1	Message: High quality education	7,29
2	Message: Potential failure implications	9,24
3	Campaign committee	5,8,22,26,27
4	Hire a consultant	2
5	Role of School Board	28

6	Communications and public relations	6,11,12,13,23
7	Tax implications for citizens	4,10,14,21
8	Use of social media	30
9	Community participation	1,3,16,25
10	Targeting specific voter groups	17,18,19,20
11	Having a strategic plan in place	15

Once grouped, these strategies become the independent variables in the logistic regression analysis where the outcome (success or failure) of the referendum election is the dependent or outcome variable. Logistic regression was chosen as a statistical test for this data so that the survey responses could be analyzed to determine if there is a statistically significant predictive relationship between superintendents' perceptions of these groups of common-themed campaign strategies and the ability to pass a General Fund referendum. Each of the eleven null hypotheses to be tested would take this basic form:

> H_O: There is no statistically significant predictive relationship between superintendents' perceptions of the campaign strategies and the outcome of a General Fund referendum.

All of the results from the eleven logistic regression models tested for this aspect of the study can be found in Appendix G.

Group number one contained two campaign strategies (#7 and #29) both directly related to sending the message to the public that the quality of education in the district was high in an effort to win support for a referendum. The multiple logistic regression analysis revealed neither strategy to be statistically significant given our established alpha level of 0.05, thus the null hypothesis would fail to be rejected for this group of strategies. However, the odds ratio values (as shown in Table 16) did indicate that the odds of winning a referendum increased by 11.632 times for every one unit increase in the importance rating for strategy twenty-nine. Thus, placing more importance on emphasizing the above average student achievement within a district increases the chances of passing a referendum for a school district. Finally, the overall model predictive ability increases from the base of 56% when the independent variables are not included to a total of 76% with the addition of the two independent variables, indicating including these two explanatory variables substantially increases the overall predictive ability.

Table 16

Variables associated with emphasizing the high quality education of a district

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Strategy_7	-.297	1.601	.034	1	.853	.743	.032	17.138
	Strategy_29	2.454	1.456	2.842	1	.092	11.632	.671	201.663
	Constant	-8.007	4.807	2.774	1	.096	.000		

For group number two, two campaign strategies (#9 and #24) were categorized together under the general theme of a school district communicating a message to the public about the implications for the school district should the General Fund referendum be defeated. The multiple logistic regression analysis reported neither independent variable to be statistically significant relative to the predictive value on the success or failure of a referendum. The null hypotheses would fail to be rejected for this group with p-values for strategy nine of p=0.244 and for strategy twenty-four of p=0.118 (Table 17). The odds ratios for this analysis do indicate that for strategy twenty-four (disseminating specific information to the public of an unsuccessful referendum), there is a 2.352 times greater chance of having a successful referendum with a one unit increase in the importance rating for this strategy.

Table 17

Variables associated with the implications of a failed referendum

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Strategy_9	-.602	.517	1.356	1	.244	.548	.199	1.508
	Strategy_24	.855	.547	2.441	1	.118	2.352	.804	6.878
	Constant	-1.177	1.477	.635	1	.426	.308		

The third group of strategies included those that were associated together because of a close association to the organizing and carrying out the work of a campaign committee. A total of five strategies (#5, #8, #22, #26, and #27) were grouped together for this regression analysis. None of the five independent variables had a statistically significant result with p-values ranging from p=0.227 for strategy twenty-seven to p=0.935 for strategy eight (Table 18). The overall null hypothesis for this group of strategies would fail to be rejected on the basis of a lack of statistical significance as indicated by the p-values all greater than 0.05. The odds ratio with the greatest impact was for strategy five (providing detailed information to citizens working on the campaign) where the chances of holding a successful referendum increased by 2.814 times with a one unit increase in the relative importance rating.

Table 18

Variables associated with the Campaign Committee

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Strategy_5	1.035	.907	1.301	1	.254	2.814	.476	16.651
	Strategy_8	-.032	.395	.007	1	.935	.968	.447	2.098
	Strategy_22	.814	.969	.705	1	.401	2.257	.338	15.088
	Strategy_26	.256	.735	.121	1	.728	1.292	.306	5.455
	Strategy_27	.830	.687	1.457	1	.227	2.292	.596	8.818
	Constant	-12.402	5.373	5.328	1	.021	.000		

Group four of the campaign strategies actually only included one independent variable which was hiring a campaign consultant. The results of the logistic regression indicate that the null hypothesis would fail to be rejected because the p-value was greater than the set alpha level with p=0.771. Based on this data, there is no statistically significant predictive relationship between superintendents' perceptions of hiring a campaign consultant ant the success or failure of a General Fund referendum.

Similar to the previous group, group five of the campaign strategies only included one independent variable: obtaining a unanimous vote of support from the school board. After analyzing the output from the logistic regression, it was clear that there was no statistically significant predictive value on the outcome of a referendum stemming from

this independent variable and the null hypothesis would fail to be rejected. The p-value for strategy twenty-eight was p=0.215 and is clearly greater than the established significance threshold of 0.05.

Group six of the campaign strategies included five questions from the survey (#6, #11, #12, #13, and #23) that all relate to the common theme of school district communications and public relations. The p-values ranged from p=0.996 to p=0.191 for these strategies and thus, none were deemed statistically significant. The null hypothesis for this group of strategies would fail to be rejected based on the p-values that were all greater than 0.05. Despite the lack of statistical significance based on the p-values, the odds ratios computed for strategy number six do indicate that with a one unit increase in the importance ratings, the chances of holding a successful referendum increase by 2.932 times (Table 19). This indicates that there may be some potential benefit to considering the importance of developing detailed campaign literature with facts about the referendum and disseminating that literature to the public.

Table 19

Variables Associated with District Communications and Public Relations

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Strategy_6	1.076	.823	1.708	1	.191	2.932	.584	14.715
	Strategy_11	-.475	.596	.634	1	.426	.622	.193	2.001
	Strategy_12	-.319	.622	.264	1	.608	.727	.215	2.459
	Strategy_13	.062	.405	.023	1	.879	1.064	.481	2.351
	Strategy_23	-.021	.488	.002	1	.966	.980	.376	2.549
	Constant	-1.581	4.006	.156	1	.693	.206		

Campaign strategies addressing the specific aspect of the tax increase were grouped together in group seven and included a total of four strategies found on the survey (#4, #10, #14, and #21). For this multiple logistic regression analysis, none of the four independent variables returned a statistically significant result. The p-values were p=0.277, p=0.697, p=0.341, and p=0.546 respectively for strategies four, ten, fourteen and twenty-one. With all of these p-values being greater than 0.05, the accepted threshold of significance, the null hypothesis for this group of campaign strategies would fail to be rejected and indicate that there is little predictive value in these independent variables, based on this small data set.

Group eight of the strategies included only one campaign strategy, the use of social media to communicate information regarding the referendum to the public. The regression analysis concluded that this independent variable was not a statistically significant predictor of the outcome of a referendum as the null hypotheses failed to be rejected based on the p-value obtained of p=0.381. The odds ratios do show that a one unit increase in the importance rating for this variable would increase the chances of a successful referendum by 1.351 times. Table 20 illustrates the output for the regression analysis of the independent variable of social media use.

Table 20

Variables Associated with the use of Social Media in a Referendum Campaign

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Strategy_30	.301	.343	.769	1	.381	1.351	.690	2.645
	Constant	-.921	1.387	.441	1	.507	.398		

Several campaign strategies (#1, #3, #16, and #25) were all grouped under the umbrella of community participation and tested using a multiple logistic regression model. The four strategies each had p-values greater than 0.05, the accepted threshold, and thus the null hypothesis for this group would fail to be rejected. However, the p-value for strategy sixteen was p=0.073 which is still not statistically significant, but may

be within a realm of borderline significance. While it will not be deemed statistically significant, the odds ratio computed for this strategy indicates there is a 5.734 times greater chance of passing a referendum with a one unit increase in the importance rating for this strategy. Having an over five times greater chance of passing the referendum is worth consideration of the strategy which was listed in the survey as providing numerous opportunities for patrons to receive and discuss information about the referendum. Adding strength to the analysis for this group of independent variables is the Hosmer-Lemeshow Test which, based on the p-value of p=0.539, indicates well-fitting model. Table 21 below includes the logistic regression output for this group of variables as well as the Hosmer-Lemeshow Test output.

Table 21

Variables Associated with Community Participation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Strategy_1	.556	.495	1.262	1	.261	1.743	.661	4.596
	Strategy_3	-.568	.451	1.584	1	.208	.567	.234	1.372
	Strategy_16	1.746	.975	3.211	1	.073	5.734	.849	38.726
	Strategy_25	-.110	.570	.037	1	.847	.896	.293	2.737
	Constant	-7.033	4.364	2.597	1	.107	.001		

Hosmer and Lemeshow Test for Community Participation

Step	Chi-square	df	Sig.
1	4.072	5	.539

Group ten of the strategies included the four survey questions (#17, #18, #19, and #20) closely associated with the strategy of targeting specific voter groups. The null hypothesis for this group of independent variables would fail to be rejected based on the significance levels reported which were all above the threshold of 0.05. Strategy

seventeen did emerge from the data with a p-value of p=0.095 which is not statistically significant and supports the failure to reject the null hypothesis. However, the odds ratios reported for strategy seventeen show that a one unit increase in the importance rating for this strategy translated into a 3.749 times greater chance of passing a General Fund referendum (Table 22). Certainly, despite the lack of statistical significance due to the p-value, it would be prudent to closely examine ways to increase the relative importance of identifying and contacting internal and external special interest groups to gain their support and endorsements as a way to potentially increase the chances of a successful referendum campaign.

Table 22

Variables Associated with Targeting Specific Voter Groups

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Strategy_17	1.322	.791	2.791	1	.095	3.749	.796	17.670
	Strategy_18	.333	.570	.341	1	.559	1.395	.457	4.259
	Strategy_19	-.727	.564	1.658	1	.198	.484	.160	1.462
	Strategy_20	.375	.432	.752	1	.386	1.454	.624	3.393
	Constant	-5.373	3.753	2.049	1	.152	.005		

The final group of campaign strategies included but one strategy, that of having a long-range strategic plan in place before calling for the General Fund referendum. The logistic regression results indicate that the null hypothesis for this independent variable would fail to be rejected based on the significance level of p=0.232 which is greater than the alpha level established of 0.05. Thus, there is no statistically predictive relationship between the superintendents' perceptions of having a long-range plan in place and the outcome of a general fund referendum.

Survey Reliability

The survey sent to superintendents contained a total of thirty items that asked superintendents, based on their perceptions, to rate the importance of each of the thirty campaign strategies on a 1 to 5 scale (not important to critical). To measure the internal consistency of these thirty items, a Cronbach's alpha test was completed using SPSS to determine if the survey met acceptable standards for reliability. J. Reynaldo Santos (1999) states, "Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability" (p. 1). Table 33 below shows the general results of the Cronbach's alpha test that was used for the thirty superintendent survey questions. The full output of results from the Cronbach's alpha test can be found in Appendix H.

Table 33 shows that the overall Cronbach's alpha score of reliability for this survey was 0.79 for the survey containing a total of thirty items. This value of 0.79 is

well above the generally threshold of acceptability of 0.70 and approaches the more optimal range for reliability of 0.80 and above. This statistical test provides evidence that the survey questions are generally reliable and measuring the same construct, for the most part. When examining some of the values on the inter-item correlations matrix, some of the values were small indicating poor correlation, but overall, the survey has high internal reliability. Finally, the item-total statistics table produces a value for "Cronbach's Alpha if item Deleted" which indicates what the overall internal reliability of the survey would have been if that questions was omitted. These values are all between 0.75 and 0.80 which are very close to the calculated reliability of 0.79, providing further evidence that there is good internal reliability within the survey and that likely none of the questions should be omitted to make the survey substantially more reliable.

Summary

The purpose of this research study was to determine what factors may have an impact on a General Fund referendum. Data were collected on the school districts that have participated in a referendum of this kind since 2008 as well as from the superintendents that led these referenda. The demographic data from the school districts included socioeconomic status, community setting, and student achievement level for all of the districts that have held a General Fund referendum. Additionally, a survey was sent to the superintendents who led referenda regarding various campaign strategies and their relative importance to the referendum process.

The demographic data were analyzed using the Chi Square test for the community setting variable revealing no statistically significant difference between the four community setting types and the outcome of a General Fund referendum. The variables of student achievement and socioeconomic status were examined more closely through a multiple logistic regression model that did reveal some important findings regarding the predictability of a referendum when including these two independent variables.

The superintendent survey data from the twenty-five respondents were examined first through the frequency of use of the campaign strategies as related to the outcome of the referendum using the Chi Square test. Several outcomes were important and statistically significant from these tests. Next, the importance ratings provided by the superintendents for the thirty strategies were examined using a multiple logistic regression model and several important results were shown through these tests. In addition to the regression models, t-tests were performed on the importance ratings data resulting in several statistically significant results.

Finally, a Cronbach's alpha test was performed on the superintendent survey data set in order to determine the internal reliability of the survey instrument. The Cronbach's alpha result indicated a highly acceptable level of internal reliability among the survey items. The next chapter will explore how these results and statistics can be translated into findings and conclusions regarding the factors that impact a General Fund referendum in Indiana.

CHAPTER 5

SUMMARY AND CONCLUSIONS

The responsibility to fund a free and appropriate public education for all students rests squarely on the shoulders of the taxpayers. In Indiana, a combination of the global economic crisis of 2008 and a change in how public schools support their operating budgets left local school boards and superintendents directly asking local voters to support education with more tax dollars through the passage of a local school referendum. Prior to 2008, local property tax dollars did go directly to support a portion of the operating fund, or general fund, for each local school district. However, the State Legislature enacted laws in 2008 aimed at property tax reform that actually shifted a full 100% of the funding for each local school district's general fund to State control. The State agreed to fully fund the general fund of each district through an increase in the State sales tax as well as other taxes collected by the State that would ultimately allow them to fund the general fund for the school districts. Sales tax tends to be a less stable and reliable source of revenue as compared to property taxes and coupled with a global economic crisis, the State of Indiana could simply not fully fund the local school districts' general funds at the anticipated, and customary, levels. As school districts came to realize there was going to be a shortfall in revenue from the State, they began to search for ways to reduce costs and increase revenue.

Many school districts made difficult and drastic cuts to their general fund budgets because there simply was not enough money to pay for all the programs and personnel due to the shortfall at the State level. With few other options, many school districts turned to the school tax levy referendum (more commonly known as the General Fund referendum) as a way to generate additional revenue for their district. The General Fund referendum asks the voters to decide if they are willing to pay more in local property taxes that would then be funneled directly to the schools. Faced with making harsh budget cuts, many districts attempted the referendum as a way to gauge support for local schools by the taxpayers. Some were successful and others were not, but the battle for additional operating funds continues as the General Fund referendum continues to gain in popularity in Indiana and is likely to be a part of many school districts' plans for supporting the operating budget until the funding from the State can be restored to previous levels.

Review of the Literature

The General Fund referendum has become an important tool for school districts to consider when searching for ways to increase revenue to support their operating budget. Dr. Wally Bourke, former superintendent in the Franklin Township School District, states in Hiller and Spradlin (2011), "school districts in Indiana are forced to seek referenda in order to retain teachers, programs, and important services to families" (p. 5). Between 2008 and the fall of 2013, forty-two school districts had attempted General Fund referenda, a number certain to increase in subsequent years (Department of Local

Government Finance, 2013). As school districts attempt to raise revenue through the referendum process, it became clear that there were a multitude of factors that impact the success of the General Fund referendum and school finance elections in general.

An essential component to successful referenda is to provide communications directly to the voters so that they can be fully informed (Erickson, 2011; Blanchfield, 1998). Written communications disseminated to the voters may take the form of campaign literature, newsletters, brochures, yard signs, and paid advertisements. Additionally, Erickson (2011) identifies the use of school web sites as well as social media as avenues to communicating the importance of the referendum to voters. Communication regarding the General Fund referendum does not stop with the written word but also includes public presentations and community forums designed to discuss the issue with patrons and make a case for supporting the referendum (Erickson, 2011; Hiller & Spradlin, 2011). In one successful General Fund referendum campaign in Indiana, Crown Point Community School Corporation Dr. Teresa A. Eineman organized over 400 community meetings in a campaign period of just eight months in order to get the message to voters about the need for a successful referendum (Hiller & Spradlin, 2011). Overall, a solid district communications and public relations plan should be in place to handle the referendum campaign and as Erickson (2011) recommends, a central media coordinator should be appointed to oversee the media and communications function of the campaign.

A robust and well-organized communications plan is clearly an important factor in school finance elections. An aspect of that communications plan includes crafting

targeted messages to be communicated to the voters of the school district. One such message reiterated in the literature is communicating to the constituents that the district provides a high quality education to all students. Cataldo & Holm (1983) note that voters are more likely to support local schools with an increase in tax dollars when they perceive a high quality output from those schools. A second targeted message emphasized in the literature is communicating to the public the possible negative impact that a failed referendum would have on the school district. In Crown Point, Dr. Eineman began the work of communicating this message by gathering the nearly 900 employees of the district and communicating to them the volatility of the General Fund and how without some additional revenue, the district would not be able to continue on the same course with personnel and programs (Hiller & Spradlin, 2011). Additionally, Carter (1995) describes how voters in school finance elections often times go to the polls to vote against a negative alternative rather than for a certain measure. In the case of the General Fund referendum, these voters would likely vote against the negative alternative of layoffs for teachers, higher class size, or cuts to programs associated with a failed referendum and thus cast their vote in the affirmative.

In addition to the immense efforts placed into communicating to the voters about the need and importance of a referendum, additional factors can impact the outcome of school finance elections. Establishing a campaign committee that is made up of a diverse cross-section of community members is an important way to make sure the message to be communicated reaches in all corners of the community (Holt, Wendt, and Smith (2006). Erickson (2011) recommends establishing the committee very early in the referendum

planning stages so that strong proponents for the referendum can be assembled and prepare to complete the work of the committee. Along with the campaign committee of citizens with a vested interest in the outcome of the referendum, it may be necessary to consider the services of a professional consultant to assist with managing the campaign. A consultant can help share the workload of running a referendum campaign considering the district administrators have other day-to-day responsibilities of carrying out the business of the school district to manage. Erickson (2011) suggests "hiring a consultant to guide the process" (p. 15) and provides details about how the consultant can facilitate implementation of the campaign strategies.

Finally, the school board takes on an even more prominent and public role during a General Fund referendum campaign. School finance elections can be heavily influenced by the trust and confidence in the school board that is held by local citizens. Godown (2010) found that the most important factor in successfully passing school bond referenda in New Jersey was the level of trust the public had in the superintendent and the School Board. Trust and credibility in the School Board is an influential factor in referendum campaigns as is the vote taken by the board in enacting the referenda process. Having unanimous board support is an influential factor in the outcome of school finance elections (Holt, Wendt, & Smith, 2006; Erickson, 2011). Dr. Henry Boer (2001) states, "successful referendum plans begin with a strongly unified board" (p. 7).

As is the case for any type of election where voters have a freedom of choice in a secret ballot, a multitude of factors influence how one will vote on any given issue or candidate. School finance elections are no different, but through a review of the literature

relating to school finance elections, some themes begin to emerge regarding communications to the public, targeted and specific messages, establishing campaign committees, hiring consultants, and the role of the school board with all of these factors ultimately influencing the outcome of important school referenda.

Purpose

The purpose of this research study was to examine the relationship of community and school district variables such as socioeconomic status, level of student achievement, and district setting (urban, suburban, rural) to the outcome of a General Fund referendum in those Indiana school districts that have attempted a General Fund referendum. Additionally, this study examined the influence that campaign strategies, as determined by superintendents' perceptions, had on the success or failure of a General Fund referendum.

Methodology

A quantitative design approach was used for this study. Two distinct sets of data were used in the quantitative statistical analysis. First, the demographic variables of community setting, student achievement, and socioeconomic status were analyzed for all school districts that had run a General Fund referendum campaign between 2008 and the fall of 2013. Descriptive statistics and ensuing trends were presented after compiling this data. Then, predictive relationships were tested between the data and the outcome of the

referendum through the use of multiple logistic regression to determine statistical significance.

The second set of data used in the quantitative analysis came from a survey distributed to the superintendents who had led General Fund referendum campaigns. The survey allowed superintendents to respond to questions that provided data regarding the use of strategies and the relative importance of these strategies in the referendum process. Data collected from the survey were first tested to determine if there was statistical significance between the use of certain strategies and the outcome of the referendum. Finally, the survey data were analyzed using multiple logistic regression to determine if there was a statistical significant predictive relationship between the strategies listed on the survey and the outcome of a General Fund referendum.

Settings and Participants

The setting established for this study was school districts that had attempted General Fund referenda between 2008 when the new laws went into effect and the election in the fall of 2013. During that time period, a total of forty-five General Fund referendum campaigns were conducted in Indiana. The forty-five campaigns actually were generated from only forty-two school districts because three districts had attempted two referendum campaigns during that time frame. The forty-two school districts comprise a truly diverse sample of districts especially in the three demographic variable

areas included in this study: socioeconomic status, student achievement, and community setting.

The participants in this study were superintendents in the forty-two districts that ran General Fund referendum campaigns between 2008 and the fall election of 2013. The three districts that ran multiple General Fund referendum campaigns had the same superintendent for each attempt and one superintendent actually led referendum campaigns in two different districts after changing employment leaving a total of forty-one superintendents to survey as the sample.

Procedures

The data pertaining to the three demographic variables were collected for each school district via publicly available electronic sources. The community setting data were obtained from the National Center for Education Statistics and the student achievement and socioeconomic data were obtained from the Indiana Department of Education. The data collected pertaining to the campaign strategy use and relative importance came from a survey distributed to the forty-one superintendents who had run General Fund referendum campaigns. The survey instrument was distributed to these superintendents electronically for convenience and efficiency and was fully voluntary. An introductory paragraph introduced the purpose of the study to the superintendents as well as the significance of the study. Superintendents were informed that the responses would be held in the strictest of confidence and the only results that would be reported

would be done in aggregate form. The survey was distributed electronically to the superintendents and a follow-up reminder was sent one week after the first distribution to those who had not yet responded to give them one final opportunity to respond, if they desired. After ample time was given for all to respond, the survey was closed and the results were electronically available for the researcher to analyze. In total, 25 superintendents responded and participated fully in the survey.

Research Questions

This quantitative study of the factors that influence the outcome of General Fund referenda in Indiana seeks to answer the following critical questions:

1. What are the factors that have an impact on the outcome of school finance elections?
2. What are the general characteristics of Indiana school districts that have been successful in a General Fund referendum with respect to school setting, socioeconomic status of the school community, and student achievement level of the district?
3. What are the general characteristics of Indiana school districts that have failed in a General Fund referendum with respect to school setting, socioeconomic status of the school community, and student achievement level of the district?

4. Is there a statistically significant predictive relationship between the demographic factors of a school district and the success or failure of a General Fund referendum?

5. Is there a statistically significant predictive relationship between superintendents' perceptions of referendum campaign factors and the success or failure of a General Fund referendum?

Data Analysis

The computer software program SPSS 21.0 was used to perform the statistical analysis on the data collected. The dependent variable was the outcome of the General Fund referendum, either passing or failing. The independent variables for the demographic portion of the research were community setting, student achievement, and socioeconomic status. The independent variables for the second part of the research were the use and perceived importance of a collection of campaign strategies as determined through the use of the superintendent survey.

Results of Hypothesis Testing

As a result of the research questions, the following hypotheses were tested and the subsequent results are provided:

$H0_1$: There is no statistically significant predictive relationship between socioeconomic status of the school community and the success or failure of a General Fund referendum in Indiana.

Multiple logistic regression was used to test this hypothesis and failed to indicate a statistically significant relationship between the community setting and the outcome of a referendum, $\beta = -.11$, $p = .89$. Thus, we fail to reject the null hypothesis.

$H0_2$: The success or failure of a General Fund referendum in Indiana is independent of the school district's community setting.

A Chi Square analysis with a contingency table was used to test this hypothesis and failed to indicate a statistically significant result, $\chi^2(3) = 4.702$, $p = 0.195$. As a result, we fail to reject the null hypothesis.

$H0_3$: There is no statistically significant predictive relationship between the level of student achievement within a school district and the success or failure of a General Fund referendum in Indiana.

Multiple logistic regression was used to test this hypothesis and failed to indicate a statistically significant relationship between the level of student achievement and the outcome of a referendum. All three levels of student achievement tested (low, average, high), all failed to produce statistically significant results ($p = .26$, $p = .72$, $p = .53$). Thus, we fail to reject the null hypothesis.

$H0_4$: There is no statistically significant predictive relationship between superintendents' perceptions of campaigning through the use of a specific message of a high quality

education provided by the school district and the success or failure of a General Fund referendum.

Multiple logistic regression was used to test this hypothesis through the combination of two strategies listed on the superintendent survey (number 7 and number 29). The test failed to indicate a statistically significant relationship between the overall campaign strategy of promoting the district's high quality education and the outcome of a referendum. The significance levels were both greater than the threshold established of 0.05 with strategy 7 recording a p-value of $p = 0.85$ and strategy 29 recording a value of $p = 0.09$. Thus, we fail to reject the null hypothesis.

$H0_5$: There is no statistically significant predictive relationship between superintendents' perceptions of campaigning through the use of a specific message of the impact of a potential failure of a referendum and the overall outcome of a General Fund referendum.

Multiple logistic regression was again used to test this hypothesis through the analysis of two strategies from the survey, number 9 and number 24. The test failed to indicate a significant relationship between the strategy of presenting the potentially negative impact of a referendum and the outcome of a referendum. The respective p-values were $p = 0.24$ and $p = 0.12$ for strategy nine and strategy twenty-four. As a result, we fail to reject the null hypothesis.

$H0_6$: There is no statistically significant predictive relationship between superintendents' perceptions of establishing and effectively utilizing a campaign committee and the success or failure of a General Fund referendum.

Multiple logistic regression was used to test this hypothesis which encompassed five strategies from the superintendent survey (questions 5, 8, 22, 26 & 27). The test failed to indicate significance with p-values ranging from p = 0.23 for strategy 27 to p = 0.94 for strategy 8. Thus, we fail to reject the null hypothesis.

$H0_7$: There is no statistically significant predictive relationship between superintendents' perceptions of hiring a consultant and the success or failure of a General Fund referendum.

For this hypothesis, logistic regression was used to test the predictive relationship between campaign strategy number two and the outcome of a referendum. The test failed to indicate significance with a p-value of p = 0.77 and thus we fail to reject the null hypothesis.

$H0_8$: There is no statistically significant predictive relationship between superintendents' perceptions of the role of the school board and the success or failure of a General Fund referendum.

Logistic regression was used to test this hypothesis pertaining to the predictive relationship between the campaign strategy of the role of the school board and the outcome of a referendum. In this case, the test failed to indicate a statistically significant relationship between the variables with an overall p-value of p = 0.22. As a result, we fail to reject the null hypothesis.

$H0_9$: There is no statistically significant predictive relationship between superintendents' perceptions of a communications and public relations plan and the success or failure of a General Fund referendum.

This hypothesis incorporated five strategies as the independent variables (strategy numbers 6, 11, 12, 13, & 23) and was tested using multiple logistic regression for the predictive relationship to the outcome of a General Fund referendum. The test failed to indicate significance with a p-value range of $p = 0.97$ for strategy 23 and $p = 0.19$ for strategy 6. Thus, we fail to reject the null hypothesis.

$H0_{10}$: There is no statistically significant predictive relationship between superintendents' perceptions of tax implications for citizens and the success or failure of a General Fund referendum.

Multiple logistic regression was used to test this hypothesis which failed to indicate any significant results. The hypothesis included four different strategies from the superintendent survey that all revolved around the central concept of the tax implications for citizens in the event of a successful referendum. The p-values were $p=0.277$, $p=0.697$, $p=0.341$, and $p=0.546$ respectively for strategies four, ten, fourteen and twenty-one. As a result, we fail to reject the null hypothesis.

$H0_{11}$: There is no statistically significant predictive relationship between superintendents' perceptions of the use of social media and the success or failure of a General Fund referendum.

This hypothesis was tested using logistic regression and the independent variable from strategy number thirty on the superintendent survey. The test failed to indicate a significant result with a p-value for this predictive relationship of p = 0.38, and as a result, we fail to reject the null hypothesis.

$H0_{12}$: There is no statistically significant predictive relationship between superintendents' perceptions of community participation and the success or failure of a General Fund referendum.

Multiple logistic regression was used to test this hypothesis through the analysis of four campaign strategies (1, 3, 16, & 25). The results of the test failed to indicate statistical significance. The p-values were p = 0.26, p = 0.21, p = 0.07, and p = 0.85 for strategies one, three, sixteen, and twenty-five respectively. Thus, we fail to reject the null hypothesis.

$H0_{13}$: There is no statistically significant predictive relationship between superintendents' perceptions of targeting specific voter groups and the success or failure of a General Fund referendum.

Again, multiple logistic regression was used and for this hypothesis test, four different strategies were grouped together for the test (17, 18, 19, & 20). The test failed to return results that were statistically significant with a range of p-values of = 0.56 for strategy 18 to p = 0.10 for strategy 17. Thus, we fail to reject the null hypothesis.

$H0_{14}$: There is no statistically significant predictive relationship between superintendents' perceptions of having a strategic plan in place and the success or failure of a General Fund referendum.

To test this hypothesis, logistic regression was used for to test the predictive relationship between strategy number fifteen on the survey and the outcome of a General Fund referendum. The test failed to indicate a significant result with the p-value of $p = 0.23$. As a result, we fail to reject the null hypothesis.

Findings

This research study attempted to carefully and statistically analyze the data associated with school districts and communities that had undertaken the daunting task of organizing and running a General Fund referendum campaign in Indiana. The data sources came from two distinct perspectives: the community demographic factors as a whole and the specific campaign strategies used in the referendum campaign. Two of the three community demographic factors (setting and socioeconomic status) are largely out of the control of the school district, they are inherently embedded as community factors that are more influenced by political, social, and economic forces than directly influenced by the education provided through the school district. The district does have great influence on the third demographic factor of student achievement as well as the other data set studied for this research which came in the form of strategies used by the district during the referendum campaigns.

The community demographic factors helped to provide some context and description for the all forty-two school districts that had run a General Fund referendum between 2008 and the fall of 2013. This data included an analysis of the community setting, student achievement levels for the district, and the socioeconomic status for the district. The analysis revealed that for community setting, most of the referenda came from either the rural or the suburban group with fewer than one-third coming from the town and city groups combined. Of all the groups, the suburban setting had the highest success rate for the referenda with 69% of those attempted in the suburbs passing with voters. The lowest percentage of passage for a referendum came from the town setting with only a 20% passage rate. Upon further analysis, statistical testing revealed that there was no statistical evidence to show that community setting and the outcome of a referendum are related.

The student achievement levels for the districts in this study ranged from low (F letter grade from the IDOE) to high (A letter grade from the IDOE). Most districts attempting the General Fund referendum came from the higher achieving groups (letter grade of A or B) which also saw the best results in the elections. The high achieving districts were successful 57% of the time as compared to only 29% of the time for low achieving districts. Upon further statistical analysis of this data, no statistically significant predictive relationship was found between student achievement and the outcome of a referendum. However, continued examination of the data from these statistical tests does show an odds-ratio continuum that supports the descriptive statistics. The odds ratios indicate that low achieving districts have the lowest chance of having a

successful referendum with average districts having slightly higher odds than the low achieving districts but still considerably lower odds of passing as compared to the high achieving districts.

Socioeconomic status for each of the forty-two school districts reveals that nearly two-thirds of all districts attempting the General Fund referendum came from non-low income districts. When the socioeconomic status is examined taking into account success or failure of the referendum, the percentage of non-low income districts achieving success is only 55% with the low-income districts passing at a 44% rate. To determine if a statistically significant predictive relationship exists between socioeconomic status and outcome of a referendum, a multiple logistic regression model was performed. Analysis indicated that there was no statistically significant predictive relationship between the two variables and thus socioeconomic status is not a good predictor of success or failure in a General Fund referendum.

In addition to these demographic macro-factors that impact a General Fund referendum, this study also examined more specific campaign strategies, how they were used, and the relative importance of these strategies as determined by superintendents through an electronic survey. The survey contained thirty different campaign strategies and the data supplied by the superintendents were statistically analyzed in several different ways in an attempt to discern the significance and potential transferability of each strategy or group of strategies.

The analysis of the survey data began with a sorting of the thirty campaign strategies based on how frequently they were used by districts. An important finding

from the research is that five of the thirty campaign strategies were used by every district in the sample, 25 out of 25 districts. Each of these five campaign strategies clearly holds some value to superintendents and districts if every district made an attempt to incorporate them into their General Fund referendum campaign. While not all twenty-five districts were successful in their campaign, they all utilized these five strategies. Most of these were campaign strategies that were general in nature and would likely be common and good practice in any type of public election. For example, in-servicing campaign workers, creating detailed campaign literature, using unpaid media coverage, and providing forums for the community to get information were all strategies employed by every district in the sample and would constitute good practice in any school finance election.

After looking at simply whether the strategies were used or not in the various referendum campaigns, an analysis of the use of the strategies by the successful and unsuccessful revealed some significant results. Several of the campaign strategies were shown to have a statistically significant influence on the outcome of the General Fund referendum. Using paid promotional information, using existing school-based organizations in the campaign, involving community leaders in key campaign roles, and distributing information through social media were all shown to have a statistically significant impact on the outcome of referenda.

In addition to the use of the various campaign strategies, superintendents also rated the relative importance of the thirty strategies to the referendum campaign. Analysis of these importance ratings included a calculation for the average importance

rating as provided by the superintendents through the survey. The strategy with the highest average importance rating was number twenty-eight which was described as obtaining a unanimous vote of support from the school board. Other strategies ranking high in average importance were establishing a citizen's committee and providing detailed information to citizens working on the campaign. A further breakdown of the importance ratings separated them based on the outcome of the referendum. Averages were calculated for successful districts and for unsuccessful districts and then compared through the use of statistical analysis. The analysis sought to determine if there was a statistically significant difference in the mean importance ratings for the strategies when differentiated by outcome of the referendum. Two strategies were shown to have statistically significant differences in their mean importance ratings for successful versus unsuccessful districts. The first strategy deemed significant was described as focusing communication efforts on the high quality of the educational programs found within the district. Thus, those districts that were successful in their campaigns rated this strategy significantly higher in importance that their counterparts who ran failed campaigns. Second, the strategy described as emphasizing the above average student achievement within the district was shown to be statistically different between successful and non-successful districts. Those districts that won their referenda rated this strategy higher in importance as compared to those districts that had failed in their attempted referendum.

The importance ratings provided by the superintendent survey were also tested for their potentially significant predictive relationship to the outcome of a General Fund referendum. The thirty strategies were grouped together into categories by theme and a

total of eleven categories emerged from the thirty strategies. Each of these eleven groups was tested using multiple logistic regression to determine the predictive relationship between the grouped strategies and the outcome of the referendum. In all, none of the eleven groups yielded statistically significant predictive relationships between the category of strategies and the outcome of the referendum. However, despite the lack of statistical significance, some useful findings did come forward from the analysis. Through the logistic regression model, odds ratios were calculated that indicated what the magnitude of the impact would be on the outcome of a referendum when the importance ratings were increased.

For many of the strategies, changing the importance ratings had merely a nominal effect on the outcome. For a few of the strategies, a greater impact was realized by a simple one unit increase in the importance ratings, as supplied through the survey. Strategy number twenty-nine showed the greatest odds ratio value and provided evidence that the higher importance placed on emphasizing above average student achievement within the district, the greater the chance of having a successful outcome on election day. This supports other findings noted earlier based on other statistical tests. The strategy described as providing opportunities for patrons to discuss information about the referendum also returned a large odds ratio value, indicating an increase in the relative importance of this strategy could have a positive impact on the outcome of a referendum. Finally, strategy number seventeen described as identifying and contacting special interest groups to gain their support showed promise in improving the odds of winning a referendum when the importance ratings for this strategy were marked higher by

respondents. All in all, the predictive capacity for the grouped strategies relating to the outcome of the referendum was not strong statistically, but some limited practical value could be found in the results.

Implications and Recommendations for Further Study

The purpose of this study was to examine the factors that impact a General Fund referendum as a process to raise revenue for local school districts in Indiana. As is the case in any type of election and certainly in school finance elections throughout the country, there are a multitude of factors that will have an influence on the outcome of election referenda. With the changes to state law and school funding, the General Fund referendum has substantially increased in popularity in Indiana since the enactment of some of these laws in 2008. This study provides school district leaders and community leaders the opportunity to review empirical research regarding some of the factors that affect the General Fund referendum and the significance of those factors on the outcome of such an election. The General Fund referendum process in Indiana continues to gain in popularity among school districts seeking to recover from loss of revenue and ever-increasing challenges to the school budget. This research will provide districts with a plethora of issues to consider when planning for a General Fund referendum and hopefully spark healthy debate as to the best approach for campaigning for a referendum in order to achieve a favorable outcome. This study is by no means a handbook or manual for how to organize and implement a successful referendum campaign, as such a document does not exist. However, this study can provide some guidance and direction

for school districts and district leaders facing the daunting task of asking the citizens to reach into their pocketbooks to pay additional taxes.

This study is truly a beginning to what will likely become a large body of research on the General Fund referendum in Indiana. As this study reaches its conclusion, only a small percentage of school districts have attempted a referendum of this type and absent any changes to the current funding formula for schools and the laws governing tax caps in Indiana, the number of districts attempting the referendum strategy for raising revenue will only increase. Continued examination of the demographic factors present in communities and their relationship to the success or failure of a General Fund referendum would help districts as they prepare for a referendum. Along with more study of the demographic factors of affected communities, further research regarding the specific campaign strategies used by districts and employed by district leaders, such as the superintendent, will help to streamline the process for districts as they consider a referendum. Districts considering a referendum can focus on those strategies that have been proven to be successful and spend less time employing strategies that have been shown to be less successful.

As more and more districts attempt the General Fund referendum in Indiana, additional research into the connection or relationship between community demographics and certain campaign strategies for successful and unsuccessful districts could help to create a profile of how certain types of districts fare in the referendum process. With this profile in mind, districts could match their own demographics to the profiled data to see what types of strategies have been successful or unsuccessful in like districts.

Additionally, further study in the area of the "dual referendum" will be necessary as more districts entertain the idea of running both a construction and General Fund referendum at the same time. To date, only three districts in Indiana have run a "dual referendum" but the concept may gain in popularity throughout the state. Further study will also be necessary in the area of community tolerance for tax increases. After more districts have participated in this process, it may become clearer how much of a tax increase certain types of communities are willing to pass in the referendum process and how much they are not willing to pass. Also, further study will be necessary in how some districts determine the maximum number of years for which they will ask voters to approve the new tax increase. State statute currently sets the maximum at seven years, though some districts have attempted an election strategy of asking voters to approve the tax increase for fewer than seven years. Further study will help to determine if this is a viable strategy in certain types of districts. Finally, the statute on the General Fund referendum dictates that the tax increase can last a maximum of seven years if approved by the voters. As some districts near the end of this seven year period and consider going back to the voters for another referendum, further study will need to be conducted on how to best organize and prepare for a second General Fund referendum.

Limitations and Threats to Validity

This research study examined two distinctive sets of data from which conclusions were drawn. The first set of data included demographic data points from the communities that had attempted a General Fund referendum. Some of these data points

presented potential limitations to this study. First, for the variable of student achievement, the school district letter grade as reported by the IDOE was used. This may not be the best representation of the overall student achievement level of the students in the school district based on the formula the IDOE uses to calculate the district letter grade but it was at the very least standardized for all of the forty-five districts examined. Second, the data for community setting were determined by the locale codes defined through the U.S. Census Bureau and again, provide some standardization across the districts studied, but perhaps do not fully capture the type of community as it would be determined through other sources.

The second set of data used for this study came from a survey sent to thirty-nine superintendents who had run General Fund referenda in their districts. Twenty-five of the thirty-nine superintendents responded to the electronic survey which provides a healthy sample, though the relatively small number of total superintendents to receive the survey in the first place puts the overall sample at risk due to the small number. The small sample size contributes to difficulties in obtaining statistically significant results in many of the analyses attempted through the study, however some significant results were discovered. Finally, the nature of this targeted quantitative study limits the richness and the context of the communities and the superintendents who lead the referendum campaigns. The demographic variables and the thirty strategies listed on the survey cannot fully tell the story of how a General Fund referendum was won or lost given the multitude of political, social, and economic factors that strongly influence the voters in any given community.

Conclusion

Funding for local school districts in Indiana has been a topic of heated debate in recent years as the state has altered the property tax system and subsequently, the ways schools have been funded. The burden on local school districts to raise revenue resulted in some to choose the path of directly asking the voters of the community for an increase in local taxes to support the local schools, a process commonly referred to as the General Fund referendum. This process was seldom used prior to the enactment of new tax and school funding laws in 2008, but gained substantially in popularity as a result of the new laws. This study sought to determine what factors may have an impact on the outcome of such General Fund referenda in Indiana in order to assist districts and school leaders who may need to attempt a referendum in the future.

Factors in the form of demographic variables describing the communities in which referenda were attempted were analyzed along with specific campaign strategies employed by districts during the referendum. These analyses revealed some significant results and provided some context for future consideration by districts reviewing the possibility of attempting a General Fund referendum. In the end, a truly successful referendum campaign likely reflects a balance of the science of winning school finance elections and the art of convincing the citizens of a community that a wise investment in the future comes in the form of a properly-funded education for all children.

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APPENDICES

Appendix A

District Data for 45 General Fund Referenda from 2008 – Fall 2013

Year	District	P/F	Setting	SES	Achieve
Fall2010	Anderson Community School Corporation	F	c	L	D
2011	Avon Community School Corporation	F	s	N	A
Fall2012	Bartholomew Consolidated School Corporation	F	c	L	A
Fall2010	Center Grove Community School Corporation	F	s	N	A
2010	Clarksville Community School Corporation	F	s	L	C
Fall2010	Community School Corporation of Souther Hancock County	F	r	N	A
Fall2010	East Allen County Schools	F	s	L	C
2010	Eastern Hancock County Community School Corporation	F	r	N	B
Fall2010	Elwood Community School Corporation	F	t	L	D
2011	Franklin Township Community School Corporation	F	r	N	A
2009	Franklin Township Community Schools	F	r	N	A
Fall 2013	Michigan City Area Schools	F	r	L	D
2013	MSD of Boone Township	F	t	N	B
2010	MSD of Mt. Vernon	F	t	N	C
Fall2010	Mt. Vernon Community School Corporation	F	r	N	B
Fall2012	Mt. Vernon Community School Corporation	F	r	N	B
Fall 2013	Muncie Community Schools	F	c	L	D
2011	North Adams Community Schools	F	t	L	A
Fall2010	Northwest Shelby Schools	F	r	N	C
2010	Western Boone School Corporation	F	r	N	A
Fall2010	Whitko Community School Corporation	F	r	L	D
Fall2010	Zionsville Community Schools	F	s	N	A
2013	Barr-Reeve Community Schools	P	r	N	A
2009	Beech Grove City Schools	P	s	L	B
Fall2010	Brown County School Corporation	P	r	L	B
Fall2010	Cannelton City Schools	P	t	L	C
2010	Carmel Clay School Corporation	P	c	N	A
2011	Crown Point Community School Corporation	P	s	N	A
2012	Duneland School Corporation	P	s	N	B

Fall2012	Hamilton Community School Corporation	P	r	N	C
2009	Hamilton Souteastern Schools	P	s	N	A
Fall2010	Monroe County Community School Corporation	P	c	N	A
2011	MSD of Perry Township	P	c	L	C
2010	MSD of Washington Township	P	c	L	D
2009	MSD Soutwest Allen County	P	s	N	A
2010	Noblesville School Corporaton	P	s	N	A
2012	Oregon-Davis School Corporation	P	r	L	D
2013	School Town of Munster	P	s	N	A
2010	School Town of Speedway	P	s	L	A
Fall2011	Sheridan Community Schools	P	r	N	C
2009	Southern Wells Community Schools	P	r	N	A
2013	Union Township School Corporation	P	r	N	A
2010	West Lafayette Community School Corporation	P	s	N	A
Fall2010	Westfield-Washington Schools	P	s	N	A
2012	Zionsville Community Schools	P	s	N	A

Appendix B

Institutional Review Board Approval for Study

PURDUE UNIVERSITY

HUMAN RESEARCH PROTECTION PROGRAM
INSTITUTIONAL REVIEW BOARDS

To: MARILYN HIRTH
BRNG 5138
From: JEANNIE DICLEMENTI, Chair
Social Science IRB
Date: 03/26/2014
Committee Action: Exemption Granted
IRB Action Date: 03/26/2014
IRB Protocol #: 1402014569
Study Title: Factors affecting the outcome of a General Fund referendum
The Institutional Review Board (IRB) has reviewed the above-referenced study application and has determined that it meets the criteria for exemption under 45 CFR 46.101(b)(2) .
If you wish to make changes to this study, please refer to our guidance "**Minor Changes Not Requiring Review**" located on our website at http://www.irb.purdue.edu/policies.php. For changes requiring IRB review, please submit an **Amendment to Approved Study** form or **Personnel Amendment to Study** form, whichever is applicable, located on the forms page of our website www.irb.purdue.edu/forms.php. Please contact our office if you have any questions.
Below is a list of best practices that we request you use when conducting your research. The list contains both general items as well as those specific to the different exemption categories.

General

- To recruit from Purdue University classrooms, the instructor and all others associated with conduct of the course (e.g., teaching assistants) must not be present during announcement of the research opportunity or any recruitment activity. This may be accomplished by announcing, in advance, that class will either start later than usual or end earlier than usual so this activity may occur. It should be emphasized that attendance at the announcement and recruitment are voluntary and the student's attendance and enrollment decision will not be shared with those administering the course.
- If students earn extra credit towards their course grade through participation in a research project conducted by someone other than the course instructor(s), such as in the example above, the students participation should only be shared with the course instructor(s) at the end of the semester. Additionally, instructors who allow extra credit to be earned through participation in research must also provide an opportunity for students to earn comparable extra credit through a non-research activity requiring an amount of time and effort comparable to the research option.
- When conducting human subjects research at a non-Purdue college/university, investigators are urged to contact that institution's IRB to determine requirements for conducting research at that institution.
- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Category 1

- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Categories 2 and 3

- Surveys and questionnaires should indicate
    - ° only participants 18 years of age and over are eligible to participate in the research; and
    - ° that participation is voluntary; and
    - ° that any questions may be skipped; and
    - ° include the investigator's name and contact information.
- Investigators should explain to participants the amount of time required to participate. Additionally, they should explain to participants how confidentiality will be maintained or if it will not be maintained.
- When conducting focus group research, investigators cannot guarantee that all participants in the focus group will maintain the confidentiality of other group participants. The investigator should make participants aware of this potential for breach of confidentiality.
- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Category 6

- Surveys and data collection instruments should note that participation is voluntary.
- Surveys and data collection instruments should note that participants may skip any questions.
- When taste testing foods which are highly allergenic (e.g., peanuts, milk, etc.) investigators should disclose the possibility of a reaction to potential subjects.

Appendix C

Superintendent Survey Instrument

Practiced by District			**Directions**	**Importance of Strategy**				
Yes	No	Unknown	For each item below, indicate on the left whether or not that campaign strategy was practiced by your school district in the General Fund referendum campaign. In the right-hand column, indicate from your observation how important each of the strategies was, **or would have been**, in the referendum election.	Not Important	Somewhat Important	Average Importance	Very Important	Critical
			Completed a formal or informal community voter survey to assess the citizens' feelings toward the proposal prior to the election.					
			Hired a professional campaign consultant to help conduct the General Fund referendum.					
			Assessed community opinion about controversial local school issues before calling for a General Fund referendum					
			Surveyed the community to assess what increase in the tax rate would be acceptable.					
			Provided detailed information and in-service to citizens working on the General Fund referendum					

			campaign.					
			Developed detailed campaign literature filled with facts about the General Fund referendum and what it would provide and distributed it to the community.					
			Focused communication efforts on the high quality of the educational programs offered in the district.					
			Demonstrated responsiveness to the opposition and actively worked to diffuse their platform.					
			Attempted to neutralize "No" voters by pointing out negative effects of defeat.					
			Presented the referendum to the public as a "tax rate neutral" referendum (i.e. promises were made to reduce the tax rate in other funds to offset the impact of the proposed additional tax rate increase added to support the General Fund).					
			Had an ongoing, positive public relations program in place before deciding to hold a General Fund referendum.					
			Made use of unpaid media coverage to disseminate information about the General Fund referendum issue (letters to the editor, interviews, etc.).					

			Made use of paid promotional information to disseminate information about the General Fund referenda issue (television, radio, newspaper ads, etc.).					
			Provided information on tax increase for the average home					
			Had a long-range or strategic plan in place before calling for the General Fund referendum					
			Provided numerous opportunities for patrons to receive and discuss information about the referendum.					
			Identified and contacted internal and external special interest groups to gain their support and endorsements.					
			Identified potential yes/no/undecided voters by telephoning individuals listed in voter registration records.					
			Conducted a direct mail campaign targeted to "Yes" and "undecided" voters					
			Made personal contact and provided information to identified "undecided" voters.					
			Established a tax rate threshold through surveys or polling of the community and then selected a rate for the referendum that was at or below this threshold.					

			Established a citizens' committee to involve the public in organizing and implementing election activities.					
			Secured support from local newspapers via positive editorials and news coverage of the General Fund referendum.					
			Disseminated specific information to the public regarding the impact of an unsuccessful General Fund referendum (e.g. the number of teachers to be reduced)					
			Conducted special community events to call attention to the General Fund referendum.					
			Utilized existing school-based organizations such as PTA or parent's club in assessing, planning and promoting the General Fund referendum.					
			Involved community leaders in key campaign roles.					
			Obtained a unanimous vote of support from the school board on the resolution calling for a General Fund referendum.					
			Emphasized the above average student achievement within the district on State and/or National assessments (ISTEP+, ECA, SAT, ACT, etc.)					

			Distributed information regarding the General Fund referendum through the use of social media (i.e. facebook, twitter, instagram)					

Did the school district win the referendum? Yes or No

Optional open-ended question (please type your answer in the box provided):

Please describe any additional General Fund referendum strategies or practices that may have been used in your district that were not adequately represented in this survey.

Answer:

Appendix D

Chi Square Results of Strategy Use Related to Outcome of Referendum

Q1 * Completed a formal or informal community voter survey to assess the citizens' feelings toward the proposal prior to the election.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q1	Yes	4	9	13
	No	7	5	12
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.924[a]	1	.165		
Continuity Correction[b]	.968	1	.325		
Likelihood Ratio	1.948	1	.163		
Fisher's Exact Test				.238	.163
Linear-by-Linear Association	1.847	1	.174		
N of Valid Cases	25				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.28.

Q2 * Hired a professional campaign consultant to help conduct the General Fund referendum.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q2	Yes	4	7	11
	No	7	7	14
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.465[a]	1	.495		
Continuity Correction[b]	.076	1	.783		
Likelihood Ratio	.468	1	.494		
Fisher's Exact Test				.689	.393
Linear-by-Linear Association	.446	1	.504		
N of Valid Cases	25				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.84.

b. Computed only for a 2x2 table

Q3 * Assessed community opinion about controversial local school issues before calling for a General Fund referendum

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q3	Yes	9	9	18
	No	2	5	7
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.939[a]	1	.332		
Continuity Correction[b]	.271	1	.603		
Likelihood Ratio	.967	1	.325		
Fisher's Exact Test				.407	.305
Linear-by-Linear Association	.902	1	.342		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.08.

b. Computed only for a 2x2 table

Q4 * Surveyed the community to assess what increase in the tax rate would be acceptable.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q4	Yes	5	3	8
	No	6	11	17
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.634[a]	1	.201		
Continuity Correction[b]	.716	1	.397		
Likelihood Ratio	1.637	1	.201		
Fisher's Exact Test				.389	.199
Linear-by-Linear Association	1.569	1	.210		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.52.

b. Computed only for a 2x2 table

Q5 * Provided detailed information and in-service to citizens working on the General Fund referendum campaign.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q5	Yes	11	14	25
Total		11	14	25

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	25

a. No statistics are computed because Q5 is a constant.

Q6 * Developed detailed campaign literature filled with facts about the General Fund referendum and what it would provide and distributed it to the community.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q6	Yes	11	14	25
Total		11	14	25

Q7 * Focused communication efforts on the high quality of the educational programs offered in the district.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q7	Yes	10	13	23
	No	1	1	2
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.032[a]	1	.859		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.032	1	.859		
Fisher's Exact Test				1.000	.697
Linear-by-Linear Association	.030	1	.861		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .88.

b. Computed only for a 2x2 table

Q8 * Demonstrated responsiveness to the opposition and actively worked to diffuse their platform.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q8	Yes	8	11	19
	No	2	3	5
	Unknown	1	0	1
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.333[a]	2	.514
Likelihood Ratio	1.702	2	.427
Linear-by-Linear Association	.468	1	.494
N of Valid Cases	25		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .44.

Q9 * Attempted to neutralize "No" voters by pointing out negative effects of defeat.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q9	Yes	7	10	17
	No	4	4	8
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.172[a]	1	.678		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.171	1	.679		
Fisher's Exact Test				1.000	.504
Linear-by-Linear Association	.165	1	.685		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.52.

b. Computed only for a 2x2 table

Q10 * Presented the referendum to the public as a "tax rate neutral" referendum (i.e. promises were made to reduce the tax rate in other funds to offset the impact of the proposed additional tax rate increase added to support the General Fund).

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q10	Yes	0	2	2
	No	11	12	23
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.708[a]	1	.191		
Continuity Correction[b]	.318	1	.573		
Likelihood Ratio	2.455	1	.117		
Fisher's Exact Test				.487	.303
Linear-by-Linear Association	1.640	1	.200		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .88.

b. Computed only for a 2x2 table

Q11 * Had an ongoing, positive public relations program in place before deciding to hold a General Fund referendum.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q11	Yes	8	8	16
	No	3	6	9
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.649[a]	1	.420		
Continuity Correction[b]	.149	1	.699		
Likelihood Ratio	.659	1	.417		
Fisher's Exact Test				.677	.352
Linear-by-Linear Association	.623	1	.430		
N of Valid Cases	25				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.96.

b. Computed only for a 2x2 table

Q12 * Made use of unpaid media coverage to disseminate information about the General Fund referendum issue (letters to the editor, interviews, etc.).

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q12	Yes	11	14	25
Total		11	14	25

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	25

a. No statistics are computed because Q12 is a constant.

Q13 * Made use of paid promotional information to disseminate information about the General Fund referenda issue (television, radio, newspaper ads, etc.).

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q13	Yes	1	8	9
	No	10	6	16
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.173[a]	1	.013		
Continuity Correction[b]	4.264	1	.039		
Likelihood Ratio	6.847	1	.009		
Fisher's Exact Test				.033	.017
Linear-by-Linear Association	5.926	1	.015		
N of Valid Cases	25				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.96.

b. Computed only for a 2x2 table

Q14 * Provided information on tax increase for the average home

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q14	Yes	11	14	25
Total		11	14	25

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	25

a. No statistics are computed because Q14 is a constant.

Q15 * Had a long-range or strategic plan in place before calling for the General Fund referendum

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q15	Yes	11	10	21
	No	0	4	4
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.741[a]	1	.053		
Continuity Correction[b]	1.918	1	.166		
Likelihood Ratio	5.232	1	.022		
Fisher's Exact Test				.105	.079
Linear-by-Linear Association	3.592	1	.058		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.76.

b. Computed only for a 2x2 table

Q16 * Provided numerous opportunities for patrons to receive and discuss information about the referendum.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q16	Yes	11	14	25
Total		11	14	25

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	25

a. No statistics are computed because Q16 is a constant.

Q17 * Identified and contacted internal and external special interest groups to gain their support and endorsements.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q17	Yes	9	14	23
	No	2	0	2
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.767[a]	1	.096		
Continuity Correction[b]	.848	1	.357		
Likelihood Ratio	3.507	1	.061		
Fisher's Exact Test				.183	.183
Linear-by-Linear Association	2.656	1	.103		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .88.

b. Computed only for a 2x2 table

Q18 * Identified potential yes/no/undecided voters by telephoning individuals listed in voter registration records.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q18	Yes	4	10	14
	No	7	4	11
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.074[a]	1	.080		
Continuity Correction[b]	1.815	1	.178		
Likelihood Ratio	3.124	1	.077		
Fisher's Exact Test				.116	.089
Linear-by-Linear Association	2.951	1	.086		
N of Valid Cases	25				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.84.

b. Computed only for a 2x2 table

Q19 * Conducted a direct mail campaign targeted to "Yes" and "undecided" voters

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q19	Yes	7	10	17
	No	4	4	8
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.172[a]	1	.678		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.171	1	.679		
Fisher's Exact Test				1.000	.504
Linear-by-Linear Association	.165	1	.685		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.52.

b. Computed only for a 2x2 table

Q20 * Made personal contact and provided information to identified "undecided" voters.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q20	Yes	8	10	18
	No	2	4	6
	Unknown	1	0	1
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.551[a]	2	.460
Likelihood Ratio	1.928	2	.381
Linear-by-Linear Association	.121	1	.728
N of Valid Cases	25		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .44.

Q21 * Established a tax rate threshold through surveys or polling of the community and then selected a rate for the referendum that was at or below this threshold.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q21	Yes	3	4	7
	No	8	10	18
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.005[a]	1	.943		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.005	1	.943		
Fisher's Exact Test				1.000	.649
Linear-by-Linear Association	.005	1	.944		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.08.

b. Computed only for a 2x2 table

Q22 * Established a citizens' committee to involve the public in organizing and implementing election activities.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q22	Yes	9	14	23
	No	2	0	2
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.767[a]	1	.096		
Continuity Correction[b]	.848	1	.357		
Likelihood Ratio	3.507	1	.061		
Fisher's Exact Test				.183	.183
Linear-by-Linear Association	2.656	1	.103		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .88.

b. Computed only for a 2x2 table

Q23 * Secured support from local newspapers via positive editorials and news coverage of the General Fund referendum.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q23	Yes	9	10	19
	No	2	4	6
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.365[a]	1	.546		
Continuity Correction[b]	.017	1	.895		
Likelihood Ratio	.371	1	.542		
Fisher's Exact Test				.661	.452
Linear-by-Linear Association	.350	1	.554		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.64.

b. Computed only for a 2x2 table

Q24 * Disseminated specific information to the public regarding the impact of an unsuccessful General Fund referendum (e.g. the number of teachers to be reduced)

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q24	Yes	10	12	22
	No	1	2	3
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.157[a]	1	.692		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.161	1	.688		
Fisher's Exact Test				1.000	.593
Linear-by-Linear Association	.151	1	.697		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.32.

b. Computed only for a 2x2 table

Q25 * Conducted special community events to call attention to the General Fund referendum.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q25	Yes	10	12	22
	No	1	2	3
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.157[a]	1	.692		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.161	1	.688		
Fisher's Exact Test				1.000	.593
Linear-by-Linear Association	.151	1	.697		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.32.

b. Computed only for a 2x2 table

Q26 * Utilized existing school-based organizations such as PTA or parent's club in assessing, planning and promoting the General Fund referendum.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q26	Yes	8	14	22
	No	3	0	3
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.339[a]	1	.037		
Continuity Correction[b]	2.141	1	.143		
Likelihood Ratio	5.455	1	.020		
Fisher's Exact Test				.072	.072
Linear-by-Linear Association	4.165	1	.041		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.32.

b. Computed only for a 2x2 table

Q27 * Involved community leaders in key campaign roles.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q27	Yes	8	14	22
	No	3	0	3
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.339[a]	1	.037		
Continuity Correction[b]	2.141	1	.143		
Likelihood Ratio	5.455	1	.020		
Fisher's Exact Test				.072	.072
Linear-by-Linear Association	4.165	1	.041		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.32.

b. Computed only for a 2x2 table

Q28 * Obtained a unanimous vote of support from the school board on the resolution calling for a General Fund referendum.

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q28	Yes	9	13	22
	No	2	1	3
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.711[a]	1	.399		
Continuity Correction[b]	.050	1	.823		
Likelihood Ratio	.710	1	.399		
Fisher's Exact Test				.565	.407
Linear-by-Linear Association	.682	1	.409		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.32.

b. Computed only for a 2x2 table

Q29 * Emphasized the above average student achievement within the district on State and/or National assessments (ISTEP+, ECA, SAT, ACT, etc.)

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q29	Yes	6	12	18
	No	5	2	7
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.968[a]	1	.085		
Continuity Correction[b]	1.624	1	.203		
Likelihood Ratio	3.006	1	.083		
Fisher's Exact Test				.177	.102
Linear-by-Linear Association	2.850	1	.091		
N of Valid Cases	25				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.08.

b. Computed only for a 2x2 table

Q30 * Distributed information regarding the General Fund referendum through the use of social media (i.e. facebook, twitter, instagram)

Crosstab

Count

		What was the outcome of your General Fund referendum?		Total
		lost	won	
Q30	Yes	4	11	15
	No	7	3	10
Total		11	14	25

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.573[a]	1	.032		
Continuity Correction[b]	2.983	1	.084		
Likelihood Ratio	4.682	1	.030		
Fisher's Exact Test				.049	.042
Linear-by-Linear Association	4.390	1	.036		
N of Valid Cases	25				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.40.

b. Computed only for a 2x2 table

Appendix E

T-tests for Mean Importance Rating of Successful vs. Unsuccessful Districts

Group Statistics – Importance Ratings for Thirty Strategies

	What was the outcome of your General Fund referendum?	N	Mean	Std. Deviation	Std. Error Mean
Q1-RATING	lost	11	3.36	1.120	.338
	won	14	3.64	1.336	.357
Q2-RATING	lost	11	3.18	1.537	.464
	won	14	3.00	1.664	.445
Q3-RATING	lost	11	3.82	.751	.226
	won	14	3.57	1.651	.441
Q4-RATING	lost	11	3.64	1.027	.310
	won	14	3.00	1.301	.348
Q5-RATING	lost	11	4.36	.674	.203
	won	14	4.79	.426	.114
Q6-RATING	lost	11	4.36	.809	.244
	won	14	4.71	.469	.125
Q7-RATING	lost	11	3.64	.674	.203
	won	14	4.43	.646	.173
Q8-RATING	lost	11	3.55	1.293	.390
	won	14	3.71	1.383	.370

Q9-RATING	lost	11	3.00	1.265	.381
	won	14	2.79	1.369	.366
Q10-RATING	lost	11	2.82	1.401	.423
	won	14	2.36	1.336	.357
Q11-RATING	lost	11	4.09	.701	.211
	won	14	3.79	.975	.261
Q12-RATING	lost	11	4.09	.701	.211
	won	14	4.07	.997	.267
Q13-RATING	lost	11	2.82	.874	.263
	won	14	2.93	1.439	.385
Q14-RATING	lost	11	4.64	.505	.152
	won	14	4.43	.646	.173
Q15-RATING	lost	11	4.18	.751	.226
	won	14	3.71	1.069	.286
Q16-RATING	lost	11	4.27	.647	.195
	won	14	4.64	.497	.133
Q17-RATING	lost	11	4.00	.632	.191
	won	14	4.50	.650	.174
Q18-RATING	lost	11	3.18	.603	.182
	won	14	3.43	1.342	.359
Q19-RATING	lost	11	3.55	.688	.207
	won	14	3.14	1.406	.376
Q20-RATING	lost	11	3.55	1.036	.312
	won	14	3.71	1.541	.412

Q21-RATING	lost	11	3.45	1.214	.366
	won	14	2.64	1.598	.427
Q22-RATING	lost	11	4.36	.674	.203
	won	14	4.79	.426	.114
Q23-RATING	lost	11	3.55	1.036	.312
	won	14	3.71	1.139	.304
Q24-RATING	lost	11	3.45	1.440	.434
	won	14	4.07	.917	.245
Q25-RATING	lost	11	3.73	1.104	.333
	won	14	4.00	.877	.234
Q26-RATING	lost	11	3.55	.688	.207
	won	14	3.93	.829	.221
Q27-RATING	lost	11	3.73	.905	.273
	won	14	4.29	.611	.163
Q28-RATING	lost	11	4.91	.302	.091
	won	14	4.57	.756	.202
Q29-RATING	lost	11	3.00	1.183	.357
	won	14	4.36	.633	.169
Q30-RATING	lost	11	3.64	.924	.279
	won	14	4.07	1.439	.385

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q1-RATING	Equal variances assumed	.136	.715	-.556	23	.584	-.279	.502	-1.318	.760
	Equal variances not assumed			-.568	22.871	.576	-.279	.492	-1.296	.738
Q2-RATING	Equal variances assumed	.307	.585	.280	23	.782	.182	.649	-1.160	1.524
	Equal variances not assumed			.283	22.329	.780	.182	.642	-1.149	1.513
Q3-RATING	Equal variances assumed	9.956	.004	.458	23	.651	.247	.538	-.867	1.360
	Equal variances not assumed			.498	19.030	.624	.247	.496	-.791	1.285

Q4-RATING	Equal variances assumed	.387	.540	1.328	23	.197	.636	.479	-.355	1.628
	Equal variances not assumed			1.367	22.995	.185	.636	.466	-.327	1.599
Q5-RATING	Equal variances assumed	5.070	.034	-1.912	23	.068	-.422	.221	-.879	.035
	Equal variances not assumed			-1.812	16.039	.089	-.422	.233	-.916	.072
Q6-RATING	Equal variances assumed	6.554	.018	-1.361	23	.187	-.351	.258	-.884	.182
	Equal variances not assumed			-1.279	15.161	.220	-.351	.274	-.935	.233
Q7-RATING	Equal variances assumed	.110	.743	-2.986	23	.007	-.792	.265	-1.341	-.243
	Equal variances not assumed			-2.970	21.164	.007	-.792	.267	-1.347	-.238
Q8-RATING	Equal variances assumed	.219	.645	-.312	23	.758	-.169	.542	-1.290	.952

	Equal variances not assumed			-.314	22.233	.756	-.169	.537	-1.282	.945
Q9-RATING	Equal variances assumed	.532	.473	.402	23	.692	.214	.534	-.890	1.318
	Equal variances not assumed			.405	22.328	.689	.214	.528	-.881	1.309
Q10-RATING	Equal variances assumed	.004	.949	.838	23	.410	.461	.550	-.677	1.599
	Equal variances not assumed			.833	21.107	.414	.461	.553	-.689	1.611
Q11-RATING	Equal variances assumed	.248	.623	.874	23	.391	.305	.349	-.417	1.027
	Equal variances not assumed			.910	22.864	.372	.305	.335	-.389	.999
Q12-RATING	Equal variances assumed	2.036	.167	.055	23	.957	.019	.355	-.715	.753
	Equal variances not assumed			.057	22.778	.955	.019	.340	-.684	.723

Q13-RATING	Equal variances assumed	5.869	.024	-.223	23	.825	-.110	.494	-1.132	.911
	Equal variances not assumed			-.237	21.817	.815	-.110	.466	-1.078	.857
Q14-RATING	Equal variances assumed	1.597	.219	.876	23	.390	.208	.237	-.283	.699
	Equal variances not assumed			.903	23.000	.376	.208	.230	-.268	.684
Q15-RATING	Equal variances assumed	.740	.399	1.229	23	.231	.468	.380	-.319	1.254
	Equal variances not assumed			1.283	22.776	.213	.468	.365	-.287	1.222
Q16-RATING	Equal variances assumed	.504	.485	-1.620	23	.119	-.370	.228	-.843	.103
	Equal variances not assumed			-1.569	18.395	.134	-.370	.236	-.865	.125
Q17-RATING	Equal variances assumed	1.761	.198	-1.931	23	.066	-.500	.259	-1.036	.036

	Equal variances not assumed			-1.938	21.895	.066	-.500	.258	-1.035	.035
Q18-RATING	Equal variances assumed	6.732	.016	-.565	23	.578	-.247	.437	-1.151	.657
	Equal variances not assumed			-.613	18.913	.547	-.247	.402	-1.089	.595
Q19-RATING	Equal variances assumed	5.325	.030	.869	23	.394	.403	.464	-.556	1.361
	Equal variances not assumed			.938	19.737	.360	.403	.429	-.494	1.299
Q20-RATING	Equal variances assumed	1.413	.247	-.312	23	.758	-.169	.542	-1.290	.952
	Equal variances not assumed			-.327	22.555	.747	-.169	.517	-1.239	.901
Q21-RATING	Equal variances assumed	1.867	.185	1.395	23	.176	.812	.582	-.392	2.015
	Equal variances not assumed			1.443	22.987	.162	.812	.562	-.352	1.975

Q22-RATING	Equal variances assumed	5.070	.034	-1.912	23	.068	-.422	.221	-.879	.035
	Equal variances not assumed			-1.812	16.039	.089	-.422	.233	-.916	.072
Q23-RATING	Equal variances assumed	.008	.931	-.383	23	.706	-.169	.441	-1.082	.744
	Equal variances not assumed			-.387	22.443	.702	-.169	.436	-1.072	.734
Q24-RATING	Equal variances assumed	4.913	.037	-1.305	23	.205	-.617	.473	-1.595	.361
	Equal variances not assumed			-1.238	16.129	.234	-.617	.498	-1.673	.439
Q25-RATING	Equal variances assumed	.035	.854	-.689	23	.498	-.273	.396	-1.091	.546
	Equal variances not assumed			-.670	18.821	.511	-.273	.407	-1.125	.580
Q26-RATING	Equal variances assumed	.183	.673	-1.234	23	.230	-.383	.310	-1.025	.259

	Equal variances not assumed			-1.263	22.904	.219	-.383	.303	-1.011	.245
Q27-RATING	Equal variances assumed	1.485	.235	-1.841	23	.079	-.558	.303	-1.186	.069
	Equal variances not assumed			-1.757	16.800	.097	-.558	.318	-1.230	.113
Q28-RATING	Equal variances assumed	10.147	.004	1.392	23	.177	.338	.243	-.164	.839
	Equal variances not assumed			1.524	17.846	.145	.338	.222	-.128	.803
Q29-RATING	Equal variances assumed	3.093	.092	-3.685	23	.001	-1.357	.368	-2.119	-.595
	Equal variances not assumed			-3.437	14.446	.004	-1.357	.395	-2.202	-.513
Q30-RATING	Equal variances assumed	.961	.337	-.869	23	.394	-.435	.500	-1.470	.600
	Equal variances not assumed			-.916	22.258	.370	-.435	.475	-1.420	.549

Appendix F

Eleven Logistic Regression Models for Grouped Campaign Strategies

Variables in the Equation – Community Participation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_1	.556	.495	1.262	1	.261	1.743	.661	4.596
	Strategy_3	-.568	.451	1.584	1	.208	.567	.234	1.372
	Strategy_16	1.746	.975	3.211	1	.073	5.734	.849	38.726
	Strategy_25	-.110	.570	.037	1	.847	.896	.293	2.737
	Constant	-7.033	4.364	2.597	1	.107	.001		

a. Variable(s) entered on step 1: Strategy_1, Strategy_3, Strategy_16, Strategy_25.

Variables in the Equation – Having a Strategic Plan in Place

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_15	-.607	.509	1.427	1	.232	.545	.201	1.476
	Constant	2.651	2.086	1.615	1	.204	14.169		

a. Variable(s) entered on step 1: Strategy_15.

Variables in the Equation – Targeting Specific Voter Groups

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_17	1.322	.791	2.791	1	.095	3.749	.796	17.670
	Strategy_18	.333	.570	.341	1	.559	1.395	.457	4.259
	Strategy_19	-.727	.564	1.658	1	.198	.484	.160	1.462
	Strategy_20	.375	.432	.752	1	.386	1.454	.624	3.393
	Constant	-5.373	3.753	2.049	1	.152	.005		

a. Variable(s) entered on step 1: Strategy_17, Strategy_18, Strategy_19, Strategy_20.

Variables in the Equation – Hire a Consultant

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_2	-.076	.261	.085	1	.771	.927	.555	1.547
	Constant	.477	.906	.277	1	.599	1.611		

a. Variable(s) entered on step 1: Strategy_2.

Variables in the Equation – Role of School Board

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_28	-1.247	1.005	1.540	1	.215	.287	.040	2.060
	Constant	6.205	4.899	1.604	1	.205	495.024		

a. Variable(s) entered on step 1: Strategy_28.

Variables in the Equation – Use of Social Media

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_30	.301	.343	.769	1	.381	1.351	.690	2.645
	Constant	-.921	1.387	.441	1	.507	.398		

a. Variable(s) entered on step 1: Strategy_30.

Variables in the Equation – Tax Implications for Citizens

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_4	-.491	.452	1.181	1	.277	.612	.252	1.484
	Strategy_10	-.136	.349	.152	1	.697	.873	.441	1.729
	Strategy_14	-.821	.863	.905	1	.341	.440	.081	2.388
	Strategy_21	-.204	.338	.364	1	.546	.816	.421	1.581
	Constant	6.550	4.541	2.081	1	.149	699.541		

a. Variable(s) entered on step 1: Strategy_4, Strategy_10, Strategy_14, Strategy_21.

Variables in the Equation – Campaign Committee

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_5	1.035	.907	1.301	1	.254	2.814	.476	16.651
	Strategy_8	-.032	.395	.007	1	.935	.968	.447	2.098
	Strategy_22	.814	.969	.705	1	.401	2.257	.338	15.088
	Strategy_26	.256	.735	.121	1	.728	1.292	.306	5.455
	Strategy_27	.830	.687	1.457	1	.227	2.292	.596	8.818
	Constant	-12.402	5.373	5.328	1	.021	.000		

a. Variable(s) entered on step 1: Strategy_5, Strategy_8, Strategy_22, Strategy_26, Strategy_27.

Variables in the Equation – Communications and Public Relations

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_6	1.076	.823	1.708	1	.191	2.932	.584	14.715
	Strategy_11	-.475	.596	.634	1	.426	.622	.193	2.001
	Strategy_12	-.319	.622	.264	1	.608	.727	.215	2.459
	Strategy_13	.062	.405	.023	1	.879	1.064	.481	2.351
	Strategy_23	-.021	.488	.002	1	.966	.980	.376	2.549
	Constant	-1.581	4.006	.156	1	.693	.206		

a. Variable(s) entered on step 1: Strategy_6, Strategy_11, Strategy_12, Strategy_13, Strategy_23.

Variables in the Equation – Message of High Quality Education

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_7	-.297	1.601	.034	1	.853	.743	.032	17.138
	Strategy_29	2.454	1.456	2.842	1	.092	11.632	.671	201.663
	Constant	-8.007	4.807	2.774	1	.096	.000		

Variables in the Equation – Implications of Potential Failure

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Strategy_9	-.602	.517	1.356	1	.244	.548	.199	1.508
	Strategy_24	.855	.547	2.441	1	.118	2.352	.804	6.878
	Constant	-1.177	1.477	.635	1	.426	.308		

a. Variable(s) entered on step 1: Strategy_9, Strategy_24.

Appendix G

Cronbach's Alpha Test for Superintendent Survey Questions

Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excluded	0	.0
	Total	25	100.0

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.790	.793	30

Item Statistics

	Mean	Std. Deviation	N
Q1-RATING	3.52	1.229	25
Q2-RATING	3.08	1.579	25
Q3-RATING	3.68	1.314	25
Q4-RATING	3.28	1.208	25
Q5-RATING	4.60	.577	25
Q6-RATING	4.56	.651	25

Q7-RATING	4.08	.759	25
Q8-RATING	3.64	1.319	25
Q9-RATING	2.88	1.301	25
Q10-RATING	2.56	1.356	25
Q11-RATING	3.92	.862	25
Q12-RATING	4.08	.862	25
Q13-RATING	2.88	1.201	25
Q14-RATING	4.52	.586	25
Q15-RATING	3.92	.954	25
Q16-RATING	4.48	.586	25
Q17-RATING	4.28	.678	25
Q18-RATING	3.32	1.069	25
Q19-RATING	3.32	1.145	25
Q20-RATING	3.64	1.319	25
Q21-RATING	3.00	1.472	25
Q22-RATING	4.60	.577	25
Q23-RATING	3.64	1.075	25
Q24-RATING	3.80	1.190	25
Q25-RATING	3.88	.971	25
Q26-RATING	3.76	.779	25
Q27-RATING	4.04	.790	25
Q28-RATING	4.72	.614	25
Q29-RATING	3.76	1.128	25
Q30-RATING	3.88	1.236	25

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q1-RATING	109.80	126.333	.484	.	.774
Q2-RATING	110.24	127.690	.309	.	.785
Q3-RATING	109.64	126.990	.422	.	.777
Q4-RATING	110.04	132.040	.278	.	.785
Q5-RATING	108.72	141.627	-.053	.	.794
Q6-RATING	108.76	134.357	.427	.	.782
Q7-RATING	109.24	140.440	.012	.	.794
Q8-RATING	109.68	127.643	.397	.	.779
Q9-RATING	110.44	137.507	.066	.	.797
Q10-RATING	110.76	129.690	.314	.	.784
Q11-RATING	109.40	144.000	-.170	.	.801
Q12-RATING	109.24	132.357	.410	.	.780
Q13-RATING	110.44	127.507	.452	.	.776
Q14-RATING	108.80	136.083	.351	.	.784
Q15-RATING	109.40	131.083	.423	.	.779
Q16-RATING	108.84	138.973	.138	.	.789
Q17-RATING	109.04	140.290	.030	.	.793
Q18-RATING	110.00	126.833	.550	.	.772

Q19-RATING	110.00	129.167	.413	.	.778
Q20-RATING	109.68	128.810	.357	.	.781
Q21-RATING	110.32	129.310	.291	.	.786
Q22-RATING	108.72	135.627	.392	.	.783
Q23-RATING	109.68	133.227	.276	.	.785
Q24-RATING	109.52	128.177	.432	.	.777
Q25-RATING	109.44	133.507	.302	.	.784
Q26-RATING	109.56	129.673	.617	.	.774
Q27-RATING	109.28	140.460	.008	.	.794
Q28-RATING	108.60	134.083	.476	.	.781
Q29-RATING	109.56	138.090	.070	.	.795
Q30-RATING	109.44	126.173	.487	.	.774

VITA

VITA

Andrew C. Sargent

Education:

Ph.D. Educational Leadership, Purdue University, December 2014
M.S. Educational Administration, Purdue University, August 2002
B.A. Biology, Indiana University, May 1997

Employment:

Teaching

1997 – 2003 Science, Robert A. Taft Middle School

Taught eighth grade science on an interdisciplinary team utilizing the middle school philosophy. Developed instructional units incorporating hands-on science experiments and effective use of technology. Collaborated with teaching teammates to design, implement, and assess interdisciplinary units of instruction that were student-centered with an emphasis on accommodating a variety of learning styles.

2003 – 2007 Biology, Crown Point High School

Taught freshman through seniors in the courses of Biology and Life Science. Incorporated Indiana State Standards and local objectives into an instructional style utilizing the laboratory facilities of our new, state of the art, high school building. Effectively co-taught life science courses with a special education teacher that blended best practices in science instruction with optimal special education techniques conducive to the learning of our LRE students. Coached the boys junior varsity basketball team, assistant coach for boys track, and co-sponsored the academic team.

Assistant Principal

2007 – 2008 Willowcreek Middle School, Portage, Indiana

Evaluated teachers through both direct classroom observation and written evaluation as well as supervised the development of professional growth plans for those teachers who met the district guidelines for participation in the process. Maintained a safe and comfortable learning environment by collaborating with teachers and support staff, including the direct responsibility of supervising and evaluating the custodial staff. Supervised the design and implementation of Individualized Educational Plans for special education students. Monitored student discipline for the nearly 1300 students enrolled at Willowcreek. Served as the Athletic Director responsible for scheduling and organizing interscholastic contests as well as staffing the 30 coaching positions. Participated in the design of the continuous school improvement plan and the associated professional development needed to assist the staff in implementing the plan.

2008 – present Benjamin Franklin Middle School, Valparaiso, Indiana

Facilitated the implementation of the Acuity standardized assessment system across all three grade levels, sixth through eighth, in the core academic areas of language arts, math, science, and social studies. Assisted teachers with the interpretation of the data collected from the Acuity assessments in order to determine appropriate instruction for students. In collaboration with other district administrators, designed a curriculum for high ability science students that allows them to take Biology I, for high school credit, in their eighth grade year. Within the framework of established district minimum requirements, developed a model for Response to Instruction (RTI) to be used at the middle level schools in Valparaiso. Served as a member on the district technology committee with a focus on providing resources and support to teachers as they utilize instructional technology to enhance learning within their classrooms. Responsible for leading the school improvement team in their efforts to maintain a school improvement plan that is relevant and focused on continuous school improvement.