THE RELATIONSHIP BETWEEN COMPONENTS OF THE OHIO LOCAL SCHOOL DISTRICT REPORT CARD AND THE OUTCOME OF A SCHOOL TAX LEVY

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The relationship between components of the local school district report card, school
district typology, and the outcome of public school tax levy requests were examined in
this study. A correlation research design was used to measure the relationship between
the independent variables (performance index, average yearly progress, value added,
economically disadvantaged, school district typology, and designation) and the dependent
variable, the outcome of a school district tax levy request. Preexisting data obtained from
the Ohio Department of Education’s interactive local report card site and Ohio Secretary
of State’s election result site from the November 2011 General Election were analyzed to
answer two research questions: is there a relationship between the outcome of public
school district tax levy requests and components of the Local School District Report Card
and is there a relationship between the outcome of a public school district tax levy
requests and school district typology? A Pearson correlation with an alpha level of .05
was used to determine the significance and direction of the relationship between the
variables. The study results suggest that components from the local school district report
cards and school district typology do not serve as a good predictor of school district tax
levy passage.
Dedication

This study is dedicated in memory of my parents, Wayne and Faye Wheatley. I am grateful for your endless supply of love, encouragement, acceptance, and support. I was blessed to have you instill qualities of respect, honesty, integrity and work ethic. You taught me to do what is right, as a Christian and provided me with a wonderful life, I miss you both every single day. I would also like to thank my children, Vicki, Michael, and Dominique: my life, my inspiration, my reason for being.
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I express my deepest gratitude to Dr. Harold E. Wilson. Thank you for taking me under your wing and providing me with an awareness of a world I never knew existed. You instilled a passion for school finance, policy, and politics. You taught me by including me in real life experiences. Your monumental task of encouragement, time, effort, and support was the only way I was able to complete this study. I am forever indebted to you for seeing me through some of my darkest hours, personally, professionally, and academically. Thank you for not letting me give up.

I would also like to acknowledge and thank the Ashland University Doctoral Faculty: the knowledge, wisdom, and experiences were invaluable.
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CHAPTER I

Introduction

This study investigates whether the outcome of a public school levy is related to School District Typology and specific components of the Local Report Card, Ohio’s school district accountability system. The study examines the outcome of all Ohio school levies from the general election held on November 8, 2011 and the relationship of the corresponding 2010 – 2011 local report card items. This chapter presents the background of school funding in the state of Ohio, the various types of school levies available for Ohio schools, and history of Ohio’s accountability system. Additionally, the identification of the problem and the significance of the study are presented.

Background

Ohio has a long and supportive history with public education. It all started with the Northwest Land Ordinance of 1787. When the American Revolution ended, England surrendered the Ohio Country to the United States. The Northwest Land Ordinance of 1787 dealt with many issues of gaining control of the land and the government dividing the territory into individual townships. The townships were then divided into smaller sections and each section received its own number. In each township, the Ordinance provided that Section 16 would be set aside for the benefit of public education. This was the beginning of the “local control” of public school districts which remains the foundation for Ohio schools. Furthermore, the goal of the Ordinance was to raise money through the sale or use of the land since the Articles of Confederation did not have the
authority to raise revenue by direct taxation of people in the United States. Ohio History Central, an on-line encyclopedia, gives much of the detail concerning Ohio’s past (Ohio History Central, 2011).

The Congress of the Confederation enacted the Northwest Ordinance of 1787, which was a plan to govern the territory. In this ordinance, public education was declared a right of the people. The Northwest Ordinance of 1787 specifically stated in the Third Article that schools and the means of education shall forever be encouraged although the Northwest Ordinance did not require states to provide public education. In 1791, the Bill of Rights, the first ten amendments to the United States Constitution, took effect. According to the tenth amendment, Rights of the States under the Constitution, the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people (The United States National Archives and Records Administration, n.d.). Since then, education has continued to be a function of the state (Ohio History Central, 2011). The Ohio Constitution also requires that schools be adequately and equitably funded. The Ohio Constitution reads, in Article 6, “The General Assembly shall make such provisions, by taxation, or otherwise, as, with the income arising from the school trust fund, will secure a thorough and efficient system of common schools throughout the state” (The 128th General Assembly of the State of Ohio, 2011).

During the Great Depression of the late 1920s through the mid 1930s, Ohio schools faced financial crisis and certain financial collapse. To avoid this, in 1935, the Ohio legislature adopted the School Foundation Program Law. The law improved
education by making sure adequate funds would be provided to educate students in Ohio. The Foundation Program also required each school district to enact a property tax of at least three mills. This was to provide thirty-two percent of the funding whereas the state would then meet the remaining sixty-eight percent. The Director of Education had the discretion to provide additional funding if school districts could not meet the thirty-two percent requirement. The state’s sixty-eight percent portion came from the Ohio Retail Sales Tax Law of 1935. This sales tax increased the funding for Ohio schools significantly. In the first year, the tax brought in 16.8 million dollars to public schools (Ohio History Central, 2011). The total received from the sales tax was larger than needed to fund public schools at the sixty-eight percent level, so the remaining funds were disbursed to local governments and other agencies. This law was the beginning of a more significant role for the state and a shift in funding public education which placed more responsibility on the state. Ohio Revised Code defines the law which indicates in Title 57, Chapter 5739.02, “the purpose of securing a thorough and efficient system of common schools throughout the state” (LAWriter Ohio Laws and Rules, 2011), is the function of the state sales tax as required by the state constitution. It also created another form of tax, other than property tax, to finance schools.

The rate of real property taxation is expressed in mills in Ohio. Real property is defined as land and the improvements to the land. A mill is one tenth of a cent. The millage is divided into two classes "inside" millage and "outside," or voted millage. The Constitution of the State of Ohio provides the inside millage and therefore levied without a vote by the people. The inside millage rate is limited to ten mills. A portion of the ten
mills supports public schools. Additionally, other government agencies are allocated a portion of this inside ten mills. The outside millage varies and voted upon by the public for various public expenses including schools (Cuyahoga County Treasurers Department, 2011).

In Ohio, an assessment rate is used to determine what part of the local property tax levy will be billed to the property. All real property in Ohio has an assessment rate of 35% of the true market value. The true market value is determined by the county auditor and defined as the worth, or value of the property. The rate for taxation is, therefore, based on 35% of the true market value and the computed tax is billed to the property owner.

Since the inception of the School Foundation Program in 1935, many changes have occurred and ultimately have made funding for public schools more reliant on local property taxation and disparity throughout public schools in Ohio occurs because of this (Ohio History Central, 2011). The State of Ohio is diverse and public school districts range from small to large with each having a different socioeconomic makeup that ranges from poverty to high income. “The basic idea behind school funding is that the state and local school districts share the responsibility for the cost of education” (Pausch, Bristol, Economus, Driscoll, Fleeter, & Levin, 2003, p. 2). Ohio has used school district income tax and property tax to assist with the funding of local schools. As of January 2011, 181 Ohio school districts have approved school district income tax levies which are collected similar to the state income tax through annual tax returns (Ohio Department of Taxation, 2010). All school districts have a property tax assessed. However, the local property tax
has been the single most important local source of funding for Ohio’s schools. For these reasons, Ohio must use voter approved tax levies to support public schools. Ohioans have at least 32 types of school levies to choose from for funding public schools. “Ohio utilizes voter approved tax levies to support public schools to a greater extent than any other state in the nation” (Fleeter, 2007, p.1). There are differing purposes for public school levies and they include both operating and capital improvements. Changes have occurred recently on when these levies can be placed on the ballot. Ohio House Bill 318 created two separate primary election dates for the calendar year 2012. The bill established a three election calendar for 2012 which includes March 6 as a primary, June 12 as a primary for the purpose of selecting party nominations for U.S. House of Representatives seats and presidential candidate, and November 6 as the General Election. A dispute over congressional redistricting was agreed upon with Ohio Substitute House Bill 369, where the House and Senate agreed to a single primary election date of March 6, 2012. Ohio Substitute House Bill 318 also reinstated an August special election date for schools and other political subdivision issues (Bricker & Eckler, 2011).

The main operating levies for voter approval are

1. Continuing property tax levies, a continuing property tax levy must be measured in mills and one mill is equal to one-tenth of a cent. These levies last indefinitely once approved but can be repealed.

2. Term limited property tax levies; a term limited property tax levy does exactly as its name implies, it is limited for a specific term which may only consist of a one
to ten year term. Other than the fact that they are term limited, they work similarly as the continuing property tax levy. When this levy expires, the option of a replacement or renewal may go to the voters. A renewal levy renews the tax for a specific extended period of time. A replacement levy replaces the current effective tax rate and may be a rate that is the same rate as the existing levy, a reduction, or an increase.

3. Emergency property tax levies, an emergency property tax levy is different in the respect that there is not a specific millage amount and asks voters for a fixed dollar amount. This amount is subject to property wealth fluctuation within the school district once approved.

4. School district income tax levies, this approach is still rare. According to Fleeter (2007), only two other states besides Ohio, Iowa and Pennsylvania, have this type of funding for public schools. Essentially, the tax can be imposed for either taxable income of district residents and estates or restricted to earned income of individuals who reside in the school district. The income tax can be imposed for either a continuing period or for a specific number of years.

These are common forms of levies and not inclusive of all the possible 32 types of levies that can be used to fund public schools.

In addition to operating levies, Ohio school boards of education may ask voters to approve funds for capital improvements. These capital improvement levies are funded two ways: by a permanent improvement levy or a bond issue. A permanent improvement levy can only be used for the intended purpose such as to maintain buildings or purchase
buses and other educational equipment. It cannot be used for day-to-day operations of the schools. Permanent improvement levies can be limited or on-going for a continued period of time. The other form of capital improvement levy is a bond issue. A bond issue is a tax used for construction and maintenance of capital property and cannot be used for operating expenses. A bond issue also allows a school district to borrow funds for up to 25 years. If approved, the bonds are interest-bearing and are redeemed over a period of years, usually 20 or 25 years. The tax rate is adjusted annually to provide the amount necessary to pay the annual principal and interest payment.

Ohio’s Accountability System

Ohio’s current accountability system began with the No Child Left Behind Act of 2001 (NCLB), which on January 8, 2002, President Bush signed into law. The Act increased accountability by requiring states to implement statewide accountability systems covering all public schools and students. To meet the NCLB requirements, Ohio created district and individual building report cards for public school districts. According to federal law, the Ohio Department of Education (ODE) administers the statewide accountability system on behalf of the federal guidelines. The systems were to be based on state standards and annual testing. The NCLB Act was a reauthorization of the Elementary and Secondary Education Act (ESEA) which was signed into law by President Johnson on April 9, 1965 as part of his War on Poverty (Jorgensen & Hoffmann, 2003).

Ohio is a diverse state and this is supported by the Ohio Department of Education (ODE) and their typology of school districts (Ohio Department of Education, 2007). Each
district can be placed in a category that ranges from 0 to 8. The categories, as identified by the Ohio Department of Education and the description for each type are listed below.

0  Extremely small and either geographically isolated or have special circumstances
1  Rural/agricultural with high poverty and low medium income
2  Rural/agricultural with small population, low poverty, and low to moderate medium income
3  Rural/small town with moderate to high medium income
4  Urban/low medium income and high poverty
5  Major urban with very high poverty
6  Urban/suburban with high medium income
7  Urban/suburban with very high medium income and very low poverty
8  Joint vocational school districts

Despite the wide diversity of public school districts within the state, NCLB requires that all students make improvements in their performance, and if school districts do not meet state and federal requirements, districts are subject to a progressive set of actions which could include developing a formal school improvement plan. In addition to the actions that may be imposed on school districts, the accountability system is documented in the form of a local school district report card (LRC) for each district. Additionally, data from each individual school building within the district is reported by a building report card. This report card information is often reported by multiple media outlets as each school district’s data is made public, typically in August, prior to the
opening of the new school year. The outcome of the components are the basis for the district and building designations which range from the highest, excellent with distinction, to the lowest, academic emergency. The data from report cards is normally the basis for school improvement plans as administrators analyze the data to make decisions for improvement.

As reported by the ODE, the major components of Ohio’s accountability system are multiple measures that evaluate the achievement and performance of schools and districts based on student outcomes. The components include state indicators, performance index (PI), adequate yearly progress (AYP), and value added data which will be described below. Designations are based on the student outcomes from the components and include excellent with distinction, excellent, effective, continuous improvement, academic watch, and academic emergency. And finally, the accountability system takes into account the various groups of students that include; economically disadvantaged students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency. Data is reported for each of these groups (Ohio Department of Education, 2009).

Before President Bush signed into law the No Child Left Behind Act (NCLB) of 2001, Ohio had an established accountability system in place. Statewide testing in Ohio began with Ohio HB 231, whereby in July 1987 legislation enacted a law requiring ninth grade tests to begin in 1990 and 12th grade tests to begin in 1994. This bill required that the Class of 1994 and any student graduating after September 15, 1993 must pass the Ohio Ninth Grade Proficiency Test in order to receive an Ohio High School Diploma.
This was the first implementation of such rigorous requirements to receive a high school diploma in the state of Ohio. It included passage of tests in writing, reading, mathematics, and citizenship to meet the requirements to receive an Ohio high school diploma (Ohio Department of Education, 1996).

Since the initial legislation requiring testing passage for an Ohio High School diploma in 1987, there have been many changes. There have been 21 House or Senate Bills signed into law as well as one Ohio Supreme Court decision that have changed the development of testing in Ohio since Ohio House Bill 231, the most recent was Ohio House Bill 153 from July 2011.

The Ohio Department of Education created the local report card to comply with the NCLB requirements. As reported by the Ohio Department of education, Ohio has a report card for school districts and individual schools that reports on a number of measures, which include student achievement data, attendance rates, and graduation rates. The districts combined efforts, which include four separate measures, are reported as a school district rating or designation. The Local Report Card information included is located on the Ohio Department of Education website (Ohio Department of Education, 2011). The designations consist of excellent with distinction, excellent, effective, continuous improvement, academic watch, and academic emergency. The four components consist of 26 Performance Indicators, Performance Index (PI), Value Added (VA), and Adequate Yearly Progress (AYP). The four components combined are the foundation for assigning the designation rating for each district.
Currently, the performance indicators consist of

- Third-grade achievement tests in reading and mathematics;
- fourth-grade achievement tests in reading and mathematics;
- fifth-grade achievement tests in reading, mathematics, and science;
- sixth-grade achievement tests in reading and mathematics;
- seventh-grade achievement tests in reading and mathematics;
- eighth-grade achievement tests in reading, mathematics, and science;
- Ohio Graduation Test (OGT) in reading, mathematics, writing, science, and social studies for 10th grade students;
- OGT in reading, mathematics, writing, science, and social studies for the cumulative 11th grade students;
- graduation rate;
- attendance rate (Ohio Department of Education, 2009).

The Performance Index (PI) measures the achievement of every student and each student receives weighted points based on the performance of each test. The points are calculated in all subjects in grades 3 through 8 and the 10th grade graduation tests. Currently, all tests have five performance levels, which are advanced, accelerated, proficient, basic, and limited. Each level is assigned a weight; advanced is multiplied by 1.2 points, accelerated is multiplied by 1.1 points, proficient is multiplied by 1.0 point, basic is multiplied by 0.6 point, limited is multiplied by 0.3 point, and untested students are assigned a point value of 0 points. The calculation involves the percentage of students scoring at each performance level and the multiplied by the point value assigned.
to each performance level. A PI score will range between 0 and 120 (Ohio Department of Education, 2009).

Value Added (VA) was added to Ohio Local Report Cards in 2003 because Ohio law was amended to replace the temporary growth measure. Value Added reflects how much progress was made since the prior year. The symbols are used to reflect each result. A plus (+) symbol is used to indicate that a district has achieved more than one year of expected growth for their students over the past year, a check (√) symbol is used to indicate that a district has achieved one year of expected growth for their students over the past year, and a minus (−) symbol is used to indicate that a district has achieved less than one year of expected growth over the past year (Ohio Department of Education, 2009).

The adequate yearly progress (AYP) is an attempt to report progress on student performance in subgroups in reading and mathematics proficiency and test participation. This is a federally-required measure and every school must meet AYP established goals. AYP is a complicated component that contributes to the overall designation for each school district. The ten student subgroups are all students, American Indian/Alaskan Native, Asian/Pacific Islander, Black non-Hispanic, Hispanic, Multi Racial, White non-Hispanic, Economically Disadvantaged, Students with limited English proficiency (LEP), and students with disabilities (IEP). The subgroup will not be evaluated for AYP if the number of students is less than 30 and will receive a NR (not rated) for that subgroup. If the number of students is 30 or greater, that subgroup will be evaluated for AYP. AYP goals must be increased over time and based on a federal law formula. Ohio law has a
provision that states a district or school that meets AYP can not be designated lower than Continuous Improvement and the law also specifies that a district that does not meet AYP goals for three consecutive years and does not meet it for more than one student group in the most recent year, can be rated no higher than Continuous Improvement. Districts can meet AYP in four ways; current year results, two-year combined results, through a growth model, and safe harbor. Safe harbor is when a student group makes a 10 percent or greater reduction in the percentage of non-proficient students from the year before and they must meet the AYP goal in the graduation rate or attendance rate.

Economically Disadvantaged is one of the ten student subgroups. Students in this subgroup are identified by being a member of a household where they meet the income eligibility guidelines for free or reduced price meals. Students identified in this subgroup may have additional challenges succeeding academically. Family income, parent education level, parent occupation, and neighborhood poverty are just a few of the socioeconomic factors that add to the disadvantages. Socioeconomic factors such as income and poverty are key factors when identifying Ohio school district typology categories which are determined by the Ohio Department of Education. (Ohio Department of Education, 2009).

Part of Ohio House Bill 3, enacted in August 2003, required that the Superintendent of Public Instruction give the General Assembly a financial analysis of the projected costs attributed to NCLB. A report prepared by Driscoll and Fleeter (2003) completed the required NCLB financial analysis, which was prepared for the Ohio Department of Education. The report identified difficulty with estimating some
information, “it is possible to identify the main features of NCLB, the task of assigning costs to the act’s major requirements presents a challenge” (p. 1). The goal of NCLB is to have 100% proficiency by the 2013-2014 school year and in order to get there, the major features included

1. Have achievement tests in math and reading for grades 3 through 8 and achievement tests in science in one elementary, one middle, and one high school year
2. create standards for highly qualified teachers and teachers’ aides,
3. create a system for measuring progress and a system of consequences for local school districts that fail to meet the standards, and
4. a way of funding the NCLB requirements (Driscoll & Fleeter, 2003).

The passage of the No Child Left Behind Act created an additional burden to Ohio Schools, which produced the need for larger budgets for the accountability system costs for local school districts. Driscoll and Fleeter (2003) summarized the estimated one-time costs imposed by NCLB to be $33 million.

Rising costs, new mandates, tax law changes, and a decrease in state funding for schools continues to be problematic and creates a never-ending cycle of tax requests that burden property owners. The additional cost of unfunded and underfunded mandates such as the NCLB accountability system adds to the problem. Increasing the possibility of passing a school levy by finding a correlation with a component of the local report card, it could bring greater value to the testing mandate that is often condemned by
critics. This research could have a positive effect on the perception of the current accountability system and basically generate a cost benefit.

Identification of the Problem

School Funding Matters reports that Ohio’s funding for schools includes federal, state, and local funds. The federal funds make up an average of eight percent, the state portion represents an average of 46 percent, and the remaining portion of the 46 percent is the responsibility of the local taxpayers (School Funding Matters, 2011, p. 1).

The problem that faces each Ohio public school district is that the funding system is so heavily reliant on local taxes, property taxes, and income taxes that school districts must repeatedly go to the voters to ask for additional funding. There are major economic problems that Ohioans face which include inflation, fixed incomes, and in some cases, unemployment. Inflation impacts both families and the schools. The uncertainty of inflation makes long-term planning difficult. It also places stress on the individual and organization to make difficult choices which have to be prioritized. Additionally, due to medical advances, many people are living longer therefore, previous retirement planning may not work for our elderly today. Retirement plans and pensions create a fixed monthly income for some elderly. Many of them are unable to incur added expenses such as an increase in property or income tax. Add to this that the unemployment rate, identified by the Bureau of Labor Statistics, has reported that Ohio’s rate in January of 2011 was 9.3% (United States Department of Labor, 2011). The rates varied for a high of 9.3% in January to a low of 8.6% in both April and May of 2011. This suggests that nearly 1 in 10 people wishing to work are unemployed. This problem means a financial
loss to the individual, as well as the economy. To make matters worse, many Ohioans have adopted a culture and mentality of not supporting or approving additional taxes. The no new tax mentality along with one of the worst economic climates since the Great Depression hinders the opportunity for successful levy campaigns. In 2009, the ODE reported 374 school issues placed on the ballot during the February, May, August, and November (Ohio Department of Education, 2009). The passage rate for all school levies placed on the ballot during that year was nearly 60% while the failure rate was 40%. These levies included both additional funding and renewals. The Buckeye Institute released a report in 2010 in which school levy results between 2003 through 2010 were analyzed and found that the statewide passage rate had a low of 40% to a high of 68%; in May of 2010, the passage rate was 56% (Testa, 2010). The results from the May 3, 2011 election, reported an approval rate of 59%. Schools trying to extend the current taxes through renewal levies were supported by 92% of the voters. However, those schools asking for additional funding through new levies were supported by 36% of the voters (Ohio Secretary of State, 2011)).

Significance of the Study

The purpose of this study is to discover if there is a relationship between the various components of the local school district report card and the outcome of public school levies. Analyzing the results from the November 2011 election and comparing the latest local school district report card from each school district that had a levy on the ballot in November may provide some insight into whether the report card impacts election results and which components weigh heavier with school levy outcomes.
Identified components that may have a correlation to a tax levy request outcome may increase the opportunity for districts to pass local school tax levy requests. This knowledge could be helpful for districts to focus on those components and provide research based improvement strategies. Local school district report cards are rolled out during the summer and include the data from the previous school year. Therefore, the most up-to-date school district report card will be compared for those districts that placed levies on the ballot. Bruce Hunter, American Association of School Administrators Associate Executive Director, has the political view that people have a 90-day political memory (B. Hunter, personal communication, March 15, 2011). By comparing the most recent school district report card data released in August to the November election may provide the most accurate analysis of any impact by the August report card. This analysis also should yield the data needed to see if a relationship exists between components from the school district report card and the outcome of a school levy. Additionally, such diversity characterizing Ohio’s schools may play a role in a tax levy outcome, therefore, an analysis will be conducted to identify a relationship between typology and tax levy request outcome. If there is statistical significance, school districts may be better equipped to predict and possibly improve the chances of a school levy passage.

One implication of this study is for local boards of education and district leaders to change the strategy, approach, and timing for presenting a tax levy for ballot consideration to increase the chance of passage. School districts that are currently reviewing their options due to declining funds may find through this study the data needed to identify the school district and building-level improvement goals. The second
The implication of this study may provide districts with evidence that more information on how to understand the local report card components may be needed. The analysis of the data may identify a combination of strategies are needed for district tax levy passage.

Summary

The State of Ohio has a rich and varied history with educational accountability measures and local school funding challenges. Ways and methods to fund public schools in the State of Ohio have changed over the years to keep up with the demands required to educate all students equally and adequately. However, the one constant is the importance of local control as it all began with the Northwest Land Ordinance of 1787. The current public school funding system in Ohio continues to place the tax burden on the property owner. With this said, the local public school district will have a continuous cycle of tax levy requests. In addition, the State of Ohio will continue to have an accountability system that maintains transparency with student performance data. Identifying a correlation between performance data and a tax levy passage, may assist schools with long term planning. Finding ways to improve academic achievement and increase local school funding are goals for public schools. This study is an attempt to assist local public school districts with a strategy to improve their chances of a tax levy passage. This study examines the relationship between local school district report card components and local school district levy requests during the November 2011 General Election.
CHAPTER II

Introduction

The rationale for Chapter II is to provide a literature review relevant to the research questions established in Chapter I. “A literature review is a synthesis of the literature on the topic” (Pan, 2008, p. 1). This study examines the relationship between local school district report card components and local public school district tax requests. A review of literature about levy campaign characteristics, funding method for schools in Ohio, and local school district accountability and reporting is included. The discovery of research specific to this topic, a correlation between local school district report card components and levy outcome was unsuccessful; therefore, the literature will reflect closely-related research. The lack of such literature supports the importance and need of such study.

Research on school funding indicates that public education in the United States has two distinct features, decentralization and student poverty. Fifty separate states operate about 16,000 kindergarten through 12th grade (K-12) school districts. All are funded by financial systems authorized and administered by each of the 50 states through a state school-funding formula. The latest national data reported that the public school spending has a state share at 46.5 percent, local share at 44.4 percent, and federal share at 9.1 percent. Furthermore, schools face the additional challenge of child poverty which on average is 16 percent. Poverty places a vast financial burden on local schools which stretches local school budgets (Baker, Sciarra, & Farrie, 2010).
Ohio places an enormous importance on education. The Ohio legislature established common schools in 1825, which was the beginning of Ohio’s public education system. This education system was financed by the state government with a half-mill property tax. Improvements to our educational system have been made since that time and numerous changes have been made throughout the years in an attempt to provide the most efficient funding system for Ohio Schools (Ohio History Central, 2011).

Since 1851, the Ohio Constitution has required taxation of property. The constitution also requires that schools be adequately and equitably funded. The Ohio Constitution reads, in Article 6, “The General Assembly shall make such provisions, by taxation, or otherwise, as, with the income arising from the school trust fund, will secure a thorough and efficient system of common schools throughout the state” (The 128th General Assembly of the State of Ohio, 2011). DeRolph v. Ohio, a court battle that disputed that Ohio’s funding system is thorough and efficient, was filed in December of 1991. Since that time, according to documents obtained from the Bricker & Eckler website, the Ohio Supreme Court has ruled four times that the states funding system is unconstitutional (Bricker & Eckler, 2011). The court ruled that Ohio’s reliance on local tax dollars leaves too much to chance. Despite the fact that the Ohio Supreme Court cited the over-reliance on the property tax as one of the chief reasons for the unconstitutionality of the school funding system, Ohio currently relies more heavily on local property taxes than it did in 1991 at the time of the DeRolph decision (Ohio Department of Education, 2011). The State of Ohio has a constitutional responsibility to provide a quality public education to all children regardless of where they live. The
necessary revenue supporting public education comes from local property taxes as identified in a statewide revenue by source report obtained from the Ohio Department of Education (Ohio Department of Education, 2011).

The vast differences in the state of Ohio are reflected in the school district typology, the development of the typology by the Ohio Department of Education is a basis to make data-driven comparisons. The typologies point to a distinction that is apparent and unjust. A student may win or lose based on their geographical living arrangement.

Review of Literature

School Funding Method in the State of Ohio

Sweetland reported that the funding for public school districts comes from federal, state, and local resources and that the majority of the revenue is acquired from property taxation (Sweetland, 2000). This means that local school districts must turn to voters to approve school levies to provide adequate funding. Most of these levies are property tax levies although in some cases, income tax levies are placed for a public vote.

Busch, Stewart, and Taub (1999) discussed an option that the state legislature provided for school districts when a law was passed to levy income taxes instead of real property taxation.

Until 1982, local districts relied almost wholly on the property tax for the local contribution to the revenue for public schools. In 1982, the state of Ohio passed legislation that for the first time allowed school districts to put up voter approval a school income tax. (p.2)
Real property tax rates are expressed as mills and one mill equals one-tenth of one percent; for example, 10 mills will equal a 1% tax rate. The Ohio Constitution requires that voters must approve any tax on property in excess of the 10 “inside” or unvoted mills. Ohio’s 88 county auditors determine the value of each parcel of land and the buildings or other improvements on the land. The value of the highest and best use of the property then determines the tax base. Morvai (1987) examined six Ohio Supreme Court Decisions that occurred between 1964 and 1982 which involved the Park Investment Company. The court cases effectively equalized property assessment for taxation purposes of real property which included agriculture, industrial, commercial, and residential. According to the Park Investment cases, commercial property owners establish that county auditors assessed commercial real estate at a 50% market value where as all other classes were assessed at 35%. This violated the Ohio Constitution “uniform rule.” After years of court cases, revisions in the assessment and taxation of real property in Ohio forced the state to begin uniform assessments at 35% of market value for taxation purposes.

Monk and Theobald (2001) identified reasons why people are discontent with using property tax as a way to fund our schools. First, owning real property does not necessarily indicate that the taxpayer has the ability to pay. Second, two taxpayers may have the same ability to pay, however could be paying differing amounts of property tax depending on where their real property is located. In that regard, unequal treatment violates the principle of providing equity in taxation. Finally, ownership of valuable homes with elderly taxpayers who may have purchased homes many years before find it
difficult when faced with fixed incomes and having to pay high property taxes. The authors stated, “Variation in the wealth of school districts does not occur because of reliance on the property tax” (Monk & Theobald, 2001, p. 503). Another important factor is that Ohio House Bill 920, which prevents inflationary growth, forces districts to go back to the ballot to cover rising costs.

The State of Ohio has two significant areas of concern: the funding mechanism is heavily reliant on property tax and there are still inequities amongst local school districts. How Ohio pays for public schools has not changed. The state has not yet determined whether relying on property tax or finding another way, such as an additional sales or income tax, would be the best way to fund Ohio schools. This creates a continuous cycle of public school tax requests to fund Ohio schools. Daniel Wilson, Treasurer and Chief Financial Officer for Mentor Public Schools, stated that recent past as well as the current state of school funding in Ohio results in local districts having a reoccurring need to increase local tax funding (D. Wilson, personal communication, March 18, 2012).

Ohio’s Accountability System

At the time of this study, the 2010-2011 Ohio Local Report Card identified a designation for each local public school district and each building within the district. The designations consist of excellent with distinction, excellent, effective, continuous improvement, academic watch, and academic emergency. The four components consist of 26 Performance Indicators, Performance Index (PI), Value Added (VA), and Adequate Yearly Progress (AYP). The four components combined are the foundation for assigning the designation rating for each district (Ohio Department of Education, 2009))
One of the most significant research studies surrounding school accountability and citizen perceptions about their schools was conducted by Henderson, Chingos, and West. During February and March of 2009, 3,251 American adults and an oversample of 948 residents from the State of Florida were surveyed. Education Next and the Program on Education Policy and Governance (PEPG) at Harvard University conducted the research to obtain citizens’ perceptions of the quality of their local schools. The results suggested that the perception Americans have on the quality of their local public schools may be linked to the information made public about student academic achievement which in turn influences their perceptions. The evidence also reflects that citizens’ experiences with their schools, coupled with the public information about performance data also influences their perceptions. Two policy suggestions surfaced. The first was accountability ratings influence citizens’ perceptions of their local schools and the ratings were more strongly related to achievement levels than with achievement growth. The second was citizens’ ratings were aligned to student performance on state standards but not with performance on national assessments (Henderson, Chingos, & West, 2010).

Gibbons and Silva (2009) from the Center for the Economics of Education (CEE), London School of Economics conducted research that set out to answer two questions; to what extent are attitudes and experiences among pupils and their parents linked to standard test-score based measures of academic performance, and to what extent are parents’ perceptions of school quality linked to their children’s happiness and enjoyment of school? The research identified four findings:
1. Parents’ judgment of school quality is dominated by school average test scores,
2. children’s happiness and satisfaction with their learning environment is unrelated to average test results,
3. parents’ satisfaction and judgments of school quality are not strongly correlated with their children’s’ enjoyment of school, and
4. schools which receive more favorable parent and child ratings tend to have higher local house prices (Gibbons & Silva, 2009).

This strengthens the idea that, for parents, test scores tend to dictate a parent’s opinion of educational quality.

A study which examined the relationship of socio-economic variables on the fourth grade reading performance randomly selected 150 elementary school students. Fifty-four Ohio public school districts were involved with the study. The dependent variable was the Ohio Proficiency Test (OPT) administered in 2003. The data was collected from the Educational Management Information System (EMIS). The results of the study indicated that performance was strongly correlated to the socio-economic status of the student (May, 2006).

Another study suggested that the current climate of high-stakes testing which is required by NCLB legislation and Race to the Top practices does not lead to an increase in learning. Mora (2011) found that classrooms spent more time on test preparation and reported on the effect of this preparation on middle-school students’ boredom. An ethnographic study, which followed 30 urban Latino middle-school students over the
course of their middle-school years, documented the impact that greater accountability had on the students. The results suggested that the boredom and frustration the students experienced were due to the pressures of high-stakes tests. “Sadly, the unintended consequences of high-stakes testing are likely to rob additional students of intellectually-engaging activities that encourage the development of higher order thinking skills (Mora, 2011, p. 6).

Levy Campaign Characteristics

Trying to identify the exact formula needed to pass a school tax levy may be difficult. When conducting the search for related literature, various solutions were identified providing an insight into passing a school district tax levy. Obtaining specific research that related components of the local school district report card to public school tax passage was missing. The following literature reviews identified research that may assist with school district tax levy passage.

Johnson (2008) identified and assembled 21 school levy strategies identified by means of a literature review. All were associated with successful school levy campaigns. He tested these 21 strategies by evaluating one district’s attempt to pass a school bond levy. The following are the 21 most frequently mentioned campaign strategies from his literature review. The strategies included local public school district operational tax requests and bond issue tax requests. Johnson cited several authors throughout his article as he identified each strategy.

The strategies are

- creating a clear vision;
- justifying the need for additional funds;
- creating a sense of urgency;
- establishing an ongoing school-community relations program;
- using all of the positive data available;
- conducting a survey;
- considering the perception of the amount of the tax;
- considering the timing and length of the campaign;
- ensuring that there is board of education unity;
- involving community in the planning;
- educating district staff and students;
- analyzing previous elections;
- establishing a diverse campaign committee;
- focusing on the yes voters;
- disseminating information;
- focusing on the benefits to the students and community;
- utilizing experts;
- keeping administration on a low profile;
- using technology;
- avoiding controversy;
- debriefing the outcome regardless of the outcome

(Johnson, 2008).
Rampelt (2011), who oversees a nonprofit organization whose purpose is to provide winning strategies and advice to levy campaigns, identified strategies for winning levy campaigns. Rampelt’s research strategies included approaches such as raising ample funds, specifically a minimum of $2.00 per vote. For example, if the community has 9,000 voters, the campaign should expect to raise and spend $18,000. He also identifies that direct voter contact, such as knocking on doors and having conversations with the resident, is essential. Additionally, targeting the message to specific voters such as women, seniors, and recent graduates is important (Rampelt, 2011).

Banach and Westley (1972) described a similar setting as they assert a seven step process for a successful tax levy campaign. They claimed a 5 to 1 chance of winning the next levy campaign by using the following strategies

- analysis;
- determination of needs;
- development of strategy;
- organization;
- finance;
- communication;
- evaluation

(Banach & Westley, 1972).
Many of the terms throughout the literature are synonymous, concluding that various research identifies the similar strategies. Banach and Westley (1972) described a similar style of targeting school supporters as Rampelt (2011) recognized.

Hickey (2006) analyzed three districts that held successful bond elections after prior failures. Hickey found evidence that supported a correlation between prior failure and future failure with bond proposals, however the study found factors that contribute to election success. Hickey’s qualitative research approach examined three case studies where prior bond issue failure eventually produced successful elections. Superintendents from each district were interviewed and asked what their perception was on the factors involved with early failure and what strategies were used to overcome negative opinions. With the first case, the superintendent felt that stakeholders, both community members and teachers, were an important part of the planning. Additionally, the district gained support from the teachers and there was effective communication which built trust within the community. The second case identified a lack of trust in district leadership and the plans for the bond election were unclear. When the superintendent requested opinions and advice, the development of trust occurred. The third case identified that being open and clear with information resulted in support. An audit was also conducted and identified the need for bond funding for construction and renovation. The differences within each district varied in size and demographic make-up however similarities to combat the negative opinions were the same. In each case study, the districts earned the trust of the stakeholders, developed support of the district employees, and improved communication.
Summary

The current method of funding for Ohio public schools continues to create a regular cycle of levy tax requests. Therefore, local school districts must prepare to have successful tax levy strategies in place in order to maintain an amount to sustain increasing budgets. Recent research has suggested that there are strategies that will help local school districts have successful school tax levy request campaigns. Furthermore, studies conducted indicated that accountability ratings influence citizens’ perceptions of their local schools. Therefore, the purpose of this study is to analyze the data to see if the local school district accountability measures have a correlation with a successful tax levy request.
CHAPTER III

Methodology

This chapter describes the methodology used for this study. The research questions, research design, data collection, data analysis, assumptions, limitations of the study, and summary are discussed in this chapter.

Research Questions

This study was conducted to determine if there was a relationship between a public school district tax levy outcome and components of a school district report card. When identifying the school districts that placed a tax levy request on the ballot during the November 2011 General Election, various locations throughout the State of Ohio emerged. Therefore, because of the wide diversity which characterizes Ohio, typology was added as a research question. The typology of each school district includes other districts that share the same or nearly the same demographic characteristics.

As such, the research questions for this study were the following:

1) Is there a relationship between the outcome of a public school district tax levy requests and components of the Local School District Report Card?

2) Is there a relationship between the outcome of a public school district tax levy requests and school district typology?

Research Design

A correlational research design was used as it examined the relationship among six different components and the outcome of all local public school tax levy requests that
had a report card attached to the district. Of the districts used in this study, the research identified to what degree a predictive relationship existed amongst the components and the outcome of a local public school district tax levy request. The study analyzed the relationship between school district typology, five components of the 2010-2011 Ohio Local District Report Card and all local public school tax levy requests from the November 2011 General Election.

Data Collection

The school districts used in this study were all public school districts that placed a tax levy or income tax request on the November 2011 General Election which also had a Local School District Report Card. The election data was obtained from the Ohio Secretary of State’s pre-existing election results data (Ohio Secretary of State, 2011). The school district data used was linked to the districts that had tax requests on the ballot. The Local District Report Card data was obtained from the Ohio Department of Education pre-existing report card data (Ohio Department of Education, 2011). For the purpose of this study, the public school district tax levy issues during the November 2011 General Election which had a Local District Report Card (n=177) were utilized.

There were 188 school district tax requests placed on the ballot for the November 2011 General Election. Tax request comparisons from vocational and technical schools, one community college, and College Corner, a district that borders Ohio and Indiana and serves students in both states were removed. These schools were not included in the correlational analysis because there is not a Local School District Report Card to compare with the school district placing a tax levy request on the ballot.
According to the Buckeye Association of School Administrators Member Advisory Report there were 188 school tax ballot issues, 91 of which received voter approval (Buckeye Association of School Administrators, 2011).

In order to categorize the variety of levies on the ballot from the November 2011 General Election, Tables 1 through 7 identify the breakdown of each type of public school district tax levy request. Each table also displays the results from the November 2011 General Election in the respective category. The results from each table were obtained from the Ohio Secretary of State, election results website (http://www.sos.state.oh.us/sos/elections/Research/electResultsMain.aspx).

Table 1

*Current Expenses*

<table>
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Table 2

*Emergency Expenses*

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**Traditional Income Tax**

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**Earned Income Tax**

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<td>Replacement</td>
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### Table 5

**Combined (Income and Property)**

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Table 6

*Permanent Improvement*

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<td>Renewal</td>
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</table>

Table 7

*Facility Issue*

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<th>% Passage</th>
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<td>16</td>
<td>21</td>
<td>23.81</td>
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Another data element used in this study was school district typology of which nine categories are identified by the Ohio Department of Education (ODE, 2007). The typology of each district includes other districts that share the same or nearly the same demographic characteristics. The typologies categorized school districts according to similarities. As assigned by the Ohio Department of Education (2007), the typology and the corresponding numeric value for each typology has been included below (Ohio Department of Education, 2007).

0 Extremely small and either geographically isolated or have special circumstances

1 Rural/agricultural with high poverty and low medium income
2 Rural/agricultural with small population, low poverty, and low to moderate medium income
3 Rural/small town with moderate to high medium income
4 Urban/low medium income and high poverty
5 Major urban with very high poverty
6 Urban/suburban with high medium income
7 Urban/suburban with very high medium income and very low poverty
8 Joint vocational school districts

This study used seven of the nine typologies because two of the typologies have school districts in this study that do not produce a Local School District Report Card. The College Corner school district is a state border district that serves students from both Ohio and Indiana. Because College Corner does not have a report card, it could not be compared with the components used in this study; therefore, the district was removed from the sample. Similarly, Joint Vocational School Districts were not used in this study because there is not a district report card linked to them. A total of 11 school issues were removed from the study: one from typology 0 (College Corner); nine, from typology 8 (Joint Vocational Schools); and one community college. The remaining school districts that had tax requests on the ballot were of typologies 1 through 7 and the final number of districts used for this study was 172. Despite the number of issues being analyzed ($n = 177$), the number of districts differ because five local districts placed two separate issues on the ballot.
Identified below are the number of school districts in each typology that placed a tax levy request on the ballot in the November 2011 General Election. The typologies analyzed in this study, Typologies 1 through 7, incorporated a total of 172 school districts (see Table 8).

Table 8

*School Districts in each Typology*

<table>
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<tr>
<th>Typology</th>
<th>Number of Districts</th>
<th>Percentage</th>
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<td>1</td>
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<tr>
<td>7</td>
<td>12</td>
<td>6.98</td>
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</table>

*Note.* 172 school districts are used for this study although 177 tax levy issues were analyzed because five school districts placed two separate tax levy issues on the ballot.

The State of Ohio has eighty-eight counties. Sixty-three of Ohio’s eighty-eight counties had school district tax levy requests on the ballot during the 2011 November General Election. This study included all school tax levy requests that were placed on the ballot during the 2011 November General Election which included operating levies, permanent improvement, and facilities issues. Specifically, the operating levies included current expense, emergency, income tax, and a combined income and property. Ninety-one of the 188 school issues placed on the ballot in November of 2011 received voter
approval for an approval rate of 48.40% (see Tables 1-7). However, for the purpose of this study, the 177 school issues placed on the ballot that had a report card attached to it, received voter approval for eighty-eight of those issues for a percentage approval rate of 49.71% (Ohio Secretary of State, 2011).

Ohio’s accountability reporting system for schools is illustrated in the form of a report card. Each local school district has a report card and each school building in that district has a report card. The performance of schools is identified by using four separate measures. The four measures used to evaluate the performance of districts and school buildings include state indicators, performance index (PI), adequate yearly progress (AYP), and value added (VA) data. The combination of the four measures is how the State of Ohio assigns a designation to each district and school building. The six designations are Excellent with Distinction, Excellent, Effective, Continuous Improvement, Academic Watch, and Academic Emergency. Various student subgroups are also included in the accountability system and consist of economically disadvantaged students, students from racial and ethnic groups, students with disabilities, and students with limited English proficiency. The data is compiled for each individual school building. It is then combined to create the district report card (Ohio Department of Education, 2011). For the purpose of this study, district data was used. In addition, the typology is identified by district which became one of the variables in the correlation. Using district data added consistency within the study and looked at the district as a whole, which is how the tax levy requests are placed on the ballot.
Data were obtained from the 2010 – 2011 Ohio District Local Report Card components which included the district designation which may consist of excellent with distinction, excellent, effective, continuous improvement, academic watch, or academic emergency, performance index (PI), adequate yearly progress (AYP), value added (VA), and economically disadvantaged (ED) (Ohio Department of Education, 2011 ).

Correlation data also included school district typology. This data source, created by the Ohio Department of Education, provides a way to make data-driven comparisons of groups of districts throughout the State of Ohio (Ohio Department of Education, 2007).

Data Analysis

A correlation research design was used to measure the relationship between the independent variables (performance index, average yearly progress, value added, economically disadvantaged, school district typology and designation) and the dependent variable, the outcome of a school district tax levy request. By using a bivariate correlation, the relationship and strength between each independent variable and the dependent variable was measured.

A Pearson correlation with an alpha level of .05 was employed to determine the significance and direction of the relationship between the variables. The quantitative analysis was evaluated by using the Statistical Package for the Social Sciences (SPSS) 20.0. The SPSS software provided an accurate analysis of the data and gives an r value which identifies whether the linear relationship is positive or negative and the significance of the relationship. The pertinent data for each local school district report card component was input to compare each to the tax levy request outcome. Each
variable had a numeric scale value assigned in order to provide a correlation. The following numeric values were used for the analysis provided through the software Statistical Package for the Social Sciences 20.0: the value for performance index was the actual value on the local district report card; the numeric value for value added was above 1, met =2, below = 3; the value for economically disadvantaged was the actual value on the local district report card; the value for the designation was excellent with distinction = 1, excellent = 2, effective = 3, continuous improvement = 4, academic watch = 5, academic emergency = 6; the numeric value for adequate yearly progress was met = 1, not met = 2; the numeric values for typology was the actual value determined by the Ohio Department of Education (Ohio Department of Education, 2007) and the numeric value for pass = 1, fail = 2.

Assumptions

The assumption of this study was that each school district that placed a tax levy request on the ballot made a concentrated effort to educate voters on the need for additional funding. Outlined in the literature review were strategies to assist districts with tax levy request passage and included approaches such as acquiring support from stakeholders by involving community members and staff, creating a culture of transparency, targeting specific voters, awareness of how the additional funding will be used, and identify any cuts that have already been made. These and other strategies are presumed to have been employed by each local school district that placed a tax levy request on the ballot. It is also assumed that communities have been informed about Ohio’s complicated funding system and student accountability system.
Limitations of the Study

The limitation of using a bivariate correlation is that this type of correlation data cannot establish causality. The study does not tell us, for example, if the outcome of a tax request predicts adequate yearly progress (AYP) or if AYP predicts the outcome of a tax request. When using the bivariate correlation, the strength of the linear relationship between two variables is identified. Therefore, a bivariate correlation gives information about the relationship between the two variables, but not why or how they are related. In addition, a bivariate correlation identifies the relationship and strength between two variables, it does not take into account that there may be a third variable that may influence the outcome. There may be other variables that could influence the outcome of a tax request that have not been tested.

Another limitation to this study is that the data used is district data, not school building data. If votes were broken down by school building attendance areas and a correlation conducted with school building data, it could prove beneficial to boards of education to know the voting areas of the district that need to be targeted. Correlation data could also assist administrators in determining performance goals at the building level.

Summary

A correlation research design was used to analyze the relationship between school district typology, components of the 2010-2011 local report card, and the outcome of all public school tax levy requests during the November 2011 General Election. The
purpose of this study was to answer two research questions: Is there a relationship among components of the Local District Report Card and the outcome of local public school district tax levy requests and is there a relationship between School District Typology and the outcome of local public school district tax levy requests? All data was pre-existing and obtained from the Ohio Department of Education Local Report Cards (Ohio Department of Education, 2011) and District Typology (Ohio Department of Education, 2007). Data was also obtained from the Secretary of State’s election results data. An analysis was made by using SPSS 20.0 and a Pearson $r$ correlation to determine the significance and direction of the relationship between the variables.

With the current public school funding system in Ohio, it is likely that the public will continue to see a considerable number of tax levy requests on the ballot. With this continuous cycle of tax requests, a strategy to assist local school districts with a way to improve their chances for a favorable outcome is necessary. This study attempted to find variables that have a significant relationship with favorable tax levy outcomes.
CHAPTER IV

Results of Data Analysis

This chapter contains the results of the data analysis conducted for this study. The study utilized a correlational research design as it examined the relationship between components of the Local School District Report Card, School District Typology and the outcome of local public school district tax levy requests during the November 2011 General Election. Pre-existing election results obtained from the Ohio Secretary of State website, local school district report card data and school district typologies obtained from the Ohio Department of Education website were applied for this study. The data analysis was calculated by using the Statistical Package for the Social Sciences 20.0.

This study examined the problems of funding for local public school districts during a period of time where continuous budget cuts and restraints have become widespread for many districts. Additionally, rising costs for services and supplies, more unfunded and underfunded mandates from the Federal Government, an economic decline, and reduced funding by the state and from federal sources has created an endless cycle of tax levy requests.

Demographic Data

The dependent variable for this study was the outcome of the school district tax levy requests. During the November 2011 General Election, there were 188 public school levy tax requests placed on the ballot and of those 188 requests, 91 received voter approval (Ohio Secretary of State, 2011). For the purpose of this study, eleven of those
school district issues were removed from the data because there was not a local school
district report card linked to the school district issue thus reducing the school district
issues in the study to 177. Of the 177 local school district issues analyzed, 84 received
voter approval for a passage rate of 47.45%. Five local school districts placed two
separate tax levy requests on the ballot which led to 172 local school districts having tax
levy requests on the ballot. The election results from the November 2011 General
Election was obtained from the Ohio Secretary of State (2011) website.

This study used six independent variables; typology, designation, performance
index, adequate yearly progress, value added, and percent of economically
disadvantaged. The Ohio Department of Education has categorized local school districts
into typologies where similar districts have been placed together on the basis of
geographical region, income, and poverty level (Ohio Department of Education, 2007).

For the purpose of this study, seven of the nine typologies were used. Two
typologies were excluded because the school districts that were categorized into those
typologies did not have a local report card linked to them. Identified below are the
number of school districts in each typology that placed a tax levy request on the ballot in
the November 2011 General Election. The typologies analyzed in this study, Typologies
1 through 7, incorporated a total of 172 school districts (see Table 8).
Table 8

School Districts in each Typology

<table>
<thead>
<tr>
<th>Typology</th>
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<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>21</td>
<td>12.21</td>
</tr>
<tr>
<td>2</td>
<td>41</td>
<td>23.84</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>12.79</td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>15.70</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>2.91</td>
</tr>
<tr>
<td>6</td>
<td>44</td>
<td>25.58</td>
</tr>
<tr>
<td>7</td>
<td>12</td>
<td>6.98</td>
</tr>
</tbody>
</table>

*Note. 172 school districts are used for this study although 177 tax levy issues were analyzed because five school districts placed two separate tax levy issues on the ballot.*

The report card data obtained from the Ohio Department of Education (2011) website indicates that out of the 172 districts that placed tax levy requests on the ballot, 26 districts were identified as having the designation of excellent with distinction, 79 were identified as excellent, 54 were identified as effective, 12 were identified as continuous improvement, 1 as academic watch, and 0 were in academic emergency (see Table 9). Table 9 identifies the number of local school districts in each distinction category from the school districts that placed tax levy requests on the ballot during the November 2011 General Election (Ohio Department of Education, 2011).
Table 9

School District Designations

<table>
<thead>
<tr>
<th>Designation</th>
<th># of school districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent with Distinction</td>
<td>26</td>
</tr>
<tr>
<td>Excellent</td>
<td>79</td>
</tr>
<tr>
<td>Effective</td>
<td>54</td>
</tr>
<tr>
<td>Continuous Improvement</td>
<td>12</td>
</tr>
<tr>
<td>Academic Watch</td>
<td>1</td>
</tr>
<tr>
<td>Academic Emergency</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. 172 school districts are used for this study although 177 tax levy issues were analyzed because five school districts placed two separate tax levy issues on the ballot.

Local school district Performance Index (PI) is very individualized and calculated based on the achievement of each student. Districts earn points based on the performance of each student on all tested subjects in grades 3 through 8 and the 10th grade Ohio Graduation Tests. All tests have five performance levels: advanced, accelerated, proficient, basic, and limited. The percentage of student scores for each performance level is calculated and multiplied by the point value assigned. A student performing at the advanced level is multiplied by 1.2 points, accelerated 1.1 points, proficient 1.0 point, basic 0.6 points, limited 0.3 points, and untested students in the calculation are assigned 0 points (Ohio Department of Education, 2011). The range of performance index ran from 77.10 to 110.04 for the school districts in this study (see Table 10). Table 10 identifies the number of local school districts in each performance index range from the school
districts that placed tax levy requests on the ballot during the November 2011 General Election (Ohio Department of Education, 2011).

Table 10

*Performance Index Range*

<table>
<thead>
<tr>
<th>Performance Index</th>
<th># of school districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>77.01 - 79.99</td>
<td>1</td>
</tr>
<tr>
<td>80.00 – 84.99</td>
<td>7</td>
</tr>
<tr>
<td>85.00 – 89.99</td>
<td>5</td>
</tr>
<tr>
<td>90.00 – 94.99</td>
<td>15</td>
</tr>
<tr>
<td>95.00 – 99.99</td>
<td>62</td>
</tr>
<tr>
<td>100.00 – 104.99</td>
<td>61</td>
</tr>
<tr>
<td>105.00 – 109.99</td>
<td>19</td>
</tr>
<tr>
<td>110.00 – 110.04</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note.* 172 school districts are used for this study although 177 tax levy issues were analyzed because five school districts placed two separate tax levy issues on the ballot.

Adequate yearly progress (AYP) determinations are based on established goals for reading and mathematics proficiency, test participation, attendance rate, and graduation rate. AYP goals increase over time and are based on a federal law formula. If a school district fails to meet any of the goals, it will result in the district not being able to meet AYP (see Table 11). Table 11 identifies the number of local school districts that met or did not meet adequate yearly progress from the school districts that placed tax
levy requests on the ballot during the November 2011 General Election (Ohio Department of Education, 2011).

Table 11

Adequate Yearly Progress

<table>
<thead>
<tr>
<th>Adequate Yearly Progress</th>
<th># of school districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>79</td>
</tr>
<tr>
<td>Not Met</td>
<td>93</td>
</tr>
</tbody>
</table>

*Note.* 172 school districts are used for this study although 177 tax levy issues were analyzed because five school districts placed two separate tax levy issues on the ballot.

Value Added (VA) is a growth measure that indicates how much progress a student has made since the prior year (Ohio Department of Education, 2009). Value Added calculates the results in grades 4 through 8 in reading and mathematics to determine whether, over the past year, students have achieved one year of expected growth (met), achieved more than one year of expected growth (above), or achieved less than one year of expected growth (below) (see Table 12). Table 12 identifies the number of local school districts in each Value Added category from the districts that placed tax levy requests on the ballot during the November 2011 General Election (Ohio Department of Education, 2011).
Table 12

*Value Added*

<table>
<thead>
<tr>
<th>Value Added</th>
<th># of school districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above</td>
<td>39</td>
</tr>
<tr>
<td>Met</td>
<td>91</td>
</tr>
<tr>
<td>Below</td>
<td>42</td>
</tr>
</tbody>
</table>

*Note.* 172 school districts are used for this study although 177 tax levy issues were analyzed because five school districts placed two separate tax levy issues on the ballot.

Economically Disadvantaged students are students who are determined eligible for the Free Lunch Program under the National School Lunch Act. The school district percentages range from a low of 1.3% to a high of 84.5% (see Table 13). One district received a rate of 0 because the Ohio Department of Education does not calculate when there are fewer than 10 students in that group (Ohio Department of Education, 2011). Table 13 identifies the number of local school districts in each economically disadvantaged range from the school districts that placed tax levy requests on the ballot during the November 2011 General Election (Ohio Department of Education, 2011).
Table 13

*Economically Disadvantaged*

<table>
<thead>
<tr>
<th>Economically Disadvantaged</th>
<th># of school districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% - 25%</td>
<td>39</td>
</tr>
<tr>
<td>26% - 50%</td>
<td>96</td>
</tr>
<tr>
<td>51% - 75%</td>
<td>30</td>
</tr>
<tr>
<td>76% - 84.5%</td>
<td>7</td>
</tr>
</tbody>
</table>

*Note.* 172 school districts are used for this study although 177 tax levy issues were analyzed because five school districts placed two separate tax levy issues on the ballot.

Table 14 shows the results of the quantitative analysis using Statistical Package for the Social Sciences 20.0. The analysis identified to what degree a predictive relationship exists and the strength between each independent variable: designation, performance index, adequate yearly progress, value added, percentage of economically disadvantaged, and school district typology and the dependent variable: outcome of school district tax levy requests. A summary of results is located in Table 14.
Table 14

Summary of SPSS Correlation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Designation</th>
<th>PI</th>
<th>AYP</th>
<th>VA</th>
<th>ED</th>
<th>Typology</th>
<th>Levy Out.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designation</td>
<td>- .775**</td>
<td>.452**</td>
<td>.564**</td>
<td>.591**</td>
<td>-.265**</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>-.506**</td>
<td>-.231**</td>
<td>-.758**</td>
<td>.260**</td>
<td>-.067</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AYP</td>
<td>.215**</td>
<td>.389**</td>
<td>-.091</td>
<td>.107</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>.186*</td>
<td>-.104</td>
<td>.050</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED</td>
<td>-.366**</td>
<td></td>
<td>.091</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.028</td>
<td></td>
</tr>
<tr>
<td>Levy Outcome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. 177 local school district tax levy requests were analyzed for this study and a total of 172 school districts were included because five local school districts placed two separate tax levy issues on the ballot. *p < 0.05. **p < 0.01.

Discussion of Research Findings

A correlation research design was used to measure the relationship between the independent variables (performance index, average yearly progress, value added, economically disadvantaged, school district typology and designation) and the dependent variable, the outcome of a school district tax levy request. A Pearson correlation with an alpha level of .05 was used to determine the significance and direction of the relationship between the variables. Each research question was answered by analyzing the pertinent data to determine if there was a relationship between the outcome of a local school
district tax levy request, components of the report card and school district typology. The results of the data analysis follow the order of the two research questions.

1. Is there a relationship between the outcome of a public school district tax levy request and components of the Local School District Report Card?

The result of the data analysis indicates that there is a weak relationship between the dependent variable, the outcome of a public school district tax levy request and the components of the Local School District Report Card which are the five independent variables: designation \( (r = .025) \), performance index \( (r = -.067) \), adequate yearly progress \( (r = .107) \), value added \( (r = .050) \), and economically disadvantaged \( (r = .091) \). None of the correlations were found to be significant. This suggests that changes in the outcome of a tax levy are not highly correlated with changes in the components of the local school district report card. Therefore, the conclusion for research question one is that the components do not serve as good predictors of levy passage.

2. Is there a relationship between the outcome of a public school district tax levy request and school district typology?

The results of the data analysis indicate there is a weak relationship \( (r = -.028) \) between the dependent variable, the outcome of a public school district tax levy request and the independent variable, school district typology. This relationship was also found to be not significant. Therefore, the conclusion for research question two is that school district typology does not serve as a good predictor of tax levy passage.

What the data analysis showed was that there were thirteen significant correlations between the independent variables. The Pearson correlation coefficient
analysis indicated that six were significant negative correlations. Designation and performance index was identified at \( r = -0.775, p < 0.005 \), a strong, significant negative correlation. Designation and typology was identified at \( r = -0.265, p < 0.005 \) a weak, significant negative correlation. Performance index and adequate yearly progress was identified at \( r = -0.506, p < 0.005 \), a strong, significant negative correlation. Performance index and value added was identified at \( r = -0.231, p < 0.005 \), a weak, significant negative correlation. Performance index and economically disadvantaged was identified at \( r = -0.758, p < 0.005 \), a strong, significant negative correlation. Economically disadvantaged and typology was identified at \( r = -0.366, p < 0.005 \), a weak, significant negative correlation.

The analysis also indicated there were seven significant positive correlations. Designation and adequate yearly progress was identified at \( r = 0.452, p < 0.005 \), a weak, significant positive correlation. Designation and value added was identified at \( r = 0.564, p < 0.005 \), a strong, significant positive correlation. Designation and economically disadvantaged was identified at \( r = 0.591, p < 0.005 \), a strong, significant positive correlation. Performance index and typology was identified at \( r = 0.260, p < 0.005 \), a weak, significant positive correlation. Adequate yearly progress and value added was identified at \( r = 0.215, p < 0.005 \), a weak, significant positive correlation. Adequate yearly progress and economically disadvantaged was identified at \( r = 0.389, p < 0.005 \), a weak, significant positive correlation. Value added and economically disadvantaged was identified at \( r = 0.186, p < 0.005 \), a weak, significant positive correlation.
Summary

The sample for this study consisted of 177 local public school district tax levy request issues that were placed on the November 2011 General Election ballot and obtained from the Ohio Secretary of State website. The researcher used pre-existing data from each School District’s Local Report Card obtained from the Ohio Department of Education website. Two research questions examined the relationship between local school district tax levy requests and components of the Local School District Report Card and Typology.

The first research question asked, is there a relationship between the outcome of a public school district tax levy request and components of the Local School District Report Card? The result of the data analysis indicate that there is a weak relationship between the dependent variable, the outcome of a public school district tax levy request and the independent variables, the components of the Local School District Report Card. None of the correlations were found to be significant which suggests that changes in the outcome of a tax levy are not highly correlated with changes in the components of the local school district report card. Therefore, the conclusion for research question one is that the components do not serve as good predictors of levy passage.

The second research question asked, is there a relationship between the outcome of a public school district tax levy request and school district typology? The results of the data analysis indicate there is a weak relationship between the dependent variable, the outcome of a public school district tax levy request and the independent variable, school district typology. This relationship was also found to be not significant. Therefore, the
conclusion for research question two is that school district typology does not serve as a
good predictor of tax levy passage. A summary of the results is located in Table 14.
CHAPTER V

Chapter five summarizes this correlational study as it relates to the importance and practical use of the findings. Conclusions and recommendations for future studies are discussed.

Summary

Local public school districts in Ohio can count on two regular occurrences: tax levy requests and school district accountability measures. Due to the public school funding approach in Ohio, local school districts are faced with a regular cycle of local school district tax levy requests. The Northwest Land Ordinance of 1787 was the beginning of “local control” of public school districts and, over time, has remained the basic approach for Ohio schools. Many changes in Ohio’s school funding system have occurred over the years however one thing is constant: local funding difficulties vary. Ohio is a diverse state, and the Ohio Department of Education recognizes this by the way Ohio local school districts are categorized into nine different typologies (Ohio Department of Education, 2007). Each local public school district in Ohio is categorized based on similar characteristics. Adding to the challenges of tax levy requests and where a person may live, Ohio’s accountability system has transformed into a transparent measure of student performance. Ohio’s current accountability system began with the No Child Left Behind Act of 2001. The act increased accountability by requiring states to implement statewide accountability systems covering all public school students. The state accountability system for each local public school district is reported in the form of a report card. Each local public school district has a report card for the district and for
each school building in that district. For the purpose of this study, only the district report data was used.

The perfect storm has occurred in Ohio’s public schools: regular tax levy requests during a time of economic instability, vast differences with each local school district based on geographic location, and increased assessment measures. Therefore, the purpose of this study was to analyze the relationship between components of the local school district report card, school district typology, and the outcome of public school tax levy requests. The importance of this study was to identify ways to assist local school districts with tax levy passage. Preexisting data obtained from the Ohio Department of Education (Ohio Department of Education, 2011) and the Ohio Secretary of State’s (Ohio Secretary of State, 2011) websites were used for this identification. The specific data analyzed were individual local school district report card data from the 2010-2011 school year, school district typology, and all local school district tax levy issues from the November 2011 General election that had a report card linked to that local school district (n = 177).

The tax levy issues consisted of all school tax levy issues that had a local school district report card: current expenses (new, renewal, replacement), emergency expenses (new, renewal, replacement), traditional income tax (new and renewal), earned income tax (new and replacement), combined income and property (new), permanent improvement (new, renewal, replacement), and facilities (new). Of the 177 local school district issues analyzed, 84 received voter approval for a passage rate of 47.45%. Five local school districts placed two separate tax levy requests on the ballot which led to 172
local school districts having tax levy requests on the ballot (Ohio Secretary of State, 2011). The typology of each local district included other districts that share the same or nearly the same demographic characteristics. Typologies that had a local public school district with a report card linked to the district which were in typology one through seven (Ohio Department of Education, 2007). The components of the Ohio District Local Report Card used in this study included the district designation which could consist of excellent with distinction, excellent, effective, continuous improvement, academic watch, or academic emergency, performance index (PI), adequate yearly progress (AYP), value added (VA), and economically disadvantaged (ED) (Ohio Department of Education, 2011).

A correlation research design was used to measure the relationship between the independent variables (performance index, average yearly progress, value added, economically disadvantaged, school district typology, and designation) and the dependent variable, the outcome of a school district tax levy request. By using a bivariate correlation, the relationship and strength between each independent variable and the dependent variable was measured.

A Pearson correlation with an alpha level of .05 was used to determine the significance and direction of the relationship between the variables. The quantitative analysis was evaluated by using Statistical Package for the Social Sciences 20.0. The SPSS Statistical software provided an accurate analysis of the data and gives an $r$ value which identifies whether the linear relationship is positive or negative and the significance of the relationship. The local school district report card components and
school district typology was input to compare each to the tax levy request outcome. Each variable had a numeric scale value assigned in order to provide a correlation.

Discussion

The research findings are organized according to each research question.

Question 1: Is there a relationship between the outcome of a public school district tax levy request and components of the Local School District Report Card?
The result of the data analysis suggested that there is a weak relationship between the dependent variable, the outcome of a public school district tax levy request and the components of the Local School District Report Card which are the five independent variables: designation \( r = .025 \), performance index \( r = -.067 \), adequate yearly progress \( r = .107 \), value added \( r = .050 \), and economically disadvantaged \( r = .091 \). This was an indication that changes in the outcome of a tax levy are not highly correlated with changes in the components of the local school district report card. This research suggested that the components of the local district report card do not serve as good predictors of levy passage.

Question 2: Is there a relationship between the outcome of a public school district tax levy request and school district typology?

The result of the data analysis indicated that there is a weak relationship at \( r = -.028 \) between the dependent variable, the outcome of a public school district tax levy request and the independent variable, school district typology. Therefore, the conclusion for research question two was that school district typology does not serve as a good predictor of tax levy passage.
What the data analysis showed was that there were thirteen significant correlations between the independent variables. The Pearson correlation coefficient analysis indicated that six were significant negative correlations. Designation and performance index was identified at $r = -0.775$, $p < 0.005$, a strong, significant negative correlation. Designation and typology was identified at $r = -0.265$, $p < 0.005$ a weak, significant negative correlation. Performance index and adequate yearly progress was identified at $r = -0.506$, $p < 0.005$, a strong, significant negative correlation. Performance index and value added was identified at $r = -0.231$, $p < 0.005$, a weak, significant negative correlation. Performance index and economically disadvantaged was identified at $r = -0.758$, $p < 0.005$, a strong, significant negative correlation. Economically disadvantaged and typology was identified at $r = -0.366$, $p < 0.005$, a weak, significant negative correlation.

The analysis also indicated there were seven significant positive correlations. Designation and adequate yearly progress was identified at $r = 0.452$, $p < 0.005$, a weak, significant positive correlation. Designation and value added was identified at $r = 0.564$, $p < 0.005$, a strong, significant positive correlation. Designation and economically disadvantaged was identified at $r = 0.591$, $p < 0.005$, a strong, significant positive correlation. Performance index and typology was identified at $r = 0.260$, $p < 0.005$, a weak, significant positive correlation. Adequate yearly progress and value added was identified at $r = 0.215$, $p < 0.005$, a weak, significant positive correlation. Adequate yearly progress and economically disadvantaged was identified at $r = 0.389$, $p < 0.005$, a weak, significant positive correlation. Value added and economically disadvantaged was identified at $r = 0.186$, $p < 0.005$, a weak, significant positive correlation.
Recent research suggested that there are strategies that will assist local school districts with having successful school tax levy campaigns. Johnson (2008) identified and reported 21 school levy strategies based upon the preexisting literature. All were associated with successful school levy campaigns. Rampelt (2011), who oversees a nonprofit organization whose purpose is to provide winning strategies and advice to levy campaigns, identified research-based strategies for winning levy campaigns. Research also suggests that achievement information made public influences Americans’ perceptions of schools. Research by Chingos, Henderson, and West (2010) found evidence that the perception Americans have on the quality of their local public schools indicates that the information made public about student academic achievement influences perception. Additionally, Gibbons and Silva (2009) recognized that parents’ judgments of school quality are dominated by school average test scores.

Conclusion and Recommendations

The current method of funding for Ohio public schools will continue to create a regular cycle of levy tax requests. The purpose of this study was to analyze components of the local public school district report card data, school district typology, and the outcome of local public school district tax levy requests to determine whether a correlation exists. The results of this study suggest that there is no correlation between components of the local school district report card, school district typology, and the outcome of a public school district tax levy, and therefore, not an adequate predictor of tax levy issue success.
It is essential for school districts to educate the public about both building report cards and district report cards. Research suggests that citizens experience with schools along with information about performance data influence their perceptions (Henderson, Chingos, & West, 2010). Additionally, research identified that parents’ judgment of school quality is dominated by school average test scores (Gibbons & Silva, 2009). Informing parents and community members about Ohio’s accountability system is a recommended strategy which could assist with school district tax levy passage.

Implications

Implications for future studies would be to analyze data over time and to analyze the data broken down by each individual school building. Analyzing data over time may provide additional research on individual attitudes and events that change, which may lead to different reactions of voters. Using data over time may also take into account the changes in public opinion over the report card components and possibly an individual’s ability to cover an increase in personal taxes. Furthermore, studies over time may assist with being able to analyze differences in the local report card components as in some cases, may change annually based on student performance. It may also provide information as to when school districts should place a local school tax levy request on the ballot. Knowing whether a General Election or Primary would create a greater chance of success would be helpful. In addition, breaking down the data by individual school building, may provide specific areas that need to be targeted when running a campaign. Large, local school districts have multiple cities and communities that feed into different school buildings within the district. Analyzing the data based on each individual school
building would provide a comprehensive picture of areas that may differ. For example, the Cleveland Heights-University Heights local school district in northeastern Ohio, serves students in neighboring Cleveland Heights, University Heights, and parts of South Euclid. One elementary school, Canterbury, obtained an academic watch building designation rating on the 2010-11 report card. Another elementary school, Roxboro, obtained the highest designation rating, Excellent with Distinction on the 2010-11 building report card. The district, obtained the designation rating of continuous improvement on the 2010-11 Local School District Report Card. Each of the two elementary schools mentioned are located in a different area of Cleveland Heights.

Another implication would be to conduct a multiple regression to see if a relationship exists between several independent variables and the dependent variable. By conducting a multiple regression, the analysis may suggest that the dependent variable may be related to more than one independent variable. This would allow for simultaneous analysis of multiple independent variables. For example, the multiple regression may suggest that two or more of the components of the local school district report card correlate with the outcome of a school district tax levy. If there were a correlation, it may be a predictor of tax levy passage.
REFERENCES


Columbus, OH


