PROPERTY TAX AND SCHOOL CHOICE

IN PENNSYLVANIA K-12 EDUCATION

Dissertation

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Property Tax and School Choice in Pennsylvania K-12 Education

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Abstract

For many years now, Pennsylvanian lawmakers have debated the merits of changing the funding method of public schools, with the elimination of property taxes drawing headlines in the media but never being realized through legislative amendments to the school funding formulas. Still today, legislation is being proposed to eliminate property tax as a funding source. The purpose of this study is to determine whether there is demographic or geographic support for these efforts among those who budget and utilize these funds: school board members. The theoretical framework employed will be that of social choice theory. A survey was conducted among school board members from the 501 individual districts in Pennsylvania to determine if there was support for a change to sales and income taxes in lieu of property taxes for school funding and subjected to analysis using SPSS via independent samples Kruskal-Wallis H and Mann Whitney-U testing, along with Crosstab analysis. Additional questions explore support for school choice and voucher systems with Pennsylvania K-12 education. The findings of this study showed that there exists support among certain geographic and demographic groups for these concepts.

Dedication

This study is dedicated to the municipal leaders who have come before us, who have tried to solve the problems of society with varied success. It is also dedicated to the municipal leaders who struggle now with the questions of right and wrong in their monthly voting sessions. Finally, this study is dedicated to those leaders who will follow us, in the hopes that our work has left enough clues for them to find the solutions that we could not. A.A.S.M.I.B.

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Chapter One: Introduction

The debate over the most effective and efficient methods of financing Kindergarten through Twelfth grade (K-12) public education systems within the fifty states of the American union has raged for decades, with a variety of solutions implemented among the individual sovereigns to varying degrees of success. While some experts have concluded that property taxes are more effective than the potential fiscal consequences that could result from shifting the financing of schools and municipalities to additional income and sales taxes within a balanced, diversified revenue system (Stump 1997), other experts explain how higher property tax payments can lead to lower house values and relate how the link between property taxes and house values lends credence to public policies that shift away from taxation of this fashion (Yinger et al. 2016).

Stump and Property Tax Elimination for School Funding in Kansas

Jerry Stump (1997) was an early researcher on the topic of eliminating state property taxes in public school funding while investigating the 1995 Kansas Legislature's proposal to eliminate the 35-mill statewide property tax levy as a source of revenue for schools. Kansas had relied on property taxes to help fund elementary and secondary education since its inception as a state. In 1994-1995, a 35-mill property tax levy generated $583 million to help finance thirty percent of Kansas elementary and secondary school district budgets, making this a controversial and partisan topic. He employed a three-phase procedure of investigation to: 1) determine the importance, advantages and disadvantages, and recent shifts in tax burdens caused by changes in tax administration and potential fiscal consequences from a shift in school financing to income or sales taxes; 2) examine mandated property tax change and its impact on taxpayers in 304 school districts, and; 3) utilize sales ratio studies to verify the quality of real estate appraisal practices.

The results showed a decline in dependency on school revenues from state and local sources, verified that a statewide school millage levy decreased personal property taxes and was augmented by an increase in sales and income taxes, and that alternate real-estate appraisal techniques have improved the quality of appraisals in Kansas. He concluded that the Kansas legislature should renew and make permanent the statewide 35 mill property tax levy for public school funding.

Baker and Green (2005) explored multiple aspects of the situation involving the state of Kansas' financing of elementary and secondary public schools, which climaxed in 2005 with a State Supreme Court declaration that the Kansas legislature had failed to comply with its January ruling. The authors cited that this is a communal problem, as forty-five states have faced challenges to their school funding. Their study examines the history of state school finance reform and the role of school finance litigation in those reforms since the restructuring of Kansas public schools and redrafting of Article 6 (The Education Article) of the Kansas Constitution in the 1960s. Under the School Unification Law of 1963, the total school districts were reduced from 1,600 to 306, with parameters established for the consolidation movement to organize rural, non-K-12 schools into fewer units covering wider geographic areas and complete K-12 grade ranges. Three years later, proposed changes to redrafting and ratification of the Education Article of the Kansas Constitution (Article 6) clarified a much stronger role for the state in organizing, controlling, and financing schools. Another provision restricted budgetary authority of school districts, prohibiting increases of more than four percent in the annual school budgets, codifying existing inequalities between rich and poor school districts. Through analysis of the effects of courts cases such as *Mock v. Kansas and the School District Finance Act* (1991), *Knowles v. State Board of Education* (1993), and *USD 229 v. State* (1994), the authors concluded that the

legislature first exercised its authority to reorganize Kansas public schools as subdivisions of state government, and it was the legislature that redrafted Article 6, reframing the state's role. Kansas courts simply upheld the legislature's ability to take these actions, in the 1970s and again in 1994.

Yinger et al. (2016, 3-142) studied intra-jurisdictional property tax capitalization across various cities and towns in Massachusetts and the effects of the state's Supreme Court decisions ordering the municipalities to assess all houses at full market value, in an effort to maximize public school funding from property taxes. The authors cited the importance of implications of fairness of policies that alter property tax rates, which can raise the effective price of housing without proper capitalization, reducing the demand for such properties. After extensive research of literature on three previous studies, the team reviewed the variables necessary to equate tax-rate-change ratios within the municipalities where capitalization was mandated at 100%. Establishing an estimating equation and defining their econometric methodology, the team proposed that the effective tax rate is proportional to assessed value divided by market value, determining that property tax cannot be regressive or progressive compared to house values with capitalization, where avoidance of regression is possible by keeping assessments equal to market values.

Willoughby, State Budgeting, and the Government Performance Project

One research study (Willoughby 2008) examined state government budget management capacity as measured by a 50-state survey to understand the challenges faced by states, the advancements made to support best practices in budgeting, and the problems that remain. The study found that many state governments:

    1. have difficulty passing budgets on time;

2. have antiquated, intransigent tax structures, and;

3. note how political expediency takes precedence over the principles of good budget management.

Willoughby (2008, 432-4) studied the issues and challenges to state government management capacity using the results of a fifty-state survey of management capacity. Her model incorporates Schick's concepts of budget system orientations that include planning, control, and management, as well as policy and accountability orientations of budget systems. Components of budget management capacity was measured by the Government Performance Project (GPP) and aggregated scores provide an overall assessment of budget management capacity in the states, based on five criteria incorporating "best practices" promoted by public budgeting and finance professional associations and revered in academic literature. States completed an online survey, with state executive and legislative leaders and staff participating in interviews, creating a "macro-level report card" on what influences public policy and management. States were scored numerically via a three-point scale on the five criteria, which were rolled up into an overall letter grade for budget and financial management capacity. Grades were also generated in human resources, information, and infrastructure. Grades in the four management areas were then rolled up into an overall letter grade of management capacity for each state.

Budget management results were less than spectacular: The state effectively manages procurement activities; The state systematically assesses the effectiveness of its financial operations and management practices; The state uses a long-term perspective to make budget decisions; The state's budget process is transparent and easy to follow; The state's financial management activities support a structural balance between ongoing revenues and expenditures (Willoughby 2008, 435).

Leaders in budget and fiscal management included Delaware, Virginia, and Utah (A) and Minnesota and Washington (A−), as opposed to Colorado (C−), California (D), and Oregon (D), which received considerably less flattering money management scores. It was concluded that strengths witnessed included incremental progress by states to advance a long-term budgetary perspective, greater budget transparency (citizen access to the budget), some punctuated advancements in procurement, and compliant financial reporting; whereas greater weakness in budget timeliness (component of budget process) and structural balance was witnessed among the states (Willoughby 2008, 440).

The work concluded that the political discipline necessary to realize balanced public-school budgets devoid of property tax reliance and reaching compromise on budget items suppresses budget management progress (Willoughby 2008). In short, the dependence on property taxes to fund K-12 schools has been strengthened by a disregard for frugality and laissez-faire spending policies limiting the abatement of public-school budget expenses. The Christian statesman is wise to lend credence to exemplify Romans 13:7, "Give to everyone what you owe them: If you owe taxes, pay taxes; if revenue, then revenue; if respect, then respect; if honor, then honor," by giving the best fiscal management and accountability they can to those they represent. Constituents can do their part by following 1 Timothy 2:1-2; "First of all, then, I urge that supplications, prayers, intercessions, and thanksgivings be made for all people, for kings and all who are in high positions, that we may lead a peaceful and quiet life, godly and dignified in every way."

While each school district's budgeting process is largely determined by state laws and local regulations, a national advisory board has recently issued some voluntary guidelines, with traditional professional influence exerting a much stronger influence in financial accounting for

governmental and quasi-governmental agencies, while retaining the legal authority over their accounting systems and internal reports. J. L. Chan (2002) recounted fiscal policies of measurement and disclosure rules that govern the form and content of financial reports required in various state and local governments. First examining the federal budgeting reform in terms of the changes in the legal framework that provide for local governments, processes and policies, the author identified two types of federal budgeting: process-oriented and outcome-oriented. The Federal Budget and Accounting Act (1921) required the President to submit a budget on behalf of the Executive branch and offered a budget staff, which morphed into the Office of Management and Budget under President Richard Nixon, as well as the Congressional Budget Act (1974). Other offerings from the Executives included President Johnson's Planning, Programming and Budgeting System (PPBS) and President Carter's Zero-Base Budgeting (ZBB). The Balanced Budget and Emergency Deficit Control Act (1985) and the Budget Enforcement Act (1990) are also detailed.

Section three of the study delves more into the state and local budget controls, which are subject to state laws regulating local revenue, spending and debt. Standards for a good budgeting process are listed as including incorporating long-term perspectives, establishing links to broad organizational goals, a focus on budget decisions regarding results and outcomes, involvement and promotion of effective communication with stakeholders, and provision of incentives to government management and employees. After an extensive review of such reforms on the federal, state, and local levels, the author concluded that three features characterize the American experience in reforming government budgeting and accounting: reform process as trial-and-error experiments; institutional fragmentation creating similar initiatives in various places at different times, and; limited conceptual harmonization between budgeting and accounting is achieved.

Numerous other studies have glanced around the subject of best practices in the state budgeting processes (Poister and Strieb 1999; Young 2003; Burns and Lee 2004; Justice et al. 2006; Coe 2008; Trueman et al. 2012).   Burns and Lee (2004) examined the ups and downs of state budget process reform spanning the period from 1970 to 2000 through surveying state budget offices to determine how they view their own operations, for which the following were returned: 50 in 1970, 50 in 1975, 48 in 1980, 43 in 1985, 47 in 1990, 51 in 1995, and 33 in 2000 (includes District of Columbia). Four main topics were considered: budget preparation and documents, program analysis, accounting systems, and budget personnel. Program analysis in budgeting is recognized as a traditional method since the planning-programming-budgeting movement of the 1960s. Analysis can provide insights into what programs work, what programs might be cut, and whether increasing resources for programs will produce desired results. The authors identify the variances between effectiveness and productivity analysis, where effectiveness analysis determines relationships between governmental activities and its societal or environmental effects, and productivity analysis which determines the relationships between program costs and the goods/services provided for a cost-benefit ratio, with input from central budget offices, central staff organizations, major line agencies, legislative leadership, and the post auditor.

The research concluded by identifying seven patterns of change and reports variables under each pattern, ranging from 'No Reform' to 'Up-Down-Up' reform, where the variables showed a rise in popularity, then a dip, and followed by a rise. The team asserts that states do not act in unison and do not give the same priority to reforms, with some reforms seemingly irreversible (reliance on information technology, development of more accurate accounting systems), and other reforms with varying support over time (priority rankings in budget requests) and recognizing patterns of backsliding and up-down-up reforms. The survey data did not

explain the decline in budget offices that conduct program analysis or the reason that major agencies dipped in such activity and then reinvigorated efforts.

This dissertation will consider the feasibility and potential consequences of the elimination of property taxes as a method for municipal government and school funding, with an analysis on the direct influences such a shift in tax sources will have on taxpayers. This study proposes three potential research questions to these ends, with a statement of practical and theoretical significance for such a study, and the quantitative and qualitative methods to be employed. Considerations will also be given to the concepts of educational disparities purportedly caused by racial and fiscal inequities, and the perceptions of social justice within these structures through the lenses of those who create these policies on a local, municipal level within Pennsylvania elected government.

<div align="center">Problem Statement</div>

There is a dissonance within academic circles concerning the value provided by property tax funding of K-12 public schools in Pennsylvania. As mentioned, two separate groups of experts support either the use of property taxes over the potential fiscal consequences that could result from shifting the financing of schools and municipalities to additional income and sales taxes within a balanced, diversified revenue system (Stump 1997), while other experts decry the inflation of local property tax which has been shown to lead to lower house values (Yinger et al. 2016). The most recent amendments to Pennsylvania's Homestead Exemption law provide local taxing entities with the option to exempt property taxes for up to 100% of the assessed value for primary residences (McCrystal 2017). Under the law, local taxing entities already have the power to exempt homeowners from 50% of their property taxes (Bauder 2017, supra note 29). If local taxing entities implement such an exemption, the policy does not apply to commercial or

industrial properties (McCrystal 2017, supra note 3). Laura McCrystal (2017) reported on the Philadelphia City Council's consideration of delayed reductions to the ten-year tax abatement and adding a 1% tax on new construction to fund antipoverty initiatives, with debates over focusing on stimulating development or increasing revenue. Proponents pointed to the creation of jobs and a bolstering of the city's tax base with long-term growth to fund affordable housing, but opponents pointed to the cost of revenue and accelerated gentrification, with local developers warning of industry stifling. McCrystal polled the opinions of various leaders in Philadelphia municipal leadership on the "cost of construction" tax, which is anticipated to generate $20 million per year or more with which the city would issue a $400 million bond to support programs such as affordable housing, rental assistance, workforce development, and investments in commercial corridors. With a downturn of construction applications, the potential revenues based on previous years' performance would not support the proposal, with one council member proclaiming that the abatement proposal wasn't radical, and citizens must be prepared to pay their fair share when it is needed. If localities can already eliminate property taxes on primary homes in Pennsylvania, can this type of exemption be positively expanded to include all private residential property, funding their schools on only commercially driven revenues, while potentially identifying viable alternative revenue streams to supply the funding lost from the elimination of the property tax?

The identification of alternate funding sources to replace property taxes in the school funding formula and the feasibility of implementation to shift those tax burdens must be balanced with how these changes directly affect its constituency as well as the schools. With unpredictable fluctuations within various real estate markets, one problem identified is the apparent difficulty for school districts to raise more money from property tax without raising

rates, which are often politically disputed by members of school boards and residents (Oliff and Leachman 2011). Property tax and other local revenues can be affected from year to year, depending on the local demographics, economics, and demand for housing. In Pennsylvania, local municipalities are allowed, by statute, to enact property taxes which directly compete with the rates charged by the local school district, where the school property tax rate can be between three to five times the municipal property tax rate (which supports local services such as police, fire coverage, streetlights, road maintenance, etc.). State budget cuts are also placing upward pressure on property taxes and other local revenues to continue to provide the services that were once covered by the state (Oliff and Leachman 2011). For school districts witnessing declines in property values, raising significant additional revenue through property tax is increasingly difficult. Beyond increasing local revenues, school districts' options for preserving education services are extremely limited. While some municipalities in Pennsylvania could divert funds from other local services to prop up school district budgets, this would sustain education spending at the expense of services like police and fire protection. This study will explore the compatibility of alternative tax sources to fund K-12 education in Pennsylvania while ensuring proper school funding levels, as gauged through the opinions of locally elected school board members.

There are some state officials who would like to see the scope of property tax exemptions, previously mentioned, extend to all properties within the Commonwealth as it does with its Homestead Exemptions (McCrystal 2018). Currently, Pennsylvania state legislators are working on several alternatives to replace that revenue before passing legislation on the matter. According to the latest estimates of the Pennsylvania Independent Fiscal Office (2020), in 2017-18, public school districts in Pennsylvania relied upon approximately $14.4 billion in revenues

from school property taxes to fund their operations, accounting for nearly half of their revenues. Increases in school property taxes are limited by Act 1 of 2006, the "Taxpayer Relief Act" (Fairchild 2019). Taxpayer groups continue to call for school property taxes to be eliminated.

Pennsylvania State Senator David Argall has argued that this antiquated method of paying for schooling must be abolished and replaced with a more modern financing method (Argall et al. 2018). Argall et al. (2016) had previously detailed the efforts of the Pennsylvania Senate to abolish local school property taxes in 2015, which would have been replaced by state revenues from higher income and sales tax rates and other currently exempt products and services. The legislation was defeated 25–24 when Lt. Governor Michael Stack cast a tiebreaking vote against it. Citing authority to take such actions within Article III, Section 14 of the Pennsylvania Constitution, which requires, "The General Assembly shall provide for the maintenance and support of a thorough and efficient system of public education to serve the needs of the Commonwealth," Argall contended that previous governors have enacted sales taxes to support state educational costs. Argall pointed to the growing rate of inflation for school tax rates, with the annual average school district property tax increasing by nearly double the inflation rate at 4.9% from 1994 to 2013.

Citing the state constitution, Argall (et al. 2016) maintained that state authority must intervene with the varying rates among school districts, quoting Article VIII, Section 1 of the Pennsylvania Constitution which requires, "All taxes shall be uniform, upon the same class of subjects, within the territorial limits of the authority levying the tax, and shall be levied and collected under general laws." Argall asserted that the subjective nature of school property tax is in direct opposition of the uniformity clause. The proposal was developed among 70 grassroots taxpayer advocacy groups across the state (the Pennsylvania Coalition of Taxpayer

Associations), which was presented to lawmakers with an increased Personal Income Tax (from 3.07% to 4.95%) and an increased and expanded Sales and Use Tax (from 6% to 7% and broadening the tax base). School districts would have received a cost-of-living adjustment tied to the Statewide Average Weekly Wage each year and would have been allowed to raise additional revenue through a local Personal Income Tax or Earned Income Tax increase contingent on local referendum.

Pennsylvania State Senator David Argall's bill to eliminate dependency on property tax collection was a bipartisan effort, which provided for tax levies, authorized imposition of a personal income tax or an earned income tax by a school district subject to voter approval, provided for imposition of and exclusions from a sales and use tax for the stabilization of public education funding, with an increase to the personal income tax, state licenses, and hotel occupancy tax. It outlined the procedure and administration of the tax, establishing an Education Stabilization Fund. The main goal of the legislation was to authorize school districts to levy, assess and collect a tax on personal income, or earned income and net profits, in efforts to eliminate property taxation by school districts. Once a school board imposes a personal income tax under this legislation and a local referendum is approved, the board cannot impose any other such tax under this or any other act (to keep it from being abusive to local businesses).

Although bipartisan support among sponsors and co-sponsors gained this topic much discussion in the news cycles, the bill did not pass. Subsequent attempts to reintroduce similar bills have been recently slowed by the COVID-19 outbreak and the legislative battles over the 2020 election results. This bill is the main talking point on the topic of property tax elimination.

There are 501 public school districts in the Commonwealth of Pennsylvania charged with educating over 1.5 million students on a daily basis. The districts spent approximately $28.3

billion of taxpayer funds, including approximately half of those revenues from school property taxes, in 2017-18 to educate those students. Public education is a people-based enterprise, and 63% of these expenses went toward salaries ($11.1 billion) and benefits ($6.5 billion) (PA State Dept of Ed. 2020). If school property taxes are abolished as a source of revenue for public school districts, as proposed in the Property Tax Independence Act [PTIA] (Argall 2017), alternatives must be identified that can adequately replace this funding without negatively affecting its base.

The current study will expound upon previous work in this field by Mark Price (2017) and John Fairchild (2019), and findings of their labor will be considered in these assessments. Price is the Labor Economist and Research Director at the Keystone Research Center in Pennsylvania and holds a Ph.D. in economics from the University of Utah. He is the author of *Who Pays for School Property Tax Elimination? An Analysis of School Property Tax Burdens in Pennsylvania.* Fairchild is the Director of Administrative Services at the Lewisburg Area School District. His dissertation, *Analysis of the Financial Impact of the Property Tax Independence Act on Pennsylvania Public School Districts*, debated the adequacy of the proposed fundings levels from alternate tax sources in Senator Argall's PTIA (2017).

D. L. Debertin et al. (1984) examined the impact that a property tax relief plan had on funding for education in Indiana over a seven-year period, from 1973 to 1980. The impacts of the extent to which various groups (farmers, homeowners, and commercial and business interests) were affected by tax relief legislation, as well as the impact of the relief package on assessed valuations, tax rates, and expenditures, were measured by comparing rural with suburban and urban school districts. An economic and statistical model was developed and estimated, assuming that the demand for educational spending is a derived demand from a production function that transforms school age children residing in a community into educated adults. The

model was used to determine if socioeconomic variables now have a less important impact on educational spending than before the relief package was implemented. The team concluded that with the advent of the property tax control system, the state distributional formula has to a degree benefited the urban at the expense of rural schools. Indiana's property tax control package implemented in 1973 had, by 1979:

    1) restrained the growth in total levies generated by the property tax

    2) increased the state share of total funding for local schools from approximately one-third to two-thirds

    3) substantially reduced general fund property tax rates.

    The property tax levy on farm property was less in 1979 than it was in 1973. Many farm inputs were exempt from the sales tax, and the farmers in Indiana pay a substantially smaller percentage of total funding for local schools than before the controls were implemented.

    Mark Price (2017, 4-23) offered a definitive work on the costs of property school tax elimination in Pennsylvania, which is highly cited for its plethora of data, providing the first estimates of the impact of property tax elimination proposals on families in Pennsylvania. Price prognosticates that property taxes would fall by an average of $1,685 per family, while sales and income taxes would rise by over $2,000 on average per family, causing an end result of property tax elimination as an increase of taxes by $334 per family. The proposed property tax elimination plan increases taxes on middle-class families by shifting taxes from corporations to families and deposits the largest amounts of property tax relief with affluent families in rich school districts that have the highest property taxes. Price utilized data from the Institute on Taxation and Economic Policy for estimated average property tax bills and median property tax payment data from the American Community Survey to determine the amounts of revenue being generated by property tax across the nation, narrowing these numbers to

only those that support public education from local and state sources. He observed that an increase of 2.6% per year in school property tax rates caused an increase of 3.9% in collected revenues between 1999 and 2016, an average increase of $47 per property. Explaining the increasing spread between state and local funding levels for education, with Census Bureau data showing Pennsylvania having the 46th lowest percentage of contribution to public school funding, providing only 37% of district financial support in a state that demonstrates the largest funding inequality between its wealthiest and poorest school districts. State funding totals here range from $23,219 in revenues per pupil in Lower Marion School District in Allegheny County, opposed to the paltry $1,034 in state aid per pupil in Reading School District. Proposals for eliminating the school property taxes include an increase in personal income tax (EIT) from 3.07% to 4.95%, increasing the sales tax from 6% to 7%, and expanding the sales tax to currently untaxed items such as food, clothing, and services. Alternate models call for an EIT of 6.5% on non-wage and interest earnings, with a decrease to 2.8% for wage and interest income. Price concluded that Pennsylvania does not currently have an issue with high property tax rates when compared to neighboring states but does have concern for the level of state funding that is not being received by the school districts, which in turn creates the issue of inequity when observing variations between more and less affluent communities. He recommended keeping the current real estate tax formulas with increased state contributions to reduce the strain of less affluent districts.

John Fairchild (2019) presented his dissertation towards a doctorate degree in business administration to Wilmington University on property tax elimination for funding public schools in Pennsylvania. The Pennsylvania Property Tax Independence Act (PTIA 2017) proposed to replace property taxes to fund public schools with increased sales and income taxes, which literature has shown varying degrees of success with these methods in other states, ranging from

limited success to disaster. Fairchild began with the premise of support needed, identifying 501

public school districts in the Commonwealth, and including over 1.5 million students, with

expenditures of $28.3 billion; including $14.4 billion in revenues from school property taxes

(2015-16), with 63% of these expenses for salaries ($11.1 billion) and benefits ($6.5 billion),

including a mere 57.3% funding level for accrued pension liabilities.

     Fairchild presented the prompt examining of the effects of legislation if it were

implemented at the beginning of the 2012-13 fiscal year and compared the results to the actual

revenues and expenditures of Pennsylvania public school districts during the five-year period

from 2012-13 to 2016-17, to determine the impact, if any, on public school funding. Data

regarding school district population demographics, including age and race, were obtained from

the 2016 American Community Survey data repository on the 2016 U.S. Census Bureau website.

Data regarding student low-income levels were obtained from the Pennsylvania Department of

Education (2017) website on low-income enrollments. Total taxes paid were summarized by

school district before and after implementation of the PTIA and increases to the personal income

tax rate from 3.07% to 4.95% and increases of sales and use tax and hotel occupancy tax from

6% to 7% were used to calculate the effects of the bill, with the revenues from school property

taxes removed from the income of school districts for all five years of the review. An ANOVA

was run on the difference in total tax revenue paid by taxpayers in each school district with and

without the implementation of the PTIA over the course of the five-year study period, grouping

the school districts by their type of locale. Twelve school locale codes from the 2007-08 National

Center for Education Statistics survey were simplified to four categories of schools: city, rural,

suburb and town. Of the 501 school districts, 337 districts had a positive increase to fund balance

and 163 districts had a decrease to their fund balance over that period, with the average increase

in fund balance per district over that time of $2,013,570. $9.98 billion in ESF revenues did not

make up for the $11.7 billion in school property tax revenues in 2012-13. While total taxes paid

decreased, so did revenues to the school, leading to the conclusion that the levels of change to

the tax rates proposed by the legislation would be inadequate to eliminate property taxes entirely.

This provided a solid basis for testing other levels of taxation to eliminate the property tax

revenue source for Pennsylvania K-12 schools.

Background and Rationale

There is ongoing debate in Harrisburg, Pennsylvania, concerning the use of property

taxes to fund public K-12 school budgets, with proponents for change calling for alternative

taxation methods, while others point to economic fluctuations as a reason to avoid disruption of

the current methods. While much has been said and written by lawmakers, school directors, and

taxpayers through letters to the editor in local newspapers, there are few sources of quantitative

or qualitative data on this topic within the state concerning the perceptions of the local decision

makers, creating a knowledge gap within the field. The major opinions on each side of the

political isle are represented in general but have not adequately been explored through a

conceptual framework. This study will advance knowledge in this field by quantifying the

opinions of locally elected school board members on the viability of implementing alternative

revenue sources for Pennsylvania K-12 education and its potential influences on equality and

social justice.

Categorical thinking was employed in this study to create order from data collected and

to separate data that can stand alone (Freeman 2017). This mode aids in the creation of criteria

from which data units can be identified and organized, which will be useful in this study to

separate and analyze the varying opinions presented within the data samples. Additionally,

dialectical thinking, which focuses on visible and hidden conflicting beliefs, emphasizing

transformation by putting into action theories of change while rectifying oppressive structures

and practices, which may also be employed during the analysis of the quantitative data collected

through associative relations between certain demographic regions within the state and the

generalized political environments of each. As this study aims to collect the opinions of policy

makers concerning the effects of tax burden shifts from property tax (which is commonly labeled

as an 'oppressive practice') to other funding sources, a search for a new relation between school

funding and revenue generation will uncover the inherent tensions between those who want

change and those who want to maintain reliance on property values to pay for the education of

Pennsylvania's children. As a theory of change, dialectical thinking alters the focus of past and

present situations to one where research is more an intervention to focus on future potential

(Freeman 2017). As modes of thinking are often used in tandem, both categorical and dialectical

modes will be primarily utilized. The purpose of this research will be to explore the perceptions

of school officials concerning a tax burden shift away from property taxes for public school

funding and the use of a school choice voucher system to fund K-12 education in Pennsylvania.

Study Objectives

In this study, the research objectives are to:

- Examine the demographic identifiers of those who support and do not support a funding
  alternative

- Explore the underlying taxpayer objections to changing the public-school funding
  formula

- Investigate attitudes of school directors towards various funding revenue sources.

Topics and content area for this study involved stakeholder demographics, questions concerning generalized household economic activity, and dispositions to various funding sources. An initial online survey was emailed to 3,387 school board members to determine their support level for school funding reforms which was analyzed qualitatively using SPSS. A voluntary qualitative interview with John Fairchild followed to discuss survey results in relation to their policy stance and perceived challenges to implementing policy that reflects the survey data.

Research Question

The reason for this research is to determine the availability of viable alternatives to property tax as financial support for K-12 public-school revenues in Pennsylvania, while discovering the most acceptable and conducive system of school administration and governance among various demographics. Since there is no current legislative support for these policies currently, it would follow that there is no real support for them among the constituencies. Therefore, the research question for this study is:

> **What policies are supported by locally elected school board members for implementation to resolve the perceived financial and social disparities between school districts created by the collection of property taxes to fund the Pennsylvania K-12 educational system?**

Three sub-questions and hypotheses proposed for this study are:

SQ 1: Is there support for a viable, socially acceptable alternative method of funding to replace property taxes in the Pennsylvania state public school funding formula?

- $H_0 1$: There is no support for a viable, socially acceptable alternative method of funding to replace property taxes in the Pennsylvania state public school funding formula.

- $H_a 1$: There is support for a viable, socially acceptable alternative method of funding to replace property taxes in the Pennsylvania state public school funding formula.

SQ 2: Are there demographic/geographic groups that support a school choice voucher system for the Pennsylvania K-12 education system?

- $H_0 2$: There are no demographic/geographic groups that support a school choice voucher system for the Pennsylvania K-12 education system.

- $H_a 2$: There are demographic/geographic groups that support a school choice voucher system for the Pennsylvania K-12 education system.

Q 3: Are there demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system?

- $H_0 3$: There are no demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system.

- $H_a 3$: There are demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system.

Practical and Theoretical Significance

The value of the outcome of this study is to help to identify the acceptance among local elected officials of alternate funding sources to replace property taxes in the school funding formula and the feasibility of implementation to shift those tax burdens. These concepts are supposedly being promoted by a large group of residents in Pennsylvania, but must be balanced to consider how these changes directly affect its constituency and its schools. This research will highlight similarities and variances between various demographics to the acceptance of a school choice/voucher system, with special regard to per-pupil funding allowances for disadvantaged and minority students, as viewed through the lens of a theoretical underpinning with its foundation in social choice theory.

While generalized choice theory is concerned with individuals making decisions based on their preferences, social choice theory is concerned with how to translate the preferences of

individuals into the preferences of a group. Social choice theory, as explained in the Literature

Review section, is appropriate for use in this theoretical framework, as independent school board

members bring their own thoughts and opinions, shaped by their environment and the influence

of their constituents, to the decisions that they make for the greater good (e.g., their school

district). Social choice theory is an economic theory that considers whether a society can be

ordered in a way that reflects individual preferences, blending elements of welfare economics

and public choice theory. The theory was developed by economist Kenneth Arrow and published

in his book *Social Choice and Individual Values* (1951). A practical example of collective

decision-making is the enactment of a law or set of laws under a constitution. Another example,

voting, where an individual's preference of one candidate over another are collected among those

in a community to elect someone who best represents the group's preferences, demonstrates the

characteristics of social choice theory.

Such studies help to expand the information database available to these leaders, with the

opinions and views of their colleagues ripe for consideration, but the decision they make on

funding sources, allocation levels, and budgetary performance will ultimately be an individual

one which may vary among the other individual perspectives of the other board members. These

individual decisions may be based on the board member's own material interests and behaviors

for normative purposes. The deliberations held during their meetings which will create the

consensus on policy implemented and laws sought.

When testing for the null hypothesis, there are potentially two types of errors: A Type I

error, where the null hypothesis is rejected even though it is true, and a Type II error, which

observes the acceptance of the null hypothesis as true when it is really false (Meier et al, 2015,

194-5). Errors of Type I can be reduced by increasing the rejection probability, but raising the

alpha level raises the chance of a Type II error, which can be minimized by increasing the sample size of the study. This trade-off must be realized and pre-determined by the administrator. As there are 501 school districts, the sample size is finite, so not all possible outcomes may have been previously experienced or established within the sample. As such, "best practices" will include the observations made within the established sample, compared to one another as well as the 'ideal' as set in the alternative hypotheses. Regionalized demographic data will be calculated using pre-determined regions within the state compatible with other such state-wide surveys.

<div align="center">Work Hypothesis</div>

A sound, well-developed research study is primarily based on research hypotheses, which contribute to the problems' solutions. Types of research hypotheses include inductive/non-directional and deductive/directional methods depending on the level of mixed methods (qualitative and quantitative), where null and alternative hypotheses may also be involved in the reporting of results. Rejecting the null hypothesis and accepting the alternative hypothesis is the basis for building a good quantitative research study just as formulating a solid work hypothesis for your qualitative elements is essential to exploring research questions. One study examined how to organize and establish an efficient and complete hypothesis (Toledo et al. 2011, 191-194). The team of Jesson, Matheson, and Lacey (2011) produced a guidebook for traditional and systematic techniques of literature review, and Chris Hart (2018) went deeper with his offering exploring the topic of literature review and the step-by-step process of finding and evaluating good source material for your study.

The work hypothesis for the research question is that the elimination of property taxes as a funding source for K-12 education in Pennsylvania, substituted with other sources via funding

mechanisms, would be centrally collected through the state revenue system. These funds would be distributed through a voucher system, where each student is allotted a pre-determined amount of funding that they can use at any approved school within the state. The work hypotheses for the three sub-questions are, respectively:

1) that schools would see an increase in funding naturally with a cycled economic dispersion of tax revenues through sales and/or income tax funding of Pennsylvania K-12 education, while taxpayers would be able to use more of their disposable income to make purchases in lieu of paying property tax;

2) that allowing parents to choose which schools they patronize through a state-sponsored voucher program will yield better educational results due to free market forces, while also providing for increased, quality educational opportunities for traditional public-school students living in larger metropolitan areas with little wealth through funding equality. and;

3) that the elimination of property taxes for public school funding would create a better learning environment with reduced racial disparity and social justice concerns.

Conceptual and Operational Definition of the Variables Examined

If legislators are proposing the collection of public-school funding under the purview of state agencies, the timely distribution of these funds will rely on the budget activities in Harrisburg, which is often stifled by impasses and disagreements between the political entities involved. One study focused on the authorities and limitations for state governments budgets, finding that all but Vermont have enacted constitutional or statutory limitations restricting their ability to run deficits in the state's general fund. Bohn and Inman (1996, 25-51) compared the

behavior of US states that operate under a range of fiscal rules that differ in the degree of restrictiveness, with the premise that more stringent balance rules have a measurable and intuitively plausible impact on budget deficits and provides strong evidence that the form of a balanced-budget rule matters. The authors pursued this goal by organizing the various state balance requirement through an accounting relationship equation to determine surpluses or deficits. The team found that states with a no-carry-over rule, which restricts passing deficits from one fiscal year to the next, have significantly higher general fund surpluses in the long-run, and a significantly lower probability of running a deficit in any fiscal year, than do states that lack such a rule. Among the 21 states with positive values of the relative fixed effect (large surplus states), 19 had a no carry-over provision, leading the team to conclude that the constraint was not by itself sufficient to guarantee a fiscal surplus, but did make a positive contribution to that goal, but cannot be attributed to conflicting ideological variables of partisanship. Four main conclusions were presented: balanced-budget constraints that apply to an audited, end-of-the-year fiscal balance are more effective than constraints requiring only a beginning-of-the-year balanced all state balanced-budget rules are ultimately enforced by a state's supreme court, with those justices directly elected by the citizens having stronger constraints and leading to larger average surpluses than states which appoint supreme court justices; constraints contained within state constitutions are more effective than constraints based on statute, and; budget surpluses in strong balance-rule states are less responsive to cyclical swings in income and unemployment than surpluses in states with weak requirements.

Pennsylvania has three constitutional/statutory budgetary limitations. The first requires the governor to submit a balanced budget at the start of budget deliberations. The second constraint requires the state legislature to pass a balanced budget. Neither of these two

prospective constraints impose any fiscal discipline at the end of the fiscal year. States facing the

third constraint are allowed to run a deficit at the end of the year with the requirement to

explicitly budget for that deficit in the next fiscal year, creating carry-over one year to the next.

This constraint never requires the deficit to be actually eliminated. Pennsylvania can simply roll

deficits into the next fiscal year's budget indefinitely, with no effective end-of-the-year fiscal

balance requirement. This exposes an essential component in the definition of a 'balanced

budget,' where deficit spending is controlled by mandated year end balances in state budgets.

Data analysis from 47 states from 1970–1991 found that state end-of-the-year (not prospective)

balance requirements have significant positive effects on a state's general fund surplus, which is

accumulated through cuts in spending, not through tax increases; being saved in "rainy-day"

funds for application to future general fund deficits (Bohn and Inman 1996).

Identification of alternate revenue sources presently employed within the state is

necessary to define the specific variables within the scope of this proposal. Sales taxes are

defined as a consumption tax for purchases made within the study's taxing jurisdiction.

Currently, Pennsylvania maintains a 6% sales tax, with a one percent local tax is added to

purchases made in Allegheny County, and a two percent local tax is added to purchases made in

Philadelphia. See Figure 2-1 in the appendix for more on Pennsylvania state revenues vs budget

and deficit spending. This sales or 'use' tax is levied on:

- Medical and Surgical Supplies

- Dental Supplies

- Farming (REV-1729)

- Mushroom Farming

- Construction and Building Machinery and Equipment

- Retail Goods (REV-717)

- Hotel Occupancy Tax.

A use tax, at the same rate as sales tax, is levied on taxable purchases of tangible personal property or specified services used or consumed in Pennsylvania where no sales tax is paid to a vendor. The hotel occupancy tax, imposed at the same rate as sales tax, applies to room rental charges for periods of less than 30 days by the same person. In addition to hotels, the tax applies to rentals of rooms, apartments, and houses arranged through online or third-party brokers, such as Air BNBs or vacation rentals (PA Dept of Rev. 2020). See Figure 2-2 in the appendix for more on current and proposed revenue sources for Pennsylvania public schools. Additionally, the following terms will be important in the course of this study:

- Local Revenue – The sum of local property taxes and other local revenue.

- State Revenue – Revenue originating from Commonwealth appropriations and directly disbursed to the school districts.

- Federal Revenue – Revenue originating from federal sources and made available to the school district through direct grants, state channels or other agencies conducting programs through the school district.

- Other Revenue – Includes revenue from the sale of bonds, proceeds from extended term financing, interfund transfers, receipts from other local education agencies, sale of or compensation for loss of fixed assets, and refunds of prior years' expenditures.

- Instruction Expense – Includes expenditures for activities dealing directly with the interaction between teachers and students, and related costs that can be directly attributed to a program of instruction.

- Support Services Expense – Includes expenditures for those services that provide administrative, technical (such as guidance and health) and logistical support to facilitate and enhance instruction.

- Non-instructional Services Expense – Includes expenditures for activities concerned with providing noninstructional services to students, staff, or the community.

- Facilities Expense – Includes expenditures for initial purchase of land, buildings, service systems and built-in equipment, construction, remodeling, additions, and improvements to buildings; initial installation, replacement or extension of service systems and other built-in equipment; improvement to sites; and other related activities.

- Other Expense and Financing Uses – Includes expenditures for the disbursement of governmental funds not classified in other functional areas that require budgetary and accounting control. These include debt service payments (principal and interest) and transfers of monies from one fund to another.

- Per Pupil – The pupil figure used to calculate the per-pupil revenue and expenditure is the average daily membership (ADM).

Chapter Two: Literature Review

Theoretical Framework for Study

As the school choice debate centers around the demand for certain provisions within the Pennsylvania K-12 public school systems, and as the leaders being surveyed for this study are directly chosen by the public to serve them, the theoretical framework for this study will fall under the purview of social choice theory. Whereas public choice theory can be defined as, "the use of economic tools to deal with traditional problems of political science" (Tullock 1987), it is related to social choice theory, where social choice theory is a theoretical framework for analysis of combining individual opinions, preferences, interests, or welfares to reach a collective decision for social welfare (Sen 2008). While choice theories are concerned with individuals making decisions based on their individual preferences, social choice theory is concerned with how to translate the preferences of individuals into the preferences of a group. In this study, school board members will choose their preferred funding methods of K-12 public school systems and choose whether or not to support a school choice system based on their individual preferences. To be studied is how these choices relate to the larger voting public's desires towards these ends. There are accusations of inadequacies from opponents of public and social choice theory in educational funding matters, which one writer termed "the economic theory of legislation," conveying concerns of the influences from special interest groups in the education funding reform. However, these researchers also employ public and social choice theory to predict legislative outcomes of education funding reform legislation (Brown 1996). As such, this theory will underpin the research contained within this study.

Social choice theory purports that leaders in public school districts have no incentive to decrease costs, as they are being shielded from market competition with a guaranteed, mandated

revenue stream that often rewards failing schools and districts with increased funding, in an attempt to fix the issues prevalent. Containing Pennsylvania K-12 public school budgets within the ever-changing dynamic of the free market, where property tax has been eliminated as a viable funding source in lieu of sources which tend to fluctuate more frequently and volatility (sales and income taxes), would be a departure from the status quo of simply increasing tax rates locally when the schools need more revenues. Some contend that public education systems not only neglect to provide incentives for cost-cutting and quality-improvements, but that they actually do just the opposite. This is witnessed by the provision of ever-larger budgets for public education which does not lead to better results. At the same time, private schools are providing higher-quality educational results at lower costs (Bors 2010). In a study that analyzed five metro areas, public schools spent nearly twice per pupil (93 percent) than the estimated median private school. These private schools were found to provide higher-quality education at a lower cost than "free" public schools (Schaeffer 2010). While private and parochial school compete for students and donations, Pennsylvania public school districts compete for funding from legislators and bureaucracies in Harrisburg. One factor in determining the distribution of this funding is student performance on standardized tests. Through this artificial substitute for market competition, schools are incentivized to focus on the results of these tests in lieu of more rounded, higher-quality educational offerings, and states have an incentive to make standardized tests easier so that more students will pass; which, in turn, brings more federal funding into the state (Bors 2010).

Social choice theory also explains why voters do not demand immediate changes on election day by voting for candidates who will champion the educational funding debates towards change. 'Rational ignorance' is a term explaining the cost to a voter for taking the time

to learn about a political issue, which is not as valued as the potential benefit of casting a well-informed vote. Unlike market decisions, where a variety of individual goods and services are available on the market, political decisions end up being 'bundle purchases' where one must choose a single politician who most closely espouses their policy positions. When electing local leaders, more especially to their school boards, voters are often stuck with a choice between two candidates, each of whom may have some agreeable and some disagreeable positions. If neither candidate champions an important topic to the individual voter, the voter may end up feeling disenfranchised and not casting a vote at all or may end up feeling forced to choose 'the lesser of two evils.' Additionally, politicians may fail to live up to the campaign promises made prior to the election, even if they genuinely believe in the policy position originally presented. This is the mirror-image of decisions in the market, where products can be returned for refunds and where false advertising is punished by the law and by customers who vote with their feet and their dollars in abandoning those companies that do not follow through (Bors 2010).

Alternatives to the funding systems currently used by Pennsylvania K-12 public school systems have been proposed, including school vouchers and charter schools, in an attempt to stimulate a replacement for market competition on the supply side of schooling, although some see these methods as fundamentally flawed (Bors 2010). Requirements and mandates that the government could (and most probably, would) impose on schools accepting vouchers (such as mandates in curricula, standardized testing procedures, hiring policies, etc.) could create even more state control over education than already exists. Additionally, opponents state that the proposed alternatives would be ineffective on a large scale to address the quantity of education that is demanded under a system of taxpayer-financed schooling. Even so, thirteen states had

adopted some form of school choice legislation by 1992, with a large number of district and school-level choice programs being implemented (Carnegie Foundation 1992).

Free-market education proponents Chubb and Moe (1990a) advocated that choice theory allows students to attend a public, private, or parochial school of their choice at the governments' expense. In their proposal, school districts are granted autonomy in budgeting and curriculum decisions. In order to be successful, the schools need to attract students who prefer their educational offerings. Market competition for students would force school districts to value those services important to the students and parents, instead of satisfying the arbitrary needs of bureaucratic and democratic institutions. A competitive market, they claim, will free schools to meet those demands. However, no conclusive evidence demonstrates that eliminating democratic control of schools and submitting education to the forces of the market will produce the desired effects. Some studies conclude that school choice systems are viable and that schools will respond to competitive demands by improving education quality to attract parents and students (Fliegel and MacGuire 1993). Others have shown school choice programs to be expensive and ultimately disappointing in failing to improve education quality or academic achievement while bankrupting school districts (Chriss, Nash, and Stem 1992). This fear of failure could be a primary deterrent for individuals to voice support for changing the status quo. To date, there has been no definitive research addressing the desire for a centralized state funding system excluding property taxes, choice programs in education, and what the opinions of those elected to make these decisions locally are on the topic.

Public choice theory advocates assume that private and parochial schools are academically superior to public schools and that the reason is competition. This perspective draws support from research showing private school students score higher on achievement tests

(Coleman and Hoffer 1987; Coleman, Hoffer, and Kilgore 1982). However, private, and parochial school students are often more likely to have demographic attributes (i.e., high socioeconomic status) associated with (and more conducive to) achievement than their public-school counterparts. Private schools often utilize an admission process that screens out students who carry the risk of academic failure (Witte 1992). This could skew the comparisons between public and private/parochial educational successes and failures. The free-market advocate would contend that, if better educational achievement is demanded, that is what the market should supply, although a variety of other demands may also be met by the same market forces. If religious services or segregation from various races at school are valued over educational achievement results, then school choice is a simple supply and demand argument. Because choice may maximize values other than educational quality, one must determine what those values are to be able to evaluate fully the costs and benefits of the proposed policy change. Public choice theory draws strength from the concept that private and parochial schools fulfill an unmet demand for quality education (Smith and Meier 1995). With the secularism of American public schools being enforced by the courts since the 1960s, parents desiring that their children get an education reflective of their religious beliefs have no option but private/parochial schooling. Services based around religion, not quality, constitute a large reason for the demand for private/parochial school education (Brown 1992).

In an effort to fully understand the arguments surrounding the topics within this study, the history of funding and intergovernmental involvement pertaining to Pennsylvania K-12 public school systems must be examined, as well as systems that have been implemented, for better or for worse, in other states. In the successive parts of this chapter, a comprehensive literature review is presented for consideration.

Introduction to Pennsylvania Public-School Funding

The elimination of school property tax in Pennsylvania's public school funding formula has been a hot button topic of debate among Pennsylvania state and local leaders, with school boards and teachers' unions showing vested interests in a potential solution. The reason for this research is to determine the effects on taxpayers and school districts by defunding the state public school funding formula from the cessation of collecting annual property taxes, substituting this revenue source with viable alternative options for public school, and its qualitative effects on taxpayers. There is ongoing debate in Harrisburg, Pennsylvania, concerning the use of property taxes to fund public school budgets, with proponents for change calling for alternative taxation methods while others point to economic fluctuations as a reason to avoid disruption of the current methods. While the process of utilized to study such issues in an academic fashion often involves a longer timeline than most politicians have to present solutions to these contemporary dilemmas (Ferkaluk 2021a), this should not be perceived as indifference or inefficiency on the part of the researchers, as suggested by Rippner (2016, 159-60), and open communication between experts and legislators must be preserved while acknowledging the cultural differences between the two as presented by Jeffrey Henig (2008, 41-62; 2009, 137-60). The major opinions on each side are represented in general but have not adequately been explored through a conceptual framework. While much has been said and written by lawmakers, school directors, and taxpayers through letter to the editor in local newspapers, there are few sources of qualitative data on this topic within the state (knowledge gap).

Capital correspondent Bob Bauder (2017) reported on the struggles in Harrisburg for proponents of Pennsylvania's Property Tax Referendum efforts. Speaking with Allegheny

County Executives and state legislators, Bauder presented the upcoming ballot referendum question:

> Shall the Pennsylvania Constitution be amended to permit the General Assembly to enact legislation authorizing local taxing authorities to exclude from taxation up to 100 percent of the assessed value of each homestead property within a local taxing jurisdiction, rather than limit the exclusion to one-half of the median assessed value of all homestead property, which is the existing law?

He reported the opinion that while bipartisan agreement can be found among legislators for eliminating property tax, the issue becomes what type of funding will replace these school revenues from state and local coffers, which is heavily debated between property taxes, wage taxes, sales taxes, or another forms of tax. Local financial totals are examined to define the scope of the replacement needed for some of the larger districts in urban areas, concluding that voters would need to approve the constitutional change in taxation, then it has to pass the state legislature and all the individual municipalities that have to implement it, which could take years if it happens at all.

The purpose of this study is to identify support for viable alternatives to supply the funding lost from the elimination of the property tax by gauging the opinions of school board members to choose their preferred funding methods of K-12 public school systems and choose whether or not to support a school choice system based on their individual preferences, as witnessed through social choice theory. While recognizing the vertical influence model (Berry and Berry 2007, 223-60) that the US Department of Education has over state policy concerning policy adoption incentivization for charter schools (Rippner 2016, 45), which do create a strain on public school funding each year, this study will examine the state and local influences separately from the federal involvements. Considerations of partisan legislative efforts should also be considered (McLendon et al. 2006, 1-24) in respect to the identification of "common

ground" that can be used to build a foundation of consensus in Harrisburg. McLendon et al. (2006) led a team to propose how temporary variations and differences in state sociopolitical composition can affect the adoption of accountability policies in higher education at the state level, utilizing a theoretical framework compiled from various sources detailing policy innovations. The period of 1979 to 2002 was scanned to identify factors affecting several performance-accountability policies. The team was able to confirm their original hypotheses partially, stating that the primary drivers of policy adoption are dependent on the majority party's legislative strength and higher-education governance arrangements. In this paper, the history of public-school funding will be explored with due consideration given to each level of education and the federal/state mandates that affect such, to consider a new funding formula consideration designed to improve student achievement and school successes.

William Berry has an extensive portfolio of work on government policy formation and was joined by Frances Berry of Florida State University on this chapter of a larger work to detail the dominant theories of government innovation within public policy literature, presenting frameworks to compare policies over numerous, diverse political systems. Demonstrating how these theories explain innovative behavior by individuals, such as teachers implementing new instruction methods, farmers working with hybrid seeds and fertilizers, and consumers purchasing new products, Berry and Berry (2007) investigated commonalities with models that seek to explain organizational innovation by focusing on cross-state program development and how such programs have diffused between various states. Using the internal determinants models to identify factors causing a state to adopt a new program or policy, the team proposed that these programs are dependent on the political, economic, and social characteristics of the state. Their proposal that larger, wealthier, and more economically developed states are more innovative is

tested with a unified model of state government innovations that reflect both internal

determinants and diffusion with the model:

$$\text{ADOPT}_{i,t} = f\,(\text{MOTIVATION}_{i,t},\ \text{RESOURCES/OBSTACLES}_{i,t},$$
$$\text{OTHERPOLICIES}_{i,t},\ \text{EXTERNAL}_{i,t})\ [\text{Equation 3}].$$

The team concluded their study by recommending that scholars should de-emphasize

global innovativeness on a range of policies and focus attention on explaining the propensity of

states to adopt specific policies and programs.

Augenblick et al. (1997) observed how most states have not addressed questions

concerning the definition of "adequate" concerning education or how educational standards can

be converted to a financial formula, describing several approaches to calculating the cost of an

adequate education. In this article, the authors examine: the role of the state in providing

education funding, including summary of funding mechanisms used by the states; the history of

litigation concerning school finance; the degree of equity found in education funding today, and;

defining an "adequate" education and converting that definition into a budgetary formula. Their

fiscal figures are drawn from the U.S. General Accounting Office, the National Center for

Education Statistics, and various contemporary research articles on public school funding

sources. Augenblick first addressed the fact that New Mexico provides 74% of their public-

school budget funding while New Hampshire state provides only 7%. State funding mechanisms

are detailed as: flat grants, foundation programs, 'reward-for-effort,' or a combination of these

approaches. Weighting systems to determine additional funding needed for at-risk and high-need

students are explained. The importance of local tax funding is explored, as is school finance

litigation. Per pupil spending levels between the various states, as well as equity between

districts and schools are detailed, where average state allocations for elementary and secondary

education equals about one-third of their total tax resources. Funding formulas explored include: Historical Spending; Expert Design; Econometric, and; Successful Schools approaches.

The General Accounting Office (1996) produced a report on the variances concerning the conditions of public-school facilities in wealth and less affluent school districts, analyzing the fiscal reasons behind these disparities. The office presented results of a nationwide survey of 10,000 schools to describe the conditions observed in site visits to 10 school districts. Estimates by school officials were used to project that America's investment in public schools needed to be increased by about $112 billion to repair or upgrade facilities to good overall condition and to comply with federal mandates. About one-third of the schools serving fourteen million pupils nationwide reported needing extensive repair or replacement of one or more buildings. Sixty percent of schools in adequate condition reported at least one major building feature, such as plumbing, in disrepair, and about half the schools reported at least one unsatisfactory environmental condition, such as poor ventilation or heating or lighting problems.

Additionally, M. Dixon (2014) reported on public education finances for the fiscal year 2010. This comprehensive document outlined public elementary and secondary education finances on a state-by-state basis, calculating the revenues and expenditures of these school systems from federal, state, and local sources. Capital outlays and debt transactions were also chronicled. Per-pupil funding rankings of the various states and population, enrollment, and personal income totals by state are examined. US Census Bureau data from the Census of Government Finances and the Annual Survey of Government Finances are conducted every five years and annually, respectively, and covers the range of government finance activities concerning public elementary-secondary education, including national and state financial aggregates, as well as data for each public school system with an enrollment of 10,000 or more.

While each state determines how to fund their public systems, most rely heavily on property tax, which yields a smaller amount of revenue from less-valuable inner-city housing and less money per-pupil than wealthier districts. Rural districts can also see low per-pupil totals due to lack of population, such as Utah, where the per-pupil amount is just above $6,000; the nation's lowest.

Augenblick concluded with six suggestions concerning public school funding: 1) States should guarantee each school district a foundation level of per-pupil funding which is based on the objectives the state expects its schools to achieve; 2) States should allocate funds to districts and districts should allocate funds to schools based on their relative needs. These analyses should recognize the fiscal implications of factors beyond the control of schools or districts, such as the number of pupils enrolled in special, high-cost programs, the presence of pupils at risk of failure, and such district and school characteristics as size and cost of doing business; 3) Above the foundation level states should provide incentives for districts to generate additional local support in a manner that equalizes the rewards for wealthy and poor districts. In other words, states should reward districts that support their schools generously through local taxes, and districts that increase their tax rates by like amounts should reap comparable per-pupil revenues; 4) States need to provide equalized support for the construction and renovation of school facilities, including charter schools; 5) States should give districts the broadest possible level of flexibility while holding them accountable for their performance, and; 6) States should allocate some money to schools as a reward for exceeding performance expectations.

In 1 Corinthians 9:19-23, Paul relays the rewards for understanding and compromise. He expresses that although he was free of societal demands and expectations, he voluntarily became a servant to all in order to expand his mission to the religious, nonreligious, meticulous moralists, loose-living immoralists, the defeated, the demoralized; everyone. While he did not take on their

lifestyles, and kept his bearings in Christ, he entered their worlds and tried to experience things from their point of view. As communal leaders and Biblical statesman, each of us should strive to do no less in our contemporary negotiations.

<p style="text-align:center">History of School Property Tax Funding for Public School Systems</p>

The American public school system was originally religious in nature and funded by community contributions, with Massachusetts and Virginia offering the first free public schools, while southern states relied on parents and private tutors (Hist. Time. 2010; Ferkaluk 2021b), creating the tradition of state and local funding for K-12 education. In 1647, Massachusetts passed a law requiring any town with more than 50 people to obtain the services of a schoolmaster and mandated that any town over 100 in population to establish a 'Latin grammar school,' which were originally established to educate upper-class male children in preparation for service as leaders in the state, courts, or church. President Thomas Jefferson was one of the first advocates of offering both academic curriculum and trade skills education, advancing a free public schooling plan in 1779 in his proposal, "A Bill for the More General Diffusion of Knowledge." In 1827, Massachusetts mandates tax-supported public education and declares any town of over 500 per capita must be open to all students in the community. This was the start of local public taxes to fund K-12 education in the United States. In this era, over ninety percent of public-school funding comes from state and local sources (Johnston and Duncombe 1998, 145-58) with over seventy percent of these revenues collected from property taxes, tying these fiscal sources to the wealth (or poverty) of the local residents, with a mere eight percent of funding from federal sources to fund such programs as Head Start, Title I, free lunch, and other programs (Ferkaluk 2021b; Rippner 2016, 65).

A comprehensive review of budget documents found, out of 46 states that publish education budget data in a way that allows historic comparisons, 47 percent of total education expenditures in the U.S. come from state funds, which varied between states (Oliff and Leachman 2011). Johnston and Duncombe (1998) examined the 1992 Kansas school funding reforms and the conflicts that arose between state and local authorities with the shift in fiscal relations created, as local governments traditionally exercised control over public education policy, altered by court action to the distribution of public education resources, which resulted in a more centralized model of funding public education. These shifts have generated conflicts concerning the reduced local control over local government activities, exposing fundamental trade-offs between equity and efficiency objectives in the provision of public education from the increased state centralization from court-ordered changes in inter-district funding equity and local opposition to the property tax. The authors contended that centralization may reduce the level of efficiency normally expected when services are provided "closer to the people," where the conformity between citizen preferences and the services provided can be strengthened, causing states to strive towards a balance of conflicting equity and efficiency objectives. The team stated that benefits associated with enhanced equity of educational opportunity as opposed to the decline in efficiency may result from erosion of local budget control. The authors proposed that school finance reform in Kansas provides an opportunity to broaden the understanding of the dynamics associated with managing such conflicting objectives.

Offering a revised formula for local distributions based on relative school size, the authors presented an equity equation for reform using the Brazier coefficient of variation to determine per-pupil unadjusted expenditures common to all schools involved, which showed little improvement in relative equality. They discovered that more outcome-oriented measures

used for a basis of comparison created a twenty to fifty percent improvement in relative equity, where removing a local option budget increases those percentages by 10 to 20 additional points, concluding that the local option budgeting process does not assist districts with the most need. Public finance theory suggests that centralization may reduce the level of efficiency normally expected when services are provided "closer to the people," where the conformity between citizen preferences and the services provided can be strengthened (Oates 1972; Tiebout 1956, 416-24).

Wallace Oates (1972) earned a Ph.D. from Stanford in 1965 and taught at Princeton University and the University of Maryland. Having written six books, edited nine volumes, and authored almost 100 papers, this book (his first) has become the defining resources for local public economics. Oates was the recipient of a John Simon Guggenheim Fellowship, was a Senior Fulbright-Hays Scholar at the London School of Economics, was named a University Fellow at Resources for the Future and one of the first Fellows of the Association of Environmental and Resource Economists. Elected to the Royal Norwegian Society of Sciences and Letters in 1997, he received an honorary Ph.D. from St. Gallen University in Switzerland in 2000 and the Daniel M. Holland Medal from the National Tax Association in 2002. As a subfield of public finance, fiscal federalism contends with the vertical structure of the public sector, the varying roles of the levels of government, and the inter-relations of these levels through intergovernmental grants. This process includes the analysis of new directions in the field and explores topics such as laboratory federalism, interjurisdictional competition, and environmental federalism, focusing on the political economy of fiscal federalism, market-preserving federalism, and fiscal decentralization in the developing and transitional economies. Oates finds that the potential of fiscal decentralization for improving economic and political performance is aided by

an evaluation of circumstances characterizing current fiscal states, with a persuasive case for a

significant degree of decentralization in public-sector decision-making.

One of the earliest researchers to investigate the effects of the elimination of property tax,

Riley (1926, 288-91) observed initial efforts to reform the California state revenue system.

Although not a study, this text gives a historical account of the arguments in favor of and

opposed to a shift of tax sources and the long-held acknowledgement of the desire to eliminate

property taxes. Public utilities (light, heat, power) were classified in order to establish rates for

each class, while railroads (steam and electric), car, express, insurance companies, and banks

were selected as the source of state revenue and the tax levied upon them was in lieu of all other

taxes. Proponents of this plan claimed that real estate would obtain tax relief, but Riley stated

that experience does not justify such a conclusion; within one year after the adoption of the new

plan, Riley observed that county rates were as high, or higher, than before separation. The plan

merely presented an opportunity to advance rates without protest from the taxpayers, who Riley

states were not aware of the true situation. Riley explained how obtaining equalization by

shifting burdens to the state caused an increase in utility corporation rates from four percent of

the gross receipts, as fixed in 1910, to seven percent in 1921, with a corresponding raise in all

classes, which was illustrated by a comparison with the tax on real property: during the same

period of time there was an increase of 156 percent in taxation on real property and an increase

of 307 percent on franchises, corroborating the tendency to shift burdens upon the state.

Variations between the taxing systems of private and corporate property created dissention,

where banks and insurance companies were taxed at often higher rates than the other companies

listed in the proposal. By shifting the burden of taxation from local to state authorities, Riley

concludes a positive correlation which widens the tax base and the utilities used, increasing the funding coffers.

Charles Tiebout (tee-bow) earned his Ph.D. in economics from the University of Michigan in 1957 with a dissertation on regional multipliers. As a professor at Northwestern University, he published *A Pure Theory of Local Public Expenditures* in 1956. He then acquired a position teaching economics at UCLA and geography at the University of Washington. Tiebout died in 1962 at the age of 43 after publishing the "Tiebout Hypothesis." In this work, he taps into his experiences as a regional economic advisor to provide this overview of local expense analysis. In this well-cited work, Tiebout contends that the Musgrave-Samuelson analysis (valid for federal expenditures) need not apply to local expenditures, presenting an alternate model based on the level of expenditures for local public goods. Opposing the concept that consumer-voters are fully mobile and can simply move from a local or state government they do not agree with to a different one that does meet their expectations based on appropriate revenue-expenditure patterns, Tiebout proclaims that, given sufficient knowledge, optimal decisions can always be found in existing models, with the more difficult task being how to find them.

Analysis of New Hampshire school finance suggests that, despite recent trends toward centralizing school finance in state capitols, strong sentiment remains in some states for the retention of local control, even if reliance on property taxes is required (Johnston and Duncombe 1998). It was noted in another study that public schools received less state funding than previous years in at least 37 states. These cuts are attributable to the failure of most states to enact needed revenue increases and instead to balance their budgets solely through spending cuts, stating that these cuts have significant short-term and long-term consequences, causing immediate public- and private-sector job losses, and a reduction of student achievement and economic growth in the

long term (Oliff and Leachman 2011). This theory disregards any potential savings in school budgeting based on consolidation of services or centralization of funding. For this case study, the data sets will be evaluated without regard to variations in these particular variables.

Now serving as the associate executive director for the Kansas Association of School Boards, Mark Tallman has been with Kansas Association of School Board (KASB) since 1990. While his primary focus includes education governance, academic achievement, and school funding, he has served several terms on the school board for Auburn-Washburn. Tallman presents his preliminary findings in this first attempt at analyzing the 1992 Kansas School Finance Act from a historical perspective of the debates and arguments included in the legislative sessions. This work would be further expanded in the Kansas Association of School Boards' *Overview of Public Education in Kansas*, with Tallman leading those efforts, also.

In the first year of the Kansas reform, school spending increased by roughly 10 percent and local property tax relief totaled $262 million; nearly half of the pre-reform level (Tallman 1993; Kansas Association of School Boards 1994). Less than 20 school districts raised property tax rates, with the average district property tax levy dropping 40 percent, providing substantial property tax relief to most districts while the state portion of total school funding grew from 43 percent to 70 percent (Kansas Association of School Boards 1994).

Tallman (2021) conveys that the Kansas Legislature approved funding of the Gannon school finance plan, boosting general operating budgets by over $900 million over six years while also adding funding to higher education, with schools receiving over $1.3 billion in one-time federal COVID-19 aid spread over four years. Funds were to be used to restore positions, programs and salaries lost from the funding shortfalls due to inflation from 2009 to 2017, address lagging academic success. He noted that even with these increases, K-12 funding is not

increasing as fast as the total income of state residents. While Kansas school funding usually increased more than the rate of inflation every year prior to 2010, increasing student enrollment, the cost of salaries/benefits, and building construction increased budget needs faster than inflation, with the largest increases for staff/facilities to help improve student success, such as expanding all-day kindergarten and preschool, special education services, extra help for at-risk students, more counselors and social workers, and educational technology. Results of increased funding included an increase of adults graduating high school from 81 to 92 percent, completing any postsecondary education increased from 48 to 65 percent, and completing a four-year degree or more went from 21 to 34 percent.

When the state Supreme Court demanded more funding for the schools, the legislature called for an education cost study, concluding that the additional funding strongly correlated with higher achievement, recommending additional funding to bring lower performing student groups to higher standards, which was approved by the Supreme Court to phase-in $1 billion additional funding between 2005 and 2009. With the Great Recession of 2008-09 and subsequent income tax cuts reduced state revenue, legislature failed to maintain funding at court approved levels, and inflation-adjusted total funding declined by almost $400 million from 2009 to 2017, with the general operating budgets (school district general fund, local option budgets and special education state aid) losing over $500 million in revenues. Total school funding is expected to increase by $1 billion from 2020 to 2023, but the latest consensus revenue estimates that Kansas personal income will increase more than $30 billion over that period, and total school funding will fall to about 4.1 percent of personal income, which is the lowest level since at least 1990.

Peter Oliff is a former staff writer for the Center on Budget and Policy Priorities, where Michael Leachman serves as the Vice President for State Fiscal Policy. They present education

funding totals from various states to reflect revenues distributed through these states' education

funding formulas (Oliff and Leachman 2011). Funds discussed include federal distributions from

ARRA's State Fiscal Stabilization Fund and the Education Jobs Fund. These budgetary reviews

include the targeted forms of federal education aid in ARRA such as Title I funding. The

education funding totals presented did not include any local property tax revenue. The

researchers analyzed funding data from across the country to discover that elementary and high

schools received less state funding in 37 states, with the cuts attributed to failure of the federal

government to extend emergency fiscal aid to states and school districts, as well as the lack of

state revenue increases to balance their budgets, relying on spending cuts which were found to

have significant consequences now and in the future by causing immediate public- and private-

sector job loss, and a long term reduction pertaining to student achievement and economic

growth. The authors determined that the replacement of local school property tax with other

forms of funding may be difficult when state budget cuts place pressure on local property taxes

to compensate for the loss of state funding.

   A dissertation on the elimination of common property taxes in Omaha, Nebraska, detailed

the efforts of The Learning Community of the Omaha metropolitan area to create greater

educational funding equity, integrate the youth of the Omaha area, and improve student learning

achievement (Steele 2019). When Governor Pete Ricketts signed the legislation on April 13,

2016, during the Second Session of the 104th Nebraska Legislature, to end the common levy

(property tax funding), alternative funding options were necessary to continue the program.

Steele employs a case study approach of qualitative research, involving state public policy

officials and metropolitan school district administrators to record perceptions of the Learning

Community's aims and effectiveness, the importance of the common levy and the impact of its

removal, and their thoughts about the Learning Community's future. Steele utilized methods including seven open-ended interview questions and four sub-questions (38-9) which focused on understanding the central phenomenon in the study, identifying seven anonymous elected and appointed individuals to interview, all witnesses to the Learning Community's formation and implementation and represented varying perspectives about its role in the Omaha metro area (40-1). Questions and sub-questions included: 1. What were the original, respective visions of legislative, educational and community leaders for the Learning Community? 2. How was the structure, governance and financing of the Learning Community intended to help fulfill its mission and goals? 3. Have the respective visions of legislative, educational and community leaders for the Learning Community been fulfilled? 4. How important was the common levy in fulfilling the original mission and vision of the Learning Community? 5. What is the impact of the loss of the common levy on the Learning Community, its goals and mission? a. Sub-question: What current functions will the Learning Community be able to continue? b. Sub-question: What additional functions can the Learning Community serve to improve education across the Omaha metropolitan area? c. Sub-question: What functions will the Learning Community be unable to provide in the future? 51 d. Sub-question: How will the Learning Community be limited or constrained in its mission? 6. What changes, if any, should be made to the structure and governance of the Learning Community to enhance the fulfillment of its mission and goals? 7. What other thoughts do you have regarding the future of the Learning Community? (50-1).

Steele identified four major themes and several sub-themes from the responses: Theme #1: Original Vision for the Learning Community Subtheme A: Socioeconomic and/or Racial Integration Subtheme B: Elimination of Dispute Among School Districts. Subtheme C: Financial Equity and Support Across Metro School Districts Subtheme D: Programming Theme #2:

Fulfillment of the Original Vision for the Learning Community Subtheme A: Positive Outcomes Subtheme B: Negative Outcomes Theme #3: Importance of the Common Levy Subtheme A: Financial Impact Subtheme B: Political Impact Theme #4: Future of the Learning Community After the Common Levy Subtheme A: Programming Subtheme B: Scope and Governance Subtheme C: Equity and Dialogue (52-74). Concerning the common levy on property taxes, Steele (82) concluded from the interview answers that suburban leadership perspectives identified financial problems of function where the funding did not reach the districts that needed them the most, while urban leadership perspectives agreed with the non-functionality of the levy and the fact that it seemed to serve as a point of contention that distracted the community from a discussion about the goal of socioeconomic integration and diversity. Funding inequality and debates over school district autonomy were identified as future concerns regarding financial funding formulas (86).

In Pennsylvania, the use of public funds for charter and cyber-charter school funding has been debated in Harrisburg since Governor Tom Corbett's administration, with these schools not being held to the same standards for funding appropriations as public schools but receiving millions in re-organizational stipends from entrepreneur Bill Gates to promote private charters in Pittsburgh (Ravitch 2016, 140, 289). Ravitch (2016) was Assistant Secretary of Education for President George H. W. Bush, and President Bill Clinton appointed her to the National Assessment Governing Board, which supervises national testing. In *The Language Police*, Ravitch lambasted educational administrators on the left and right for sacrificing truth, literary quality, and disciplinary content in textbooks and exams they authorized.

In *The Death and Life of the Great American School System*, Ravitch drew upon federal education data, arguing that school choice, testing and accountability, the predominant approaches to contemporary public education, are degrading the intellectual capacity of students. Ravitch reveals, students in charter schools do not outperform their counterparts in public schools. Charter schools achieving apparently dazzling results often cook the books by accepting few English language learners, students with special education needs, or those with disciplinary problems. By measuring success through the No Child Left Behind program only in relation to exams in reading and mathematics, and stigmatizing and sanctioning schools that do not make adequate yearly progress, Ravitch states that the NCLB provides perverse incentives to 'teach to the test' and devote less time to science, social studies, history, geography, foreign languages, art and music, which are not heavily favored on these standardized tests, and asserting that administrators get "breathtaking results" by quietly dumbing-down tests or lowering the minimum passing grades. Ravitch concluded with a plan to enhance education through strengthening of the curriculum from the culture wars, setting rigorous statewide or national standards for content, and improving the conditions in which teachers work and students learn, rather than arguing over how school systems should be organized, managed, and controlled to governmental standards.

Pagano and Johnston (2000) explored the impact of devolution on local governments through the assumption that revenue burdens from shifting fiscal responsibilities from state and federal funding will cause an increase in local tax rates or drawing down end balances as monetary support sources for increased local services (159-60). Three potential multivariant models for local revenue generation are proposed for study: 1) a reliance on property tax rates for revenue generation, 2) imposing local sales and income taxes to increase revenues, or 3) a

combination of both of these methods. The team proposed the hypothesis in the first model that higher property tax reliance, or less diversification of revenue generation, should lower revenue burdens (tax rates), where greater expenses are shouldered through non-property tax revenues (162-3). In the second model, expanded tax authority (use of sales and income tax) is proposed to raise tax burdens due to diversification of funding sources, which may lead to less adjustments to rates as alternate sources respond quickly to local economic growth. The third model uses a combination of these sources. Controls for resident per-capita income and other population considerations were included in the analysis, with data from the National League of Cities (1992-98) and the National Association of Counties fiscal surveys (1998) used as indicators dependent on the use of each source of revenue generation (164).

Pagano and Johnston (2000) determined, using ordinary least squares analysis, that the scenario in the first model contradicted expectations, as intergovernmental aid to local governments reduced resident revenue burdens from property tax collection (165), while per-capita income negatively affects revenue burdens locally in higher populations but reverses when considering county-wide government, where federal money is distributed through block grants to municipalities based on local decisions for allocation. Local reserve funding is found to accommodate additional expenses mandated by devolution when higher end balances are maintained for savings towards necessary projects (166). Here, increased municipal surpluses (for matching funds) create greater opportunities to procure intergovernmental aid and grow the municipal own-source revenues. The use of sales and income tax will increase coffers during prosperity and less during retraction, making property tax a more stable source of funding (except in housing bubbles), with the public often expressing more dissent against raising these rates in lieu of shifting the burden to non-residents through sales and income taxes (167-8).

Additionally, residents will be more willing to impose increased rates when the government reserves a portion of these funds to stave off economic fluctuations (169), concluding that diversification is an adequate moderator for the instability of reliance on one particular revenue source (170). This research is consistent with trends witnessed in Pennsylvania's programs.

Phillips and Chin (2004) noted how inequality in income, earnings, and wealth has risen dramatically in the United States over the past three decades. In "Social Inequality," a group of the nation's leading social scientists opens a wide-ranging inquiry into the social implications of rising economic inequality, assessing whether the recent run-up in economic inequality has been accompanied by rising inequality in social domains such as the quality of family and neighborhood life, equal access to education and health care, job satisfaction, and political participation. Within the work, Meyers finds that many low-income mothers cannot afford market-based child-care, which contributes to inequality both at the present time by reducing maternal employment and family income, and through the long-term consequences of informal or low-quality care on children's educational achievement. Additionally, Kane links the growing inequality in college attendance to rising tuition and cuts in financial aid. Also included is the analysis from Fligstein and Taek-Jin to show how both job security and job satisfaction have decreased for low-wage workers compared with their higher-paid counterparts. Those who fall behind economically may also suffer diminished access to essential social resources like health care. The team of Mullahy, Robert, and Wolfe discussed why higher inequality may lead to poorer health: wider inequality might mean increased stress-related ailments for the poor, and it might also be associated with public health care policies that favor the privileged. Freeman concluded that political participation has become more stratified as incomes have become more

unequal. Workers at the bottom of the income scale may simply be too hard-pressed or too demoralized to care about political participation.

J. Davis (2019) explored the current state of property taxes in Pennsylvania, the preparations in order for the elimination of property taxes and proposes that revising property assessment laws would be more effective against the financial disparity within the current property tax system. Davis began his study with a brief overview of the current state of Pennsylvania's property tax system, the origins of the Homestead Exclusion Amendment, and why local taxing entities may not support the tax exemption (690-2). He continued by discussing the current property reassessment system in Pennsylvania and the issues witnessed with the methods employed by local taxing entities when reassessing property, basing his assertions on the implications of the Pennsylvania Supreme Court's ruling in Valley Forge, and proposed guidelines for property reassessment by local entities (693-98). This analysis followed into evaluating how the Valley Forge decision may drive local entities to concede to whatever alternative funding schemes the state government provides to replace the revenue lost from the elimination of property taxes (698-700). Davis examined the potential hardships in school funding should state government impose alternative taxing solutions (700-3), prior to proposing a revision to Pennsylvania's property assessment laws that would be, in his opinion, a more effective, long-term solution than the elimination of property taxes (703-6).

Davis (2019) correctly assessed the disparities in assessment values and millage rate between Pennsylvania municipalities (690) and the state referendum and subsequent legislation in 1997-8 allowing for up to 50% of property taxes to be 'forgiven' by taxing authorities (691-2). Identifying how the county, the township or borough, and local school districts all impose a property value tax based not on 'fair market value' but on 'common-level ratio;' an unweighted

average of the assessment ratios for all 'arms-length' real estate sales occurring in a particular

calendar year (693). In Valley Forge v. Upper Marion (2017), Davis recounted the decision

reaffirming that all property must be taxed uniformly throughout taxing jurisdictions, agreeing

with the property owner in finding that the school district's policy to selectively reassess

commercial properties violated the Pennsylvania Constitution's uniformity clause (695): a

decision which could influence the state legislature avoid extension or renewal of any authority

that perpetuates property taxes; more especially the public support for the Homestead Exclusion

Amendment (699). To address the alternatives to replace approximately $12.6 billion raised from

real estate taxes in Pennsylvania (2015-16), Davis opined the inevitable failure of a system that

increases earned income taxes by less than two percent and sales tax increased by one percent,

pointing out the need for property tax to eliminate current debt loads by the school districts,

which he states could take more than twenty years (702).

Davis offered four solutions alternate to eliminating the school property tax dependency

in Pennsylvania: 1) eliminating the base year method for assessing properties; 2) mandating

periodic, county-wide reassessments; 3) partially funding the mandated reassessments; and 4)

establishing a state agency to oversee the reassessments throughout Pennsylvania. Davis did not,

however, go into any detail about these potential solutions, ignoring the exorbitant costs of

county-wide reassessments to the local governments. Additionally, the suggestion to establish a

state authority over these county functions would surely meet immediate resistance, as similar

centralization efforts such as consolidating county tax collection operations in Harrisburg under

the Department of Revenue has not been a popular notion among municipalities.

Having led legislative discussions and promoted the elimination of public funding for

private charter and cyber-charters for these reasons, I have written resolutions which have been

adopted by the Pennsylvania State Boroughs Association to combat this abuse, which has caused

fiscal shortfalls for many school districts. The exclusion of this expenditure from collected

revenues is appropriate for the formation of our proposed funding model. A reduction in property

tax dependence can reduce the amount of funding from other sources to replace the remaining

property tax. Individual local school district budget reports confirming local property tax rates,

as well as data from the PA Department of Revenue and the PA Commonwealth Budget are

appropriate for analysis to accurately interpret and visualize data results.

<p style="text-align:center">Purpose of Public Education</p>

Studies have investigated the purpose in education by delving into the question of what

makes for a good education, in contrast to an effective education, by defining the frame

discussions and the topics included in such talks, identifying qualification, socialization, and

subjectification as three ends considered in the presentation of 'good' education (Biesta 2008).

While never answering these questions, the researcher presented such as 'composite questions'

central to educational discussions. At the collegiate level, another study critiqued the US federal

government's education policies for aberrating the administrative agendas of independent

colleges through the accreditation system, recommending that market forces for training should

be allowed to determine institutional offerings in lieu of reconfiguring their educational priorities

(Lawler 2017). This study suggested that governmental accreditation should be more concerned

with ensuring institutional excellence through reduced involvement with educational offerings

and more on the satisfactory results accomplished by those attending; allowing the student to

decide on the purpose for their pursuit of knowledge or skills. The study seems much ado about

nothing but how to develop future research approaches to the questions contained.

Researchers also contend that the "Educational Gospel," or the pre-occupation of academia on improvements in education opposed to skills training, has interfered with the market demand for skilled workers, as gaining higher education through colleges and other institutions somehow trumps the value of vocationalism and occupational preparation programs in public schools that offer superior competencies than formal schooling (although the latter is made more attractive through the efforts of the prior). Here, the purpose of education is seen correctly to prepare one for their contributions to society in the labor force (Grub and Lazerson 2005). This was supported by observations contending seventy percent of new jobs in contemporary markets require no more than a high school education, with overeducation becoming a more predominant issue (Hecker 2001), while another study witnessed nearly forty percent of workers had educations much higher than needed for their current positions, including here in the United States (Hartog 2000). The exaggerations of the importance of the "Educational Gospel" to economic growth have been examined and confirmed by subsequent observers (Wolf 2002). So, the purpose of education presented here is divided between the need for educational training in skilled labor positions and less in unused college degrees, for which former students are now calling for debt forgiveness with claims of being coerced to pursue degrees they did not need and do not use (Jackson and Mark 2021).

Arguably, one of the best explanations for the purpose of education in the United States was offered by a qualitative study examining the motivational factors of parents and students for pursuing schooling (Widdowson et al. 2015). The team identified four areas to explain the purpose of education, including:

1) self-knowledge;

2) life and social skill development;

3) quality of life optimization, and;

4) economic and employment advancements.

They found that students were more focused on gaining qualifications for future opportunities, while their parents were more interested in their children developing into productive members of society, regardless the career path chosen. Students were split, however, between learning good work habits, the importance of effort, and the socio-economic advancements available with higher levels of learning – often equated to the avoidance of physical labor (Nicholls et al. 1985). Concluding that the students' perceptions were largely influenced by at home, the researchers observed a broader view of the purpose of education from the students in relation to those of their parents or teachers. This division between becoming a responsible, knowledgeable member of society and the pursuit of wealth and status through educational accomplishment has presented an edification purpose for education associated with personal commitment building and the lesson that success is a direct result of effort (Nicholls 1985, 683).

Regardless of the focus of the study or the intentions of the researchers, some experts agree that education is essential to the development of abilities and talents in youth (Ravitch 2016, 238, 254). In doing so, it is proposed that public school systems must return to the practices of enforcing standards of civility and self-respect, as well as respect for others, in order for students, regardless of their vocational endeavors, to learn good behavior, citizenship, and habitual thoughtfulness of learning.

It is accurately suggested within the text of 2 Timothy 2:15 why students should study and pursue the understanding of truth (Williams 2016). Referring to knowing God's word and being able to point out false teachings and philosophies, the verse applies to education, as

students should indulge in their work and fulfill their potential for the glory of God and to exemplify His granting of such gifts to humanity. The student can find wise counsel in Matthew 6:33, where we are told to seek God and everything else will be provided for us. While education is important, and proving our love of God's gifts deserves attention, it should never come before our relationship with God. Knowing from recent and current experience, it is easy to get overwhelmed and overfocused on our grade point averages and class ranks. When we allow God's purpose for us to take center stage and take time to talk to God about our efforts and concerns, He is able to remove those barriers to our success and allow us to grow as He has intended.

Funding Early Childhood Education

When discussing the costs of public education, rarely are the components of early childhood education included in these figures. 28 states in the US have been increasing the funding for the pre-Kindergarten (pre-K) age group to over $1 billion in new money annually after 2014 (US Dept of Ed 2015, 5). First addressed during President Lyndon B. Johnson's administration, federal Head Start programs were initiated as part of the war on poverty. Prior to this, early childhood education was not a primary policy concern and received very little federal funding, leaving the bulk of support to the state and local entities (Lowenstein 2011). Under the current guidelines, many of these programs are housed within a single facility to for convenience and funding considerations, where multiple programs can pool their money towards overhead costs (Rippner 2016, 53).

Consideration of the various levels of stakeholders involved in the success or failure of early childhood education programs will involve agencies on the federal plateau and state leadership regarding the funding equations for such programs. On the federal level, the US Office of Economic Opportunity was initially tasked with oversight of Head Start and other programs, eventually being transferred to the Department of Health and Human Services, as these programs also involved components addressing healthcare and social services (Rippner 2016, 54-5), with families meeting federal poverty guidelines being eligible for benefits. States are not involved in the administration of these programs but are responsible for coordinating with their state programs. State monetary support averages $4,629 per pupil in pre-K, with the District of Columbia spending the most at $16,853 per student and South Carolina the lowest at $1,300 per child (Barnett et al. 2013). States can arrange their programs under 'coordination,' where each agency collaborates with the others, or they can utilize 'consolidation,' where multiple

programs are administered by the same agency; usually the state department of education (Regenstein and Lipper 2013). Debates over funding levels to offer free programs universally (for-all), where these programs would extend the range of the current primary and secondary systems (Ferkaluk 2021c), or programs requiring income verifications (targeted) are ongoing, with both sides offering real-world anecdotes to support their stances. Funding from the Child Care and Development Fund (CCDF) and the Temporary Assistance to Needy Families (TANF) totals over $8 billion in federal expenditures, with Title I and Early Childhood Special Education programs providing another $800 million annually (Hustedt and Barnett 2011).

Hustedt and Barnett (2011) offered their study with the premise that states have offered targeted educational programs, with the types of finance models used in state preschool initiatives examined in detail and future opportunities to build a more cohesive system are explored. Hustedt led a large-scale, multi-year evaluation of the statewide pre-K program in New Mexico and is a former fellow at the National Institute for Early Education Research. Data compiled for this study included Administration for Children and Families, Office of Head Start, Early Childhood Learning and Knowledge Center, the US Department of Education, the US Census Bureau, and the Tax Policy Center. The team explored common Federal, State, and Local preschool funding 'silos,' including federal Head Start support, direct child subsidies such as CCDF and TANF, tax credits, Title I funding, the Early Childhood Special Education program, state-funded and local programs. States, although following federal guidelines for funding at that level, are allowed to determine the best uses for these funds for a variety of educational activities. Targeted and universal early childhood programs are also discussed. School funding formulas from Oklahoma, West Virginia, and Wisconsin are highlighted for their variances in

application of these funds. The uses of lottery systems are described for supplementing educational revenues, while universal pre-K in New York and Florida are detailed.

Hustedt and Barnett concluded by offering new opportunities for large-scale coordination through federally funded early learning councils, with early learning councils being established by state governors to include representation from state and local education agencies. These councils would develop recommendations to increase participation in early childhood programs from birth to age 5 at the federal, state, and local levels; develop recommendations for professional development plans and unified statewide data systems, and; identify opportunities for improved coordination and collaboration. Progress toward resolving funding conflicts and opportunities through the early learning councils can result in a more seamless, coordinated system of early childhood education and care.

Altshuler and Koppels (2003) attempted to familiarize social workers with federal law requirements, ramifications, and recent amendments for children and families. Based on the federal requirements for educational opportunities for handicapped children established in the 1975 Education for All Handicapped Children Act (P.L. 94-142) and perpetuated through the 1990 Individuals with Disabilities Education Act (IDEA; P.L. 101-476) and revisions in the 1997 Amendments to IDEA by President Bill Clinton (321), the team established a background for the current educational concerns and the issues with testing for disabilities, such as native language testing to protect students from erroneous diagnoses (324). Processes concerning IEPs for children with educational special needs are outlined, as are the disciplinary actions concerning special needs students who go astray. Interactions with social workers and other governmental agencies are presented. The team concluded with the differences between these special needs

students and others in school systems and the provisions and funding needed to service these students in their local neighborhood schools.

Mathews (2002) reviewed the relations between federal Head Start programs administered by states, which had been shown to be effective in language improvement and problem-solving skills. As of 2013, less than half of children eligible for these programs have been enrolled and three out of four under six years old receiving federal child-care assistance for educational endeavors. Early enrollment in federal Head Start programs are shown to prepare young children for the social and educational endeavors ahead of them in public K-12 education systems, while also building on their language and motor skills. Mathews chronicled the advantages experienced by children who participate in multi-year Head Start programs as opposed to those who may only have limited exposure, and their advances in the public systems over children who have not participated in these programs. Educational advances by students who participate in Head Start programs prior to their fifth year tested slighted higher on their standardized tests than those who did not.

Community stakeholders are also important for promoting the standards, continued research, and advocacy for these educational programs. The National Association for the Education of Young Children (NAEYC) is the largest advocacy group concerning early childhood education in the nation, with Ounce of Prevention and the National Head Start Association also lending support for the pre-K children in the US (Rippner 2016, 65). These groups address parental concerns about program availability as many use these as work support in lieu of childcare in homes where the parents work during the day. These groups advocate for funding and quality standards in these programs, where thirty-nine states have adopted the Quality Rating and Improvement Systems (QRISs) to align professional standards and program

assessment, as well as providing direct financial and technical assistance to these programs (Schaack et al. 2012). By promoting continued educational initiatives for teachers such as the child development associate (CDA) credential and the pursuit of higher degrees, professional standards are raised in efforts to better qualify these instructors to ensure efficacy and alignment with state and federal guidelines, such as the State Advisory Councils on Early Childhood Education and Care (Regenstein 2013).

One study discussed how many low-income children experience other risk factors, including living with a teen mother, in a household without English speakers, or with parents who lack a high school degree (Schmit et al. 2013). Children affected by several adverse circumstances, three or more risk factors, are the most likely to experience school failure and other negative outcomes, including maladaptive behavior. Head Start is the country's comprehensive early education program for poor children. Funding for Head Start (which includes Early Head Start funds) increased by $1.2 billion from 2006 to 2012. Many states have established childcare subsidy policies aimed at enhancing childcare quality, including the use of direct contracts that establish quality requirements and higher reimbursements for childcare settings that receive higher QRIS ratings. Both NCCP and CLASP have a rich set of resources and tools available for state policymakers and advocates. Staff can provide information and expert guidance concerning ways to strengthen early care and education investments and policies and both organizations invite readers to request assistance.

Liberty University's Emily Ferkaluk (2021) highlighted the wisdom of Psalms 127:3 as a Biblical mandate for parental responsibility for the education of their children, while listing many other verses. In particular, the mandate of "The Great Commission" in Matthew 28:19-20 calls for disciples to spread knowledge throughout the world, through education and testimony.

Indeed, "The fear of the Lord is the instruction for wisdom, and before honor comes humility," (Psalms 119:66). Therefore, we must place our ego below the wisdom of the Lord in order to work towards a place of knowledge to teach the world what we have learned, in order to perpetuate His grace. Seeking knowledge can be seen by some as a personal pursuit to gain qualifications towards a better job, more money, a nicer house… but the Christian statesman approaches education as a refinement of the skills given by God, which if wasted, is an abomination to His glory. God take pleasure in his creation when they attempt to reach their full potential, which is noted in Daniel 1:17, when God gave knowledge and skill in all learning to the four children which gave Daniel an understanding of the visions he was gifted.

Funding K - 12 Education in Pennsylvania

Upon consideration of eliminating property tax to fund K - 12 education in Pennsylvania, a major variable shift from industry-controlled property tax dependence to a potentially variable revenue source from other commerce funding may particularly affect K – 12 school districts with high concentrations of children in poverty or special education needs in Pennsylvania. States typically distribute general education aid through formulas that target additional funds to school districts with large shares of low-income and other high-need children and/or with lower levels of taxable wealth. These funds are then allocated by locally elected school board members (Rippner 2016, 91), which is calculated through student enrollment and local revenue capacity (Roza 2013, 39). Reductions in state educational formula funding may result in cuts in general state aid for less-wealthy, higher-need districts unless a state goes out of its way to protect them, such as the "hold-harmless" clause in Pennsylvania's state funding formula that does not permit a reduction in any amounts received the previous year by any school district, creating the situation where a series of ever-increasing budgets are eminent and per-student spending is

skewed in districts with declining populations. As such, a per-pupil cost model should be explored as part of this funding solution proposal.

In 1992, Kansas adopted a school funding reform that transferred most public-school finding decisions, both taxing and spending, to the state, with a statewide mandatory base spending amount set per pupil being key components of the reform (Johnston and Duncombe 1998). Public finance theory suggested that centralization may reduce the level of efficiency normally expected when services are provided "closer to the people," where the conformity between citizen preferences and the services provided can be strengthened (Tiebout 1956; Oates 1972). Analysis of New Hampshire K – 12 school finance suggested that, despite current trends toward centralizing school finance in state capitols, strong sentiment remained in some states for the retention of local control, even if reliance on property taxes is required (Johnston and Duncombe 1998). It was noted in another study that public schools received less state funding than previous years in at least 37 states. These cuts were attributable to the failure of most states to enact needed revenue increases and instead to balance their budgets solely through spending cuts, stating that these cuts have significant short-term and long-term consequences, causing immediate public- and private-sector job losses, and a reduction of student achievement and economic growth in the long term (Oliff and Leachman 2011). This theory disregarded any potential savings in school budgeting based on consolidation of services or centralization of funding.

With smaller, rural schools outnumbering larger city schools in Pennsylvania, considerations must be given to the special needs of these school districts. Swick and Henley (1975) discussed the problems facing small schools, including finances, tax referenda, lack of instructional resources, and the need for special services. A review of research on rural/small

schools' problems, prospects, and possible alternatives indicates that these schools find themselves in a cycle of financial trouble, community disintegration, and dwindling population, facing problems such as low tax base, lack of financial support by state and federal government, inadequate facilities and instructional materials, inadequate overall funding, poor teacher quality, isolation, and lack of functional jobs. The primary causes of the problems are isolation and poverty. Such schools are also noted to have positive aspects in terms of potential for humanistic, personal, and community development. The positive aspects of these schools include a personal climate, development of regional services, and individualized attention given to students. Teachers must provide multiple service roles. Solutions to these problems include the in-service education for staff, community-based education programs, extensive use of audio-video equipment, flexible scheduling, and alternative course offerings. Major prospects for rural/small schools are found to focus on personal contact between teacher and students, opportunity for school and community to work together for rural development, use of individualized instruction, and potential for developing alternative educational programs. Changes in instruction, school-community situations, and underfinanced programs include continued programs for teacher improvement, regional cooperatives, experimentation with unique classroom instructional approaches, community school concepts, and new modes of financial support. Rural/small schools can give students comprehensive educational and social programs through regional approaches.

Gjelten (1980) took the other view, however, when it was asserted that rural children progress through school more slowly, score lower on achievement tests, are more likely to drop but at an early age, and are less likely to continue studies after education. It is acknowledged that consolidation has been seen as the way to a better education. Between 1932 and 1977, the

number of schools in the US dropped from 261,000 to 89,000 through consolidation, and local

battles continue. The most common objection offered to consolidation was that it weakens the

local community's sense of identity and foreshadows its decline. Many argued that this sense of

community promotes overly provincial attitudes in children. The richness of the curriculum

"remains the most powerful argument for consolidation when compared with the benefits of rural

schools." The educational and financial results of state mandated school district consolidations

do not meet legislated expectations. There is no "ideal" size for schools or districts. "Size" does

not guarantee success – effective schools come in all sizes. Smaller districts were observed to

have higher achievement, as well as affective social outcomes. The larger a district becomes,

Gjelten states, the more resources are devoted to secondary or non-essential activities. Local

school officials are warned to be wary of merging several smaller elementary schools, at least if

the goal is improved performance. After a school closure, out migration, population decline, and

neighborhood deterioration are set in motion, support for public education diminishes. Gjelten

implies that there is no solid foundation for the belief that eliminating school districts will

improve education, enhance cost-effectiveness, or promote equality. Students from low-income

areas have better achievement in small schools.

Funding Higher Education

Although forty-seven percent of institutional revenues come from tuition, student

financing will not be a primary focus here. Federal financial support for higher education

institutions has been on the decrease over the past decade (Rippner 2016, 113-4, 130), which has

increased the costs of running these schools while shifting the burden to students, states, and

private donors. Aside from direct student aid programs, federal funding provides for research and

development services and library support (Gladieux et al. 2005). Being a people-centered

service, the rising costs of faculty salaries and benefits (Rippner 2016, 117; NCES 2015), coupled with negative effects on per-pupil state contributions after the Great Recession (Rippner 2016, 129; Deprez 2015), has caused public and private institutions to rely on the generosity of their alumni, endowments, and other donors (Rippner 2016, 128-130; NCHEMS 2014). Private institutions find that capital investments and campus infrastructure to maintain market competitiveness increases the per-pupil costs.

The decreased post-recession spending by forty-eight states on higher education dropped nearly twenty-five percent per-pupil and has yet to regain much of those losses (Rippner 2016, 130-1; SHEEO 2015), with nearly thirteen percent of total state budgets going to this sector (NASBO 2014). These funds are distributed through either enrollment-based or incremental formulas, often requiring outcome-based policies for qualification of funding; a mechanism first advanced in Tennessee in 1979 linking performance indicators to desired state goals and funding sources (Bogue and Johnson 2010), with formula implementations that fluctuated with economic performance, causing the abandonment of these policies (Dougherty et al. 2014). Subsequent retooling of these policies was re-engaged in the late 2000s, with 36 states engaged in linking state metrics of college completion to greater funding percentages, which some note has been counterproductive (e.g., greater inequity of access to increase graduation rates) (Snyder and Director 2015, 5).

One study explored the topic of how most practicing policy analysts ignore ethics despite the compelling arguments for their inclusion in policy analysis and despite the availability of methods for including normative evaluations in policy (Amy 1984). It points to institutions of higher learning and their exemption of morality within the scope of policy discussion. The subjectivity of value and moral judgments is a major objection held by those in academia who

refuse to reflect on such while pondering policy questions. Researcher Amy contends that value and moral judgments are not preferences, as preferences do not require reasons or justifications as do moral standards, with the assertion that moral positions can be adopted for good or bad reasons. He identified other objects against the inclusion of ethics in policy analysis, which state that value decisions are best left up to policymakers, not the subject of policy analysis and tout its inclusion as allowing for better policy. He correctly identified cost-benefit analysis in opposition to the "multiplicity of value concerns that are inevitably present in policy choices." Amy followed up with detailed analysis of the various levels of policy making and the actors involved, showing how using moral thinking in policy considerations can benefit the process without detriment, and how the popularity of cost-benefit analysis demonstrates a compatibility of ethics and policy analysis.

Besides state funding and student tuition, donations from public and private endowments supplement the shortfall in funding for higher education institutions. Construction costs for dorms and student tuition assistance programs are paid for utilizing interest earned on donation deposits, which can total more than $35 billion at the nation's most affluent schools (Rippner 2016, 136-7; Upton and Schnaars 2012), while the principal balance is retained to perpetuate annual returns on investment. Additionally, many donors specify uses for their funding, reducing the eligible projects applicable to such gifts. Other sources of income flow from premium tuition rates of out-of-state and international students, who do not receive supplemental funding from federal and state sources. Doctoral institutions also receive funding in the form of research and development project allocations from the federal coffers to advance support for these activities, which climaxed at nearly eighty percent of total revenues in 1965, to a level closer to sixty percent today (AAU 2015). Such fiscal support justifies the variances received between two-year

and doctoral institutions, as the former receive less than half of the grants received by the latter due to research activity and grant support.

Adherence to performance mandates in exchange for school funding is not an anti-Christian concept, as the book of Deuteronomy explains how adherence to God's commandments is a qualifier for the gift of His grace. Also verified in this book is the concept of the separation of powers, as the priestly power that exists in Deuteronomy is divided among as many people as possible (Deut. 18:6-8). In lieu of being modeled after a coercive federalist stance, God also invites a decentralized religious experience, as described in Exodus 20:24 ("You need make for me only an altar of earth and sacrifice on it your burnt offerings and your offerings of well-being, your sheep and your oxen; in every place where I cause my name to be remembered I will come to you and bless you"), to retain the power of the Church where it rightfully belongs: in Him.

<center>School Choice and Voucher Funding: Compatible for Good Education?</center>

The unproductive and inefficient track record of American public schools offer little return on investment while ranking at the top of the world's per-pupil costs (Walberg 2007, 1, 8), with a strong majority of parents favoring programs that allow public school funds to follow the student to other public, private, or religious schools through vouchers programs and creating the demand needed for implementation of a market model for public-school systems. Proponents of school voucher systems assert that competition between schools for students allows for innovation and propels individuals to excel in pursuit of profit and esteem (Walberg 2007, 37), while opponents claim that competition leads to a discouragement of cooperation between administrators and teachers who view these systems as a diversion of revenue from traditional public schools and a disruption of the status quo.

Walberg (2007) provided the results of a study containing up-to-date surveys, which summarizes his research on charter schools, vouchers, and public versus private school effectiveness, using randomized control groups that monitor achievement changes over time, including previous studies based on large numbers of students. Walberg believes that the US school choice debate is confined to the small-scale voucher programs akin to those established in Milwaukee and Cleveland, and examines evidence from around the world, including Chile's 25-year-old nationwide voucher program, the Dutch universal voucher program dating back to 1917, and the more recent program in Sweden. Walberg concludes that school choice and voucher programs, while beneficial, exceed the subjects of academic achievement, student civic engagement, cost comparisons across school types, and public and parental opinion about schools and school choices, revealing how little American parents actually understand about school choice. Walberg asserts a consensus of high-quality international research overwhelmingly in favor of competition and parental choice in education over the monopoly systems that dominate the United States and many other industrialized countries. While vouchers are highly supported by minority group parents in low-performing school districts as a way to obtain a better education for their students, some maintain that the improvement of education through choice is a false claim (Ravitch 2016, 156), countering opposing claims that there is substantial evidence that publicly funded voucher programs have positive effects on student achievement benefits through competition and choice (Walberg 2007, 46).

Famed economist Milton Friedman (1955) published the article "The Role of Government in Education," in which he proposed that government should fund but not administer public school systems, advocating for a voucher system to fund these schools while promoting greater school choice options. These vouchers would subsidize educational costs at

schools maintaining established minimum standards to create a more efficient and competitive private enterprise better responsive to consumer demands; preventing the double taxation of parents who pay their real estate taxes to the school systems while also paying tuition fees at private or religious schools. Friedman was the trendsetter concerning the topic of government and education, asserting that government's primary role is to preserve the rules of the game by enforcing contracts, preventing coercion, and keeping markets free. He presented the notion that there are only three major grounds on which government intervention is to be justified: "natural monopoly" or similar market imperfection which makes effective competition (and therefore thoroughly voluntary exchange) impossible; the existence of substantial "neighborhood effects," akin to the action of one individual imposes significant costs on other individuals for which it is not feasible to make him compensate them or yields significant gains to them for which it is not feasible to make them compensate him circumstances that again make voluntary exchange impossible, and; an ambiguity in the ultimate objective rather than from the difficulty of achieving it by voluntary exchange, namely, paternalistic concern for children and other irresponsible individuals.

He proposed that financial burdens imposed by educational requirements could readily be met by families in a community, so it might be feasible and desirable to require the parents to meet the cost directly, while extreme cases could be handled by special provisions as is done now for housing and automobiles. An analogy is provided by present arrangements for children who are mistreated by their parents, where the advantage of imposing the costs on the parents is that it would equalize the social and private costs of having children and promote a better distribution of families by size. Friedman concluded that the role of government in education reflects a necessary growth of governmental responsibility which has been previously

unbalanced. While government has financed general education for citizenship, it has been led to administer most of the schools that provide such education. Contending that the administration of schools is neither required by the financing of education nor justifiable in its own right in a predominantly free enterprise society, Friedman states that government has appropriately been concerned with widening the scope of professional and technical training available, but it has sought to further this objective by the inappropriate means of subsidizing education, largely in the form of making it available free or at a low price at governmentally operated schools.

This proposed voucher system led to the rise of charter schools in the 1990s, as promulgated with the publishing of "Politics, Markets, and America's Schools" (Chubb and Moe, 1990b) and the establishment of the nation's first state voucher systems in Milwaukee, Wisconsin, and Cleveland, Ohio shortly thereafter (Ravitch 2016, 122-3; Walberg 2007, 42-4, 49). Some studies of the late 2000s suggested no impressive gains in student achievement attributable to the voucher systems implemented (Rouse and Barrow 2009, Wolf et al. 2013), with other experts showing a large majority of parents satisfied with these programs (Greene and Winters 2004). Chubb and Moe (1990b) premised their study stating the fundamental causes of poor academic performance are not in the schools but the governing institutions (5), proposing a new system of public education without political and bureaucratic controls in lieu of a reliance on indirect control through markets and parental choice. Three research questions were posed: 1) What is the relationship between school organization and student achievement?; 2) What are the conditions that promote or inhibit desirable forms of organization?; and how are these conditions affected by their institutional settings? The team identified major participants in democratic governance as political leaders and the unions, from which complaints of school bureaucracy emanates from the very authorities complaining and recognizing that incentives to bureaucratize

the schools are built into the system (6). Additionally, they claimed that bureaucratic control and

efforts to measure the unmeasurable are unnecessary for schools who are working to please their

clients, contending that school competition and choice are strong incentives to take on reforms

that the market and clientele find important without governmental controls. It is recognized that

choice is a self-contained reform with its own rationale and justification (8), proposing that

public authority must create a system that is beyond the reach of public authority.

Additional proposals included each district having their own funding formula for per-

pupil amounts required, with the researchers preferring an equalization approach where wealthier

districts contribute more per-pupil than poor districts do which guarantees an adequate financial

foundation to students in all districts, with the state's contribution calibrated to preferred per-

pupil amount, meaning a larger state contribution in poor districts than in wealthy ones under an

equalization scheme (9), while being opposed to any additional funding directly from parents.

Students and parents would then be free to choose which school they will patronize (10).

Governmental intervention was eliminated in this model, imposing no state structures or

requirements on the authority within individual schools, which can be run by teachers, the union,

a principal, or other self-designated structures (11).

Rouse and Barrow (2009, 19-36) reviewed the empirical evidence on the impact of

education vouchers on student achievement and discuss the evidence from other forms of school

choice, stating that the best research found small achievement gains for students offered

education vouchers, not statistically different from zero, while finding little evidence regarding

the potential for public schools to respond to increased competitive pressure generated by

vouchers. Their literature review concluded that tempered expectations should prevail

concerning the ability of vouchers to substantially improve achievement for the students who use

them. The team approached the theoretical reasons why education vouchers *should* improve

student achievement and review the empirical approaches used for identifying such effects. A

unique design element of consideration is the cost of transportation and whether it is included in

the voucher funding or paid for by the parents if alternative schools are chosen, which would

increase the tax burdens without the ability to pre-determine these costs. A unique empirical

approach is offered to estimate the impact of vouchers on student achievement. Strategies to

estimate public-school responses to competitive pressure are reviewed. Detailing the nation's

first voucher programs in Milwaukee and Cleveland, the team declared little evidence of overall

improvement in test scores for students offered an education voucher from privately funded

voucher programs. When public-school administrators perceive a threat of student voucher use,

they have incentive to respond by improving school quality. This provided the researchers an

alternate way to gauge potential response of public schools to increased competitive pressure.

Florida's school grading system was evaluated, and the study concludes that there is no

conclusive support for the potential of vouchers to spur public schools to improve. After a

detailed review of charter and other types of schools, the study determined other forms of school

choice do not provide achievement gains nor do they induce public schools towards

improvements.

Wolf et al. (2013, 156-336) attempted to determine the impact of school vouchers on

educational attainment through analysis of the voucher system implemented in Washington, DC

in the early 2000s and review prior research on such programs in the United States. After

extensive research into previous studies which concluded that there is a significant positive effect

on student achievement through voucher programs, the team established the foundation of their

evaluation as a randomized controlled trial (RCT) comparing the outcomes of eligible student

applicants randomly assigned to receive an offer (treatment group) or not receive an offer (control group) of an he Opportunity Scholarship Program (OSP) through a series of lotteries, based on the mandate to use rigorous evaluation methods and the expectation that there would be more applicants than funds and private school spaces available, as well as the statute's requirement that random selection determine who receives a scholarship. A total pool of eligible applicants the first two years were tallied at 2,308 students who were rising kindergarteners or currently attending public schools entered lotteries. 492 cohort 1 students were subject to scholarship lotteries upon entering grades 6 through 8 or 9 through 12, with slots were available in grades K through 5 to accommodate all cohort 1 eligible applicants. All 1,816 eligible public-school applicants in cohort 2 were subject to scholarship lotteries, including 1,178 entering elementary grades, 381 entering 6 through 8, and 257 entering 9 through 12. Study participants were invited to five different data collection events if they were a member of the treatment group and six events if they were a member of the control group and received payment for costs if they attended an event, which were held on Saturdays, except for one session staged on a weeknight at multiple sites throughout DC. Treatment and control-group students were tested by the same proctors under the same conditions. With randomized data, a regression with only a treatment assignment dummy variable yields an unbiased estimate of program impact, where an Ordinary Least Squares (OLS) regression was used to calculate the regression-adjusted impacts of the program on student achievement. The attainment impact analysis revealed that the offer of an OSP scholarship raised students' probability of graduating from high school by 12 percentage points. Graduation rate was eighty-two percent for the treatment group and seventy percent for the control group, with an increase of twenty-one percentage points towards the likelihood of graduating, with the positive impact highly statistically significant. Analysis indicated a

marginally statistically significant positive overall impact of the program on reading achievement after at least four years and no significant impacts observed in math. Reading test scores of the treatment group averaged 3.9 scale score points higher than the scores of students in the control group, which was equal to a gain of 2.8 months of additional learning. The calculated impact of using a scholarship was a reading gain of 4.8 scale score points or 3.4 months of additional learning.

Green and Winters (2004) found parents generally satisfied with voucher systems when they posed the question of whether voucher systems allow public schools to respond to competition from private schools by improving the quality of instruction. They examined Florida's A+ program which offers students in schools that chronically fail the Florida Comprehensive Assessment Test (FCAT) an opportunity to transfer to a private school through a voucher program, where schools face the threat of losing public funding if they are failing but can remove the threat by improving their test scores. School 'grades' are lowered if less than half of its worst students (those in the bottom 25 percent at the school) make learning gains but must test at least 90 percent of their students to qualify. If not, they receive an 'Incomplete' score and an investigation is initiated, after which the state commissioner of education assigns a grade to the school. If a school receives a grade of F twice during any four-year period, they are deemed chronically failing and their students become eligible to receive vouchers (called opportunity scholarships) which they can use to transfer to other public schools or a private school. The vouchers are worth the lesser of per-pupil spending in the public schools or the cost of attending the chosen private school. In this study, school-level test scores on the 2001-02 and 2002-03 administrations of the FCAT and the Stanford-9, a national norm-referenced test that is given to all Florida public school students around the same time as the FCAT and included nine voucher-

eligible schools. The team concluded that voucher-threatened schools made the next highest relative gains, with 9.2 scale-score points on the math FCAT and 3.5 percentile points on the Stanford-9 in math; both of which are statistically significant at a very high level, relating high confidence that the test-score gains made by schools facing the actuality or prospect of voucher competition were larger than the gains made by other public schools. As hypothesized, actual voucher competition produced the largest improvements in test scores, while the prospect of facing voucher competition produced somewhat smaller gains.

Joining President Ronald Reagan's team of advisors, Friedman helped to promote a voucher system for low-performing students; a policy scrapped in the transition to Reagan's second term in favor of school choice efforts (Ravitch 2016, 121-2), which enveloped opposition from the Democratic-led House of Representatives and teachers' unions to the dismantling of the US Department of Education and school choice. "A Nation at Risk: The Imperative for Educational Reform" is the 1983 report of the US National Commission on Excellence in Education which stated that when schools competed, all students benefit, and viewed school choice as a panacea for public school performance improvements possible, in part, through the market model's effect of competition between schools.

In 1983, The National Commission on Excellence in Education (NCEE) published a report commissioned by Secretary of Education T. H. Bell to provide a comprehensive study on the quality of the American education system, the findings of which point to a general decline in education quality and predict a subsequent decline in America's global leadership. Focusing primarily on education at the high school level, the report does not provide specific strategies for educational reform, nor does it point fingers in blame, but summarizes studies, public surveys, and other data, dividing findings into four general areas of concern and need for reform: content,

expectations, time, and teaching (United States National Commission on Excellence in Education 2013). The report strongly supported a theme that people believe that education is the major foundation for the future strength of this country, considering education more important than developing industrial systems or military forces, recognizing education as the cornerstone of both of these efforts. They also held that education is "extremely important" to one's future success and that public education should be the top priority for additional Federal funds. Education occupied first place among 12 funding categories considered in the survey–above health care, welfare, and military defense, with 55 percent selecting public education as one of their first three choices. The report also found that not enough of the academically talented students are being attracted to teaching and proposed teacher preparation programs essential for substantial improvement. The commission also found that the professional working life of teachers is on the whole unacceptable and that a serious shortage of teachers exists in key fields.

In 2003, the District of Columbia initiated a voucher program of $7,500 per student for religious or private schools, which should very little significant differences in performance the first two years and slight improvement for some students in reading scores in the third (Ravitch 2016, 135). However, successive failures by state governments to implement such programs witnessed Utah's conservative legislature defeating a voucher program proposal 62-38 in 2007, and Florida's attempted constitutional amendment to allow a voucher system expired by a vote of 58-42. Governor Tom Corbett of Pennsylvania saw the rapid expansion of charter and cyber-charter schools during his term as governor, causing public school funding shortfalls from the siphoning of budgetary revenues given to these schools, some of which were found to have misappropriated over $7 million these monies (Ravitch 2016, 140). These would-be educators abused their authority in education just as Paul warned against abuse of authority in the gospel (1

Corinthians 9:18) and are worthy of God's punishment (Peter 4:11, 1 Corinthians 4:6, Romans 1:32).

No Child Left Behind and Public-School Funding

Unfunded federal mandates (Ravitch 2016, 112) are a huge hurdle for any school wanting to improve performance standards without the necessary budgets to achieve these goals. The advent of the No Child Left Behind (NCLB) program under President George W. Bush, as well as the successive programs launched by President Barack Obama with Every Student Succeeds (ESS) and Race to the Top (RttT), has created a federal system of oversight for public education districts which increase the costs of administration while siphoning these funds from other educational resources. Current demand for qualified teachers stems directly from these federal mandates, which require increased qualifications, which increases the value of the professional and the compensation received (Ferkaluk 2021d). With less students choosing to enter the educational professions, as seen by reduced enrollments in teaching programs at US universities, a premium salary is offered to attract staff to needy school districts, further increasing the costs of public education. Future research should focus on how to avoid unfunded mandates in education and how to best retain and increase teacher effectiveness.

Beveridge (2020) detailed how the No Child Left Behind programs was first established under the Bush administration. While lawmakers and school administrators ponder the changes made in school administration under the Act to loosen the strict guidelines, the policy of the Obama administration is also discussed. NCLB mandates have educational fallout on those who are exempt from the testing also, as many are put into special education classes to avoid their low performance on standardized testing ruining the schools' overall ranking. The mandates also put a financial strain on other school programs which end up being cut as a result of unfunded

dictates from the federal authorities, which often means the arts and music programs first. Beveridge offers one of the first complete analyses of the NCLB fiasco. M. R. Davis (2006) emphasized how core subjects and state testing guidelines under the NCLB program essential weed out the choice of curriculum in public school systems, as unfunded mandates continue to evaporate the local funding to implement the changes called for in the NCLB program. Not only are certain courses that do not relate to the standardized testing format of NCLB cut from the course choices due to concentration on test-related materials, but other classes such as music, art, and PE are drastically reduced to make financial and scheduling room for the core subjects on these tests. This creates a less diverse student and does not adequately capture improvements for the majority of students in the public school system.

The involvement of teachers' unions has also created increased costs for school districts. Unions often negotiate salaries for their membership (Ravitch 2016, 179) with good teachers receiving the same increases as poor-performing teachers, reducing the competition noted earlier in this study as essential to promoting increases in student achievement. The definition of "effective" teaching is lost here due to the professionals 'teaching to the test' (Ravitch 2016, 164), lowering actual student achievement but securing the schools' survival and the teachers' jobs. Additionally, programs like NCLB have created the dilemma of student reclassification, where lower performing students are placed in special education programs to keep them from affecting the standardized test results, which also increases school administration costs through the increased cost of special education resources (Ravitch 2016, 166). By trying to control state administration of educational services, the federal authorities have actually reduced the levels of student achievement and created situations where schools are unable to achieve the mandated

improvement levels, causing closures and student transfers to other schools, further increasing the costs of education. Future research should look to address these concerns of school cheating.

Kohn (2000) explained problems with standardized testing, and how the unintended consequences of this policy implementation has caused government administrators to rate the success of students and schools on an arbitrary scale based on standardized testing, which was designed so that only half of the students answer correctly on most of the questions, and the highest scores are attributed to students that think superficially. Kohn showed how these tests should be excluded from being the absolute indicator of school rankings and should not influence student access to higher levels of education. It was concluded that the 'No Child Let Behind Act' should remove the mandated requirements of standardized testing for college admission, which stunts the opportunity of homeschooled and charter schooled students who may never take these tests.

Randolph and Wilson-Younger (2012) discussed the advantages and disadvantages of NCLB Act implemented during the Bush Administration in 2001. The article reviewed how federal funding is used as a coercion to mandate schools to implement standards improvements that have yet to produce the desired results. The ability to track a problem and measure it in order to improve upon performance is used in the business industries but school systems are not the same as corporate environments, and a cooperative atmosphere must be employed to allow for the desired improvements in educational achievement. While many resources have flooded schools that are underperforming in order to give everyone an equal chance to succeed, these funds are not being distributed equally, although the standards for success are the same.

A variable shift from industry-controlled property tax dependence to a potentially variable revenue source from other commerce funding may particularly affect school districts

with high concentrations of children in poverty or special education needs. States typically

distribute general education aid through formulas that target additional funds to school districts

with large shares of low-income and other high-need children and/or with lower levels of taxable

wealth. Reductions in state educational formula funding may result in cuts in general state aid for

less-wealthy, higher-need districts unless a state goes out of its way to protect them, such as the

"hold-harmless" clause in Pennsylvania's state funding formula that does not permit a reduction

in any amounts received the previous year by any school district, creating the situation where a

series of ever-increasing budgets are eminent and per-student spending is skewed in districts

with declining populations. As such, a per-student cost model should be explored as part of this

funding solution proposal. See Figure 2-3 in the appendix for per-student revenues for 2018.

A study contracted by ERIC/CRESS (Educational Resources Information

Center/Clearinghouse on Rural Education and Small Schools) to produce the "fact sheets" and

"mini reviews" included in a collection of mini papers. Since ERIC/CRESS received repeated

requests for information on certain timely topics, it was determined that the most efficient way to

answer such requests was to produce with pre-printed fact sheets and/or mini reviews. Topics

were prioritized to produce brief synthesis pieces dealing with early childhood education, special

education, transportation systems, and reading achievement as pertaining to rural needs and rural

education (Seeager et al. 1980). These topics are indicative of major concerns of the rural

educators and others requesting information on rural education from ERIC/CRESS. The Seeager

study showed a five percent turnover rate of special education teachers due to isolation, lack of

continued professional development, low salaries, and lack of administrative support. Regional

service centers and itinerant teachers are suggested as solutions to service delivery problems.

Traditional designs for early childhood education are not feasible in rural areas due to lack of

funds, lack of trained teachers, and long distances. Home-based instruction models are suggested, and five model programs are outlined. Individualized reading programs are proposed as fostering improved reading achievement by students in rural areas, but at what cost?

Kaczor (et al. 2012) provide good examples of the issues faced by public school systems under the NCLB program, discussing specifically the Norma Butler Elementary School in Florida and its status as a top performing school. English as a second language learners and the economically disadvantaged students are affected when teachers have to teach to the test to ensure proper performance to the federal government standards or risk losing their funding, students, and possible closures of the school. The team also notes how President Obama allowed Florida and some other states to disregard many of the most important aspects of the law so that a focus on individualized education needs was possible, which it was not under NCLB and President Bush. The team suggested changes to the current federal systems to allow for more individualized programs which vary from state to state.

The cost of education in the American public school system will continue to increase, despite efforts to consolidate schools and reduce overhead costs by individual districts. In order to truly increase the performance of our teachers and our students, the federal government needs to withhold some of their mandates causing results opposite their stated goals. While school choice is able to bring a health competition among schools and professionals to provide the very best services deemed appropriate by their clientele, the funding fiasco of property tax collection must transfer fiscal revenues to state-led income and sales taxes, which are distributed directly to the students' families so that they can choose where to apply these funds. School choice will create a new mandate, closer to home, to replace the federal over-sightlessness of programs like NCLB, RttT, and any other national initiatives to usurp the desires of the constituents within the

individual states. Keeping locally elected school boards will help to retain some of the local

controls so admired by many of these organizations, allowing for timely decisions to be made

concerning the direction their superintendents are taking their curriculum. As the 10th

Amendment clearly places education under the authority of the states, it is their leadership that

must forge the path forward to provide a gameplan to promote the best environments for our

students to learn and grow. Romans 12:6-7 reminds us that "We have different gifts, according to

the grace given to each of us. If your gift is prophesying, then prophesy in accordance with

your[a] faith; if it is serving, then serve; if it is teaching, then teach." A noble and wise

profession that pleases the Lord and should be pursued regardless of the individual rewards

received. Our reward is in the fulfillment of our destiny under His glorious plan.

<center>Validity for Societal Support of K-12 Education</center>

There exists throughout the world noticeable differences in the quality of education

provided from public school systems. John Stuart Mill (1969, 215) once proclaimed that

"present, wretched education" was a "real hindrance" to widespread happiness. In consideration

of the type of vision contained within the funding of the public educational systems in the United

States, a contemporary preference is to follow the unconstrained visions of Godwin, Mill, and

Rousseau (LU 2021), where additional per-pupil federal funding is afforded to underperforming

schools to increase the opportunities of minority and poor students. In theory, this provides an

equalized potential to achieve for all students, with those needing more than others granted such.

This concept of "fair equality of opportunity," where equality in society for those similarly

endowed is not traded-off but establishes categorical priorities which are not applicable to all

situations (Rawls 1976, 301-2). Mill (1977, 128) encouraged the educational process, directing

the universities to create "improvers and regenerators" among its students, producing the "best

and wisest" of society for its own betterment (Mill 1859, 86). Judge David L. Bazelon (1988, 196-7) asserted a similar unconstrained vision that inequality of wealth in society should prompt the government to provide for such basic needs as education as if it were a constitutional right.

The attempts of President Lyndon B. Johnson to increase public education levels through the Higher Education Act saw over eleven million students enroll in American colleges and universities (Sowell 1995, 14-19). Other investments included the expansion of federal expenditures on sex education in American public schools, which saw Washington schools receiving early-grade sex curriculum, only to see increases in pregnancy rates in the 15–19-year-old age groups as well as a skyrocketing in venereal disease cases in females under 15 years of age, leading advocates to double-down on investments for preventative services, maternity, abortion, and social services.

Other visions within the public-school funding debate center around the constrained modeling of economist Adam Smith and philosopher Thomas Hobbes (LU 2021), who contended that man is self-serving by nature and needs constraints. Adam Smith (1976) opposed the views of Judge Bazelon on many subjects, including finance and education. For this discussion on education funding, the constrained vision would dictate equal funding per-pupil in a school choice, voucher funded system where equal treatment is more important than equal results (LU 2021). While a fusion vision has been proposed which leans toward the unconstrained visions through a synergy of moral and law theory (Dworkin 1985), impositions upon the school systems by American courts have conceded to the old notion that one size solutions do not fit all (Sowell 1995, 206). It was noted that, although Thomas Sowell is not a Christian and does not use the Bible as the basis for his logically consistent ethical argument, he has a great mind and a knack for calling out the inconsistencies with the liberal worldview

(Batzig 2010). While he does not practice our faith, Sowell adheres to the tenets proclaimed in Genesis 9:6, where we are told, "The creation of humanity in God's image is the basis of human dignity and equality, as well as the sanctity of life." Sowell has a similar conservative soul that can be appreciated by both Jew and Gentile.

<div align="center">Social Policy and Education</div>

Opportunity is defined as when everyone has the same access to educational and employment settings (Scheurell 2003, 29). Social justice, which is a critical component of civil rights (Segal 2016, 144), extends the tenets of 'fairness' for the same basic opportunities and social obligations to all people. The opportunity for a basic education through twelfth grade for all American students has been available since the events transpiring during the desegregation of US schools in the 1950s and 1960s. Education is a path towards the alleviation of social and economic inequality, with the goal of educational public policy to ensure equal education opportunities by the democratization of secondary and higher education, in efforts to reduce social economic barriers to accessibility (Lazin 1982, 294).

Lazin (1982) began his study by establishing the premise that Israel is a unitary political system. All use subject to the Israeli Social Policy authority lies with national institutions which delegate limited and specific powers to local authorities. These locals have no independent constitutional authority and require the approval of the Ministry of Interior to enact municipal ordinances, budgets, and taxes. To test the assumption about implementation and unitary systems, Lazin examines the ability of two ministries in Israel, education, and welfare, to implement their policies and programs on the municipal level. Noting that each provides services which are the primary responsibility of the national government, the focus was on the vertical administrative linkages between the national ministries, municipal authorities, and other bodies involved in the implementation of ministry policy. The research question was, "To what degree

do these linkages help the respective ministries in implementing their policies, on the one hand, and to what extent do local authorities and others influence those policies, on the other?" Data used included the arrangements for provision, funding, employment, regulation, and supervision. The researcher called on a tradition of studies on implementation by Pressman and Wildavsky, Derthick, and Bardach, which ask whether the intergovernmental system succeeds or fails in translating general policy objectives into concrete and meaningful public services. It also considers issues raised by Lineberry and Levy, Meltsner, and Wildavsky, about the allocation of policy outputs. The potential effect of the linkages on the distribution between municipalities in a single country are explored.

Lazin presented that the unitary character of the political system and the centralized role and function granted both ministries make Israel an ideal case in which to examine the hypotheses concerning the ability of unitary systems to implement national policies and programs, with Israel's size facilitating a study of distribution of policy outputs within a single political system. The findings can be easily compared with and applied to similar works on the effects of administrative arrangements for implementation of welfare and educational systems in both unitary and federal systems and allow for the evaluation of theoretical works on resource allocation in distinct types of political systems. This study evaluated the provision of welfare and educational services in five Israeli communities -Beer-Sheva, Rechovot, Ramle, Kiryat Gat, and Gedera, where these five are typical of various categories of Israeli communities in population, size, ecology, demography, and type. Review of relevant literature on implementation and education and welfare policies in Israel was included. Using an approach influenced by Grodzin's and Elazar's studies of municipal services in American communities, Lazin investigates the roles and functions of the municipality, national ministries, and public and private bodies in the

arrangements for provision, funding, employment, regulation, and inspection of the respective

municipal services.

Elazar (1987, 2-37) had previously classified three models of federalism based on the

placement of power within the system: centralization, decentralization, and non-centralization.

He also noted that polities come into existence in three major ways: conquest, organically, or

through covenant. He aligned these two categories to produce three political organizational

structures the pyramid, the center-periphery, and the matrix models. Elazar's model of non-

centralized matrix is often compared with the decentralized pyramid power and the organic

center-periphery models. Elazar stated that the characteristics of federalism (non-centralization)

are best represented within the matrix model and presents such as a cooperative arrangement

between the levels of government in which hierarchy of power centers are not recognized,

replaced with various sized arenas of political action and decision-making. Where primary

responsibilities are differentiated, interests in common can become collaboration efforts,

symbolic of a non-centralization method of federalism. The matrix model's design was

polycentric, where the measure of political integration does not rely on the power of the central

authority opposed to the peripheries, but the strength of the framework to promote simultaneous

strength in the individual units, as there were no peripheries and no center (Elazar 1987, 199).

The first competing model of federalism analyzed by Elazar was center periphery

(centralization), an alternate to the matrix model which contemporary experts have been

increasingly championing (Elazar 1987, 200, 225), originating from the organic growth of

smaller political divisions to larger polities, where precedent, nepotism, and a single center of

power minimizes constitutional choice. Elazar acknowledged the center-periphery model had

received "impetus" from the highly compatible Marxist theories; the influence of which has

caused conceptualizing the US structure as a matrix more difficult. Similarities to the federal matrix are lacking for our purposes here, as these two models stand in contrast to one another to create a balance between oligarchy and authoritarianism. The center-periphery model implies that central authority has control over policy initiatives, although interest may be shown for the concerns of the peripheral actors, unlike the cooperative brainstorming by various agencies within a matrix model. In organic polities, accommodation through the central authorities grants autonomy to the peripheral groups, which can be reneged to preserve the integrity of the center (Elazar 1987, 228). In the matrix model, the various government levels are designed to protect one another.

The second competing model was the pyramid power model (decentralization), which was hierarchical in nature and was accepted by contemporary political scientists as normative (Elazar 1987, 200-28). Historians acknowledge these regimes usually commence through conquest, with the 'conqueror' at the top. Like the matrix model, autonomy was possible through feudalism, where a contractual agreement between the higher and lower powers can preserve the "illusion" of hierarchy, as long as the lower parties are able to retain enough power to enforce said contracts, varying from the constitutional federal arrangements of a matrix model. Pyramid initiatives originate at the top (in lieu of the collaborative efforts of the matrix authorities), with little concern of the issues important to the bottom. Whereas non-centralization strives for equality among levels, decentralization occurs only because the top assumes control of the polity and offers limited autonomy in return for contractual loyalty.

Lazin (1982) presented an open-ended questionnaire in extensive interviews with the mayors, municipal department heads, and senior staff of the five communities. Lazin found that the distribution of welfare services was uniform to eligible persons in local communities only in

financial assistance to the needy and to persons in special categories, in the placement of eligible persons in institutions sponsored or supervised by the ministry, and in those services delivered directly by the ministry at the local level. He also found that most other services are neither uniform nor adjusted to need, including social services for families, youth, the elderly, and the retarded, and rehabilitation services for those re-entering the job markets. While fixed services such as prekindergarten, kindergarten, primary, and secondary schools are provided in almost all the communities, the level, diversity, and quality of the services and staff have many obvious variances, where some differences are due to ecological factors of size and location, but smaller communities are unable to provide what larger communities can, creating a more complex problem of class and cultural imbalances in the provision of municipal education facilities and services. The significant difference, which cuts across the urban-rural and size divisions, is between places inhabited predominantly by elder citizens and those populated almost exclusively by more recent immigrants from non-European countries. The latter communities have inferior schools and teachers despite similar services, where the children receive vastly different educations depending on where they live. Lazin also discussed the funding issues involved in the federal vs local relationship in the unitary government structure.

There exists, however, an unequal distribution of resources without a correlation to need, with less affluent communities receiving fewer educational services by less qualified professionals than communities with more financial backing. Broad social policy responses have been proposed to adapt to the negative effects of the low wage/high employment strategy. Social investments in education, job training and other active labor market initiatives are proposed to hasten labor market re-entry and mobility up wage ladders (Myles 1996, 4). Since keeping people off welfare through the use of public education, educational policies and resources for

poor and minority students play a 'peripheral' role in public education to strengthen civil society and democracy (Ch 2000, 332). Myles (1996) began his analysis in the first section describing the existing structure of North American welfare institutions. In the second section, the political dynamics that shape social politics in Canada and the United States are described. In the third section, he considered alternative strategies now under discussion to accommodate to the market failures of the 1970s and 1980s. The chapter concluded on a pessimistic note involving the fiscal deficits facing the United States and the limits this imposes on state capacities to invest in significant social experimentation, while confronting a democratic deficit that limits the representation of those most affected by economic restructuring in the political process. The last of these imply that the capacity to identify and implement positive-sum solutions to new forms of economic security and the existence of a democratic deficit makes this situation unlikely. Myles explained how the quarter-century that followed the Second World War brought constantly rising real living standards stemming from rapidly increasing productivity. The labor market brought more, not less, equality, similar to the 1980s, and how the market became a source of income security.

Liu and Taylor (2005) focused on the repercussions of the Civil Rights Act of 1964, the Voting Rights Act of 1965 and the split decision reached in Milliken v. Bradley (1974) upholding local controls of public-school boards. The latter of these is identified as the obstacle between school attendance and place of residence, where racial isolation in housing and residential segregation has been experienced in high-poverty school districts where white families will not send their children and in suburban schools where minority children's families cannot afford to live. Admitted the 'checkered past' of school choice programs to improve opportunities for urban students, the team noted that minority and poor students who did attend

non-urban schools faced white hostility, economic and physical retaliation, and harassment. The research noted how the Supreme Court invalidated freedom of school choice in Green v. County School Board (1968), ruling that school choice programs could not be used unless it was demonstrated to be effective in achieving desegregation.

School choice provisions with the potential to aid desegregation is a provision in 'No Child Left Behind' allowed parents of children who attend failing schools to transfer their children to better performing schools, making no mention of race. As many low-performing schools are racially isolated and high-poverty, many of the transfer-eligible students are children of color, with the transfer schools having significant numbers of white children. Transfers are mandatory only within school districts, providing weak encouragement from the law to adjoining school districts in metropolitan areas to make cooperative arrangements with city districts that lack an adequate number of higher performing schools for effective choice. The team proposed two desegregtive school choice policies: the encouragement of racial and socioeconomic diversity in charter schools, and the use of vouchers to enable urban children to choose private schools or middle-class suburban public schools. They recommended a funding line item in federal and state charter school program budgets to create and reward charter schools that reflect the racial and socioeconomic diversity of localized urban areas. One drawback identified was that schools subject to racial balance provisions that use local district demographics as a benchmark have little desegregtive impact in racially segregated, high-poverty school districts. To combat this, they suggested increasing the desegregtive potential of school vouchers targeted to poorer and minority children by making vouchers redeemable at private and public schools. These voucher amounts would pay up to (1) the median tuition among nonsectarian private schools in the local area or (2) the full portion of per-pupil expenditure in a chosen public school

attributable to local income or property taxes, which would help to bridge the political divide between private and public-school choice.

Social investment in education, job training and other active labor market policies is now widely hailed as a major cure for non-employment, unemployment, and low wages. Rather than insist that the welfare state redistribute income to achieve 'point-in-time' equality, the aim of the social investment strategy is to maximize opportunities to achieve life-time equality. Enthusiasm for this strategy was reinforced by the growing wage gap between well-educated and poorly educated workers in the United States and the growing unemployment gap between the well-educated and poorly educated. While there was little doubt that education and training can improve the labor market opportunities of the disadvantaged, there were at least two reasons to doubt that more social investment is a cure-all for labor market polarization. The first is cost, where estimates of approximately 3 per cent of US GDP per year in education and training expenditures to restore American wage differentials to 1979 levels were projected. Myles explained how this is a difficult target to reach in a country that has invested little in active labor market programs in the past. There was little enthusiasm for active labor market policies as gauged by the ambiguous results of previous experiments. The assumption behind the social investment strategy was that supply would create its own demand, while putting more highly skilled workers on the market would produce more highly skilled jobs. Those who considered the problems of wages and employment to be largely determined by the demand side are skeptical about the possibility that supply side strategies by themselves would provide a solution. There had been no change in the overall rate of growth in demand for skill in the United States since the 1940s, but what had changed was the concentration of demand at the very highest skill levels; a demand that was unlikely to be met through upgrading the skills of workers in the large

mass occupations. **The enthusiasms of policy analysts do not by themselves create policies.** Main objectives to moving toward a more active version of liberal interventionism are partisan political, with decentralized and fragmented power in the American state making significant policy changes difficult.

The social aspects of education became abundantly clear in the infancy of the United States. Immigration to the United States from Western European countries escalated from 1830 to 1850 (Irish and German migration) and from 1860 to 1920 (Polish, Italian, Greek, etc.). Most of these immigrants were unskilled laborers who flooded the cities and were poor. As migrants moved to the cities, urban problems, such as the need for a robust public education system to attend to these new citizens, developed (Scheurell 2003, 32).

Scheurell (2003) offered an analysis on the changing economic and political circumstance surrounding federal (national) government responsibility for income maintenance programs, such as old-age survivors, disability, and health insurance (Social Security—OASDHI), Supplemental Security Income (SSI), and Temporary Assistance to Needy Families (TANF) through a survey of conservative and liberal ideologies within the state-centered, dual federalism, and cooperative federalism systems and modern devolution efforts. He identified some of the major values in the United States Mutual Aid through pragmatism (seeking a practical solution to problems), humanitarianism (a compassion for others generally expressed through charity, donations, and philanthropic organizations), social mobility (the concept that anyone can rise in the class system), work ethic (the theory that hard work, discipline, activity and work becomes a central focus in one's life), education (key to an occupation, career, and social respectability). The concepts of achievement and success are noted as rooted in individual efforts result toward socioeconomic and psychological rewards. Although the United States is

debating massive tax cuts and the paying down of the national debt, the country may find the economic prosperity of the 1990s may be eroded, resulting in the prioritization of cutting taxes versus increasing national debt, and may have to scale back current proposals. Program changes decrease the economic position of the poor and near-poor, and tax changes result in the higher-income groups receiving a larger share of these cuts than the lower or middle classes, with a net result in the continuing deterioration of the socioeconomic base of the near-poor and the middle class. Decisions include the United States not paying for family planning, a reversal of a campaign pledge to include carbon dioxide as a pollutant, a repeal of ergonomics (a program to reduce work injuries), a repeal of not building roads in national forests, a proposal to eliminate affirmative action, and a massive tax cut proposal. All of these actions are peripherally related to social welfare but do send a message. The current administration will support and continue the process of placing a greater burden on the states for social welfare and a growing emphasis on personal responsibility.

Education in the United States has undergone a profound change over the last two decades as part of neo-liberal and neoconservative political reforms. The reforms have been characterized by efforts to standardize the curriculum, to implement standardized tests in order to hold students, teachers, and schools accountable, to increase school choice, and to privatize education provision. While the reforms in both countries have similarities, differences in the structures of schooling and in the relative political strength of neoconservatives and neo-liberals help to account for policy divergence. (Hursh 2005, 3-4). Under neo-liberal post-welfare policies, inequality is a result of individuals' inadequacy, which is to be remedied not by increasing dependency through social welfare, but by requiring that individuals strive to become productive members of the workforce.

Hursh (2005) described how, not so long ago, most students attended the local school to which they were assigned, learned from teachers who used and adapted the school's and district's curriculum, and were evaluated based primarily on teacher-prepared assessments. Students today are being given a choice of which school to attend, learn from teachers who use state or national curriculum and standardized testing, and are evaluated by those standardized tests. Hursh summarized the educational reforms in the United States with the aim of exposing how similar neo-liberal and neoconservative political rationales are employed, denoting the similarities and differences of policy implementation methods, and how the policies fail to achieve their goals. Hursh maintained that because employability and economic productivity are considered central to standardized educational processes, education becomes less concerned with developing a well-rounded, liberally educated person and more concerned with the development of skills which results in an economically productive member of society. Neo-liberal governments, Hursh contended, wish to reduce funding for education while at the same time reorganizing education to fit the needs of the economy. Neo-liberal policy makers have packaged these reforms to simulate the appearance of the promotion of equality because the public might object to cuts in social spending and increasing economic inequality, providing rebuttals which emphasize increases to fairness in education, such as requiring all students to achieve high standards as measured by objective tests, and opportunity.

The disparities in the opportunities for equal educational achievement begins with the Head Start programs offered in the United States, following through to K – 12 and on to higher educational access. Among Organization for Economic Cooperation and Development (OECD) countries, early childhood education and care is generally publicly funded through subsidies or tax credits, and either publicly provided through facilities at or near K-12 schools or provided by

a mix of private nonprofit institutions such as churches and parents' cooperatives. Costs are

largely assumed by the government; only in Anglo-American countries do parents cover the

majority of costs through fees. Head Start not only positively impacts children, but it also aims to

benefit their families. Children from families that lack the resources to ensure optimal

development should receive universal access to Head Start services. The goals of the program to

promote social capital in order to improve life outcomes could/should be made more explicit

(Conley 2010). Amy Conley (2010) asserted that preschool daycare programs have served three

purposes: to care for children during work hours; to provide early childhood education; and to

fulfill the needs of poor and disadvantaged children. This last model was the focus of this study,

proposing that the welfare approach to childcare be supported by a social investment approach to

exemplify human and social capital investments for low-income families and communities while

contributing to additional social development goals. The Head Start program in the United States

is highlighted as an example of this premise, contending that childcare with services for

disadvantaged children represents an investment in their abilities and potential, not just a welfare

handout. Secondary data to stimulate debate on the role of childcare in social welfare was used

with a description of the social investment approach and the mechanisms of human and social

capital, serving as a background for these national childcare intervention strategies and how they

foster investment in the capacities of children, families, and communities. The Head Start

program in the USA was selected as an example of two nationally implemented childcare

programs that explicitly benefit poor children and communities; serving children in these large-

scale social experiments which provide policy implications for the social investment strategy.

Conley concludes with the argument that investment-oriented childcare for poor children can be

combined with remedial approaches to better promote the social welfare of children and families and is compatible with the larger goals of the social development approach.

Conley stated that governmental involvement with childcare in the US has been intermittent at best and usually focused on with a connection to gainful employment. While the federal government began to focus on childcare during the Depression and World War II to assist with the increases in female employment, after World War II, the federal government withdrew its support and encouraged women to give up employment to care for their children. Federal funding since this time has been limited to the Head Start program and to childcare subsidies for welfare recipients. While many other Western, industrialized countries (notably in Scandinavia) have established comprehensive, government-funded and -operated childcare systems, the USA has not initiated such measures towards this approach. Three clear programmatic requirements for the social development approach are established by Conley by the acknowledgement that: social development initiatives must clearly articulate the integration of social and economic efforts and be institutionalized through formal arrangements; economic planning must support social welfare; and social policies must support economic aims by contributing to development, rather than simply consuming resources as with conventional, remedial models.

Once these children reach the age to enter into the public school system, school choice, as promoted in the United States by the No Child Left Behind Act (2001) (NCLB), encourages parents to transfer their children from school to school, therefore undermining their allegiance to the local school and the incentive to engage in public discourse regarding the nature and purpose of schooling. Because, as I will describe, the reforms focus on turning schools into competitive markets in which students apply to the school they want to attend, children and their parents no longer have shared interests with other students and families and, instead, may become

competitors for the available openings. (Hursh 2005, 5-6). Voucher programs, in which students are provided with public funds to attend private (including religious) schools, were recently approved by the US Supreme Court.

Under NCLB, students in failing schools must be given the option to transfer to a school not in 'need of improvement'. However, since failing schools tend to be clustered by district (urban and poor), there are typically few, if any, schools to which to transfer. If there are insufficient openings in a student's school district, they can choose to transfer to a nearby school district. However, few students take advantage of this option. NCLB also encourages the creation of charter schools and may be part of an effort to portray public schools as failing so that they can be replaced by private schools for which students would receive vouchers to pay for part of the tuition cost. (Hursh 2005, 7). NCLB explicitly introduces choice and competition into the educational system, as students are given the ostensible option to leave a school that fails to make 'adequate yearly progress' (AYP). Howard Fuller, founder of the pro-voucher organization Black Alliance for Educational Options (BAEO), in a 2002 interview with the National Governors Association, hoped that the NCLB law will be amended to allow families to choose private schools as well as public schools (Hursh 2005, 10). With industrialization and the requirement for a more highly educated workforce, there became an increasing recognition that post-primary educational opportunities represented a gateway to socioeconomic opportunity. As state-supported educational opportunities expanded and improved, the new educational entitlements were often recognized as constitutional or at least legal rights. It is the prevalent public opinion in America that a basic education and social insurance are likewise citizen entitlements and rights (Hega and Hokenmaier 2002, 145).

Hega and Hokenmaier (2002) argued the existence of a trade-off between government investment in public education and spending for social policy, exploring this "trade-off" thesis and the relationship between public education and social programs for eighteen democratic industrial nations since the 1960s. They recorded a strong association between educational policies and social programs in these nations, finding evidence of a "trade-off." The types of welfare states (liberal, conservative, and social democratic) are correlated with particular profiles for educational policy, with diverse types of welfare regimes exhibiting tendencies to choose between educational opportunities or social insurance programs as alternative policy strategies. The team asserted that certain varieties of welfare regimes have given political and budgetary preference to social insurance programs over educational programs, limiting the available coffers to expand educational opportunities and social mobility. Higher levels of public investment on educational opportunities beyond a basic allocation can be viewed as an alternative policy strategy to income maintenance programs and other social insurance guarantees in other welfare states. The team maintained that Esping-Andersen's welfare state typology can be applied to the field of education policy, holding that there is a specific relationship between the kinds of social insurance programs found in Western societies and the educational policies they support. The observed nature of a state's social insurance provisions, along with the educational entitlements and opportunities offered, reflects a particular policy profile. It was hypothesized that an examination of the educational policies found in advanced industrial democracies would show their tendency to cluster into three distinct groups -- liberal, conservative, and social democratic -- corresponding to Esping-Andersen's typology of welfare states. Here, a broad and universal safety net of social insurance provisions provide educational opportunity as an individual's

protection against the risks of life within liberal regimes, with the individual held responsible for their results.

Research design and methodology included the utilization of three kinds of welfare regimes in advanced industrial societies, and upon efforts to identify the causes for variation in social and educational spending by Western societies. Castles' model to explain educational spending is modified to test the applicability of Esping-Andersen's welfare state model to the field of educational policy, where the three welfare state types are tested for their association with unique educational policies, to see if variation in educational policy can be explained by the particular constitution of the welfare state. The team explored the existence of evidence of a trade-off between education and other social security policies as alternative welfare state strategies, with the relationship between spending for education and social insurance programs in advanced industrial nations for the inclusive 1960-1990 time period studied in particular. The sample was comprised of 123 observations out of 126 possible for the eighteen nations over the 1960-1990 period; however, the team did not include the 1960 records for Denmark, France, and Switzerland because the required spending data for social insurance and education was not available. Each missing record represents one of the three different welfare state groupings, so it is not believed the missing data lends to bias or compromise of the analysis. Their findings provide support for the varieties of social security states described by Esping-Andersen and offer evidence that certain types of welfare states have distinctive educational policy profiles. Summary data by welfare regime type showed that conservative nations tend to place greater emphasis on social insurance expenditures than education, relative to the other welfare state types.

Higher education's growing prominence in socioeconomic adjustment leaves this void increasingly indefensible. The normalization of higher education, with the increased access to higher learning from what were once a select-few elite students to significant shares and often broad majorities of age cohorts, has turned the sector into a central battleground for distributional conflict in contemporary societies. A development of a political science of higher education as it relates to the shifting conceptions of welfare that contemporary states seek to provide is necessary (Schulze-Cleven 2020, 279-81). Schulze-Cleven (2020) asserted that policymakers have pursued the goal of organizing competition among universities by combining fiscal and regulatory policies that strengthen universities' self-reliance, rivalry, and decentralized decision-making. His analysis showed that understanding cross-national patterns of institutional transformation requires putting countries' evolving regimes of state-university relations into historical perspective, and that states' shifting governance strategies are important drivers of higher education's contemporary reimagination, clarifying how regulatory solutions to welfare provision have fostered the re-composition of public infrastructures, raising pressing questions about the quality and scope of the welfare that regulatory approaches promote. He pursued contemporary institutional changes in higher education through the lens of the regulatory welfare state (RWS), a concept proposed to capture the growing role of regulation in states' welfare policies, focusing the analysis on state strategies to trigger structural changes in higher education across the United States, which contains a plethora of world-leading university systems. The methodology employed follows four steps. The first step clarifies the main parameters of welfare states' changing relationships to the sector and defines the goals of the RWS concept for a comparative political economy perspective on contemporary higher education. The second step recounts the processes of the RWS to define central parallels in how American state authorities

have sought to shape competition among universities as a way of spurring broader institutional changes over the preceding thirty years. It also discusses how historical legacies have pushed national reforms in particular directions beyond the demonstration of the strengthening of market principles in its higher education systems. The third step lends anecdotes to contrast outcomes of shared agendas, with the last step involving the review of analysis findings to expand on potential implications for the contributions of welfare states and universities to the future of democratic capitalism. Schulze-Cleven concluded that the role of higher education in state-building recommends that regulation has long been part of the welfare state, making it essential in empowering universities as parastates and acknowledging that recent changes in regulation have been more about concerns of quality rather than quantity. This finding is consistent with the analysis provided by other articles in this volume, easily extended to labor market regulations, from the eight-hour workday to provisions against child labor, both of which preceded the growth of fiscal expenditures financed via income taxes. The findings suggest that scholars should treat regulation as one of the long-standing levers of welfare states.

Higher education has been a central element of public initiatives to support the population's welfare, including through policies supporting national economic development and defense. Academic freedom in the United States shows up prominently in the high degree of independence enjoyed even by public colleges and universities, which roughly three-quarters of American students attend, thus leaving relationships between government and universities arm's-length at best. In contemporary higher education, the predatory practices of for-profit higher education institutions, as well as the racial, gender, and socioeconomic biases that pervade routines at notionally public institutions, remind us that there are clear limits to, and inequities in, welfare states' promotion of individual welfare (Schulze-Cleven 2020, 292).

Poverty and School Choice

C. M. Hoxby (1998), writing on behalf of the Department of Economics at Harvard University

and the National Bureau of Economic Research, explored the origins of school-finance problems in

relation to property tax assessments using data from 1900 to 1990. Three research questions are posed:

Has the distribution of per-pupil spending in the United States grown more or less unequal over time?;

Has the relationship between per- pupil spending and property value changed?; Has the relationship

between parents' income and per-pupil spending become stronger or weaker over time? Data was

amassed from district-level data for large cities in Massachusetts, Illinois, and California, collected by

the federal government after 1970. From these records were procured data on expenditures, number of

pupils, and local equalized property valuation. The U.S. Census of Population provided the

demographic data aggregated to the same juris- dictional level as the school district, with

demographics including household incomes and the age distribution of the population (309). Hoxby

conceded that spending equality among the districts observed noted a downward trend from 65% to

45% between 1900 and 1990 (311). This was attributed to the decline in arbitrary differences in

districts' per-pupil valuation due to 'lumpy' real-estate asset; if local residents did not modify their

choice of property-tax rates depending on the relationship of local real-estate assets to incomes, then

inequality in per-pupil spending would have fallen considerably between 1900 and 1990. Developing

a regression to show how per- pupil valuation and per capita income explain per pupil spending for

Massachusetts and to see whether the relationships have changed over time, estimates of /31 and /32

from the following regression are presented:

$$PPSijt = /o + OIPPVijt + /2PCLIjt + /3OLDijt + /4HSijt + s5GRADijt + sijt;$$

where PPS is per-pupil spending, PPV is per- pupil valuation, PCI is per capita income, OLD

is the percentage of the population over age 65, HS is the percentage of high school aged children in

the population, GRAD is the percentage of adults who are high school graduates, and s is an error term; i indexes the districts, j indexes the states, and t indexes time (312).

Hoxby concluded that regressions of per pupil spending on per pupil valuation, per capita income, and demographic variables show that the relationship between spending and income grew stronger, in both explanatory power and the elasticity of spending out of income, from 1900 to 1950, and then weakened. There was no statistically significant relationship between local per capita income and per- pupil spending in the state of Massachusetts by 1990 (313). California had the smallest fluctuations and lowest level of inequality from 1900 to 1970, proving that school finance crises are not necessarily resultant of systems breaking down, but may be due to rising expectations about the equality a state's school-finance system should be able to achieve. Hoxby found that per pupil valuation does matter for per pupil spending but not due to arbitrary differences in real property assets (314).

Absolute measure of poverty, utilizing poverty thresholds first developed in the 1960s to determine the poverty line from which are established income limits for qualification in federal and state educational programs (Segal 2016, 183), is the preferred method of measurement to relative measures in the government's administration of educational and school lunch needs assessments in the United States. 5.2 million families with children lived below this federal poverty line during the late 1990s. Some of these people are considered the 'working poor' (Segal 2016, 188), where three out of four families had working adults in the household. These 'working poor families' have the same rights to a quality public education as their more affluent colleagues. Childhood poverty has been linked to lower educational achievement, leading to disadvantaged life outcomes (Segal 2016, 191). One cause of such outcomes of poverty is the lack of proper education and training to acquire the appropriate job skills necessary to attain

gainful employment (Segal 2016, 193). In this study, the interrelationships between school choice and poverty will be explored.

Historically, public schools have been assigned by residential addresses. Urban schools have declined in quality due to the exodus of middle-class families to suburban areas. Federal Community Protection and Revitalization (CPR) scholarships have been used to encourage wealthier families to stay in urban areas to decrease poverty through the Department of Housing and Urban Development (HUD) (Danielsen 2017, 1). While the success of these programs is dependent on the acceptance of the presented incentives to engage with poorer communities, CPR scholarships have been shown to benefit the poor through direct eligibility in these programs while indirectly experiencing increased economic activity and improved neighborhoods (Danielsen 2017, 9). Studies have suggested that racial isolation between urban and suburban/rural areas is a primary obstacle to desegregation in many schools, despite the passage of fair housing laws. This has exacerbated the issues with low quality educational opportunities for the poor and minority children in urban settings (Lui and Taylor 2005, 792), while the possibility to simply move or change schools has not been presented in the current public-school systems of Pennsylvania.

Bartley R. Danielsen (2017) explored the root causes of public-school failures in urban environments, dismissing blight and bad leadership as catalysts. Citing federal housing policies such as the Gautreaux Assisted Housing Program and the Moving to Opportunity experimental programs conducted by the Department of Housing and Urban Development (HUD), Danielsen touted the life outcome benefits of minorities assigned to suburban housing opportunities, including higher incomes for children who attended these more affluent schools. Danielsen asserted that the use of CPR scholarships for private school choice opportunities would attract

more affluent residents to poorer neighborhoods. Danielsen contended that theoretical and empirical evidence has supported an increase to economic activity in communities which offer school choice voucher programs for K-12 education. Parochial and private school presence in the community is shown to benefit social cohesion, reduce perceptions of disorder, and lower crime rates. CPR scholarships are proposed to increase safety and revitalization to distressed communities with prominent levels of poverty, appealing to higher-income families to relocate and revitalize urban centers. Poorer families benefit directly and indirectly through the program. Higher-income families will attract more local business options, providing jobs for lower-income families and increasing the overall economic prosperity of the urban area. Subsequently, school choice programs were found to allow urban students in failing or closing schools to attend better performing institutions through a voucher for tuition costs (see Vermont). These programs, as implemented in Milwaukee, Wisconsin, were noted to improve education for student achievement but did not necessarily improve the economic situation in the city, neglecting to reduce concentrated poverty pockets or attracting wealthier families to the urban areas. The 'less-poor' have 'voted with their feet' and taken their vouchers to institutions outside of the city. Danielsen identified the trade-off between lower housing costs and reduced educational services for children, stating that it is not enough for these families to relocate.

Kozol (1992) asserted that children from poor families are disadvantaged systematically and robbed of future successes by grossly underequipped, understaffed, and underfunded schools in U.S. inner cities and less affluent suburbs. The schools visited between 1988 and 1990 in the poorest national neighborhoods of Camden, N.J., Washington, D.C., New York's South Bronx, Chicago's South Side, San Antonio, Tex., and East St. Louis, Mo., where the populations were "95 to 99 percent nonwhite." Kozol found that racial segregation has intensified since 1954. He

notes that in the suburbs, the slotting of minority children into lower-level educational tracks set up a differential, two-tiered system that minimizes the horizons and aspirations of children from less affluent areas. Kozol lets the pupils and teachers speak for themselves, uncovering glimpses of energy and hope. This report is an indictment of the shameful neglect that has fostered the ghetto school systems in America. In the early 1990s, journalists documented the disparities of wealthy and poorer school districts across the country, identifying problems of total racial segregation, per-pupil spending variances, and huge divides in the availability of classroom resources. Movements of students between traditional public and charters schools have been associated with racial isolation and poverty concentration Kotok et al. (2017, 415). Kotok posed four research questions to address poverty concentrations, school choice, and racial segregation:

> 1: To what extent are students and schools affected by movement between charter schools and traditional public schools (TPSs)?

> 2: Are student transfers from TPSs to brick and mortar (BandM) charter schools associated with increasing racial isolation? How does this vary by geography?

> 3: Are student transfers from TPSs to charter schools associated with increasing exposure to low-income students? How does this vary by geography?

> 4: What are the demographic characteristics of the TPSs from which cyber students transfer?

They used longitudinal student-level data to compare the student racial and economic composition, disaggregating student movement by geographic location to account for both cyber and BandM charter school choices, while examining the segregation of students entering charter schools for three racial/ethnic groups. The team noted that the expansion of charter schools exacerbated segregation, with racially isolated minority schools having fewer resources essential for a well-rounded K-12 education, experiencing instead lower academic achievement and educational attainment. Students transferring from public to charter or private schools

moved on to schools reflecting student populations with less minorities than the school they left. White students account for 3 of 4 cyber students (1 in 2 BandM nationally), with less English Language Learner and economically disadvantaged students enrolled in the cyber options. Data for the study including individual student and school/district data for 2008-2009 to 2011-2012 in Pennsylvania from the Public Department of Education indicating what school a student attended in each year, race, and grade, omitting pre-k students and ungraded students. Additional individual school data and that from the National Center of Educational Statistics (NCES) Common Core of Data (CCD), and Public-School Universe were compared. Findings conclude that the trend of students moving into and out of BandM and cyber charter schools from TPSs may be associated with segregation, isolation patterns, and poverty concentration.

Data from Pennsylvania public schools and previous studies have disaggregated findings by geography, finding that transfers of African American and Latino students from public to charter schools were segregated. For example, white students transferring to other urban schools did so while going to more racially segregated schools, while students from the various racial groups were found to attend urban charters schools with lower poverty concentrations. Studies opposing school choice options point to findings that white families avoid schools with higher percentages of non-white students, which cannot be attributed to other school characteristics such as test scores, safety, or poverty rates. Here, school choice for white and wealthier students lead to increased economic and racial segregation in public schools. These findings could not be explained by school district policies, suggesting that laissez-faire school choice policies may further deteriorate the educational conditions for disadvantaged students left behind in local public schools (Saporito 2003, 181).

Saporito (2003) investigated whether school choice options (private, charter, and magnet schools) impact race and class segregation among students, citing the advocacy of scholars for school choice policies which expand the educational options of poor, urban families to create greater educational equity and desegregation. The study embraces the notion that choice policies will act as a conduit for poor/minority students to escape failing urban schools in poverty-stricken areas. One supposition maintains that wealthier white families will choose schools based on academic performance in a choice program, as opposed to choosing schools based on racial demographics, while another opposes this stance, stating that increased educational mobility will exacerbate segregation from white families avoiding predominantly minority-populated schools. Saporito identifies the opportunity to add knowledge to this arena as no other studies are linked to such decisions, taking his data from Philadelphia public school records, to extricate the influence of school choice from the influence of institutional factors. In Philadelphia, Saporito observed that the withdrawal of white students from Philadelphia's public schools coincided with an increase in residential segregation between whites and African Americans, where segregation between was measured by the index of dissimilarity, which increased from .61 in 1930 to .80 in 1980 and plateauing at .78 in 1990. Sixty-one percent of Philadelphia's public-school students lived below 185 percent of the poverty line ($23,495; same standard for free or reduced lunch for a family of four). Although desegregation measures were implemented in 1968 by Pennsylvania statutes, voluntary participation by families disallowed the enforcement of the mandates. Data was compiled from the Philadelphia school systems, which included up to the 1991-92 school year. In pursuit of these goals, Saporito examines three questions:

1) How are the choices of different race and economic groups structured?
2) Do higher status groups avoid places populated by lower status groups?

(3) Can stated preferences for places that happen to be occupied by different racial groups actually reflect non-racial preferences for safe, clean, high-quality neighborhoods?

Saporito concluded that private choices have public consequences, where the private choices of individual families for schools are patterned by the race of families seeking alternative schools and the racial composition of the schools they leave. In particular, white families were averse to attending schools heavily populated by non-whites, and the school choices of non-white families were not correlated with schools' racial composition. This proposed that one cannot predict whether a non-white child will avoid or seek a school based upon its racial composition. Therefore, private school choices by families, not the government, result in greater racial segregation in urban public schools, while acknowledging that the school district does not regulate these private choices that leave urban schools more racially segregated with similar patterns are found between various economic groups.

'Working poor family' students are susceptible to future poverty due to the inability to acquire marketable skills and knowledge, due to the lack of or improper investment in their early educational endeavors (Nishimura and Raut 2007, 412). Nishimura and Raut (2007) formulated a model of parental school choice and explore the existence of the poverty trap in urban school systems. Noting previous (1798) studies that suggested population control as a solution for poverty by controlling the fertility rate of lower-income populations and the obvious inadequacies of such policies, the team proposes that parents have the option of a lower fertility rate and investment in their children's human capital (as is seen in wealthier families) opposed to choosing a higher fertility rate and disregarding the costs of education for those children. They assume a non-concavity in the relationship between eventual income potential and investment in schooling. However, they cited marginal increases in earnings for children who receive increased

investments in school activities. Understanding the variances in the quality of schools available, the researchers acknowledged the increased costs of housing in affluent neighborhoods and the resultant access to additional funding for school activities, which improves the quality of experience for the students at these schools. Variable formulas valuable to this research appear on p. 415. The team concluded through their modeling that low-income parents will invest less money into their children's educational experience, converging to a low-level equilibrium (stuck in the intergenerational poverty trap). Improvements to the quality of lesser performing schools and free access to these services are proposed as a solution for poor and minority children.

These types of situations often result in the continuation of intergenerational poverty cycles and low intergenerational social mobility. Some of the reasons opponents of school choice have posed include the documented failures to achieve greater educational equality due to inadequate resources to poor schools directly contributing to childhood poverty repercussions. Neoliberalist influences in education is identified as the main force to desegregate schools and reform education through school choice. Studies have concluded that the continued marginalization of minorities and poorer students have adversely affected their potentials by limiting their educational opportunities and their right to quality education (Ndimande 2016, 33). Ndimande (2016) joined a number of researchers on the topic of school choice and voucher programs (see https://ger.mercy.edu/index.php/ger/issue/view/24 for more references on the subject). Reflecting on the failure of school choice policies on achieving educational equality, the researcher asserted that inadequate resources are the dominant reason for the failure of less-affluent school districts, which directly contributes to the continuation of poverty for children in these systems. While the study examined data from the South African school systems in relation to apartheid and racial segregation, much of the school choice data can be extrapolated to

correlate with American, and particularly Pennsylvania, schools. Ndimande found that educational inequalities have an impact on the economic and social lives of children, including the continuation of poverty conditions well into their adulthood. Educational resource inequalities have continued even though funding levels have increased for many school systems since the early 2000s. Research points out that inequalities are not eliminated merely by increasing budgets, and that current deficits are so great that equalizing funding is not sufficient to make resources in schools equal. This is caused by enormous education debt that must be alleviated if resource disparities are to be eliminated or mitigated.

The research found that school reform policies did not mandate the desegregation of schools nor tried to alleviate the lack of resources in urban schools, but instead encouraged parental school choice with the intention to encourage desegregation. However, none of the White parents chose to send their children to the urban schools, avoiding any type of desegregation. Parents interviewed expressed the inability to participate in school choice programs due to their economic inability to afford 'better,' formerly White-only schools. Ndimande quoted Milton Friedman in the assertion that government should not run schools but provide the funding to allow private agencies to administer. This offers an environment conducive to the expansion of school choice programs, to break the links between residence and school assignments, giving parents control over where their funds will be utilized and providing a market solution to failing schools.

Educators in high-poverty communities have difficulties identifying how they can help students face the challenges of poverty and the resultant achievement gap that is caused by a living experience containing poor housing, inadequate income, and discrimination. School leaders are often confused of their roles concerning the problems of poverty and inequality,

recognizing that poor children are often given teachers who are less qualified in their own skills. Levin (2007) noted how mismanagement of school choice programs exacerbates inequities, responding to the calls for governments and international agencies to intervene through the school systems to eliminate the effects of poverty. Levin examined the 'Programme for International Student Assessment' (PISA) study involving over forty countries, demonstrated the various educational gaps among the various countries' highest and lowest-achieving students. Conveying the fact that countries with less inequality in income and education show better economic achievement, counter to the long-standing debate between equity and efficiency, Levin also noted that the scope of socioeconomic status is too large for schools to have a mitigating impact upon the negative trends experienced. Levin's short synopsis of the Canadian results of addressing equity issues among their provincial school system show that performance improvements are documented among the individual approaches taken by school leadership throughout the nation. Experts with the acumen to alleviate these disparities have documented leadership traits of those running our schools as vision, passion, and the desire to exude positive influences on their students and staff to improve student success and elevate their communities.

Characteristics such as situational, transformational, and distributive leadership help to transform high-poverty, low-performing schools with poorer populations while embodying an elevated level of dedication and commitment to these students. Leahy and Shore (2019) presented a study to document skills and characteristics believed to be significant for successful public charter school leadership by exploring the impact of school leadership between various school methodologies and contending the need for 'differently' prepared leaders in charter schools. The qualitative study evaluated the leadership styles of two successful charter school leaders over twenty-five-year careers in education, where both transformed low-performing,

high-poverty school to improve student achievement levels. This type of leadership is essential to ensure the student achievement levels of those considering such schools in a choice/voucher system. The team notes a confounding factor that the existing research highlights is the difficulty of generalizing results due to the unique nature of each individual charter school. As the team stated that there are limited resources for literature review of the topic, they immediately delved into an analysis of the foundations in leadership theory, highlighting distributive, situational, and transformative leadership styles and the best reflections of each in educational leadership, with particular emphasis on charter school leaders. Two leaders were chosen from thirteen interviewed from the previous work *Adventures of Charter School Creators* (Deal et al. 2004). Ten were contacted via email or by phone to request an interview following Institutional Review Board approval, with two interviewed via telephone. Before the interview, each participant signed an Informed Consent Form. Phone interviews were digitally recorded and transcribed by the researchers. Additional data were obtained through follow-up email correspondence and publicly accessible sources such as the school websites and newspaper articles. Before the interviews, the protocol was emailed to the participants along with the Informed Consent Form so that responses could be reflected upon before the interviews. Each semi-structured telephone interview lasted 30 minutes with consistent focus areas and questions for both. Questions to clarify or solicit addition information were added as needed, with the names of the public charter schools and the leaders were kept confidential. The findings highlighted the individual traits of leadership inherent in the subjects and proposes that these same skills should be sought in charter school leaders.

Noting studies from 1798 that suggested population control as a solution for poverty by controlling the fertility rate of lower-income populations and the obvious inadequacies of such

policies, Nishimura and Raut (2007) proposed that parents have the option of a lower fertility

rate and investment in their children's human capital (as is seen in wealthier families) opposed to

choosing a higher fertility rate and disregarding the costs of education for those children. They

assumed a non-concavity in the relationship between eventual income potential and investment

in schooling. However, they cited marginal increases in earnings for children who receive

increased investments in school activities. In Philadelphia, Saporito (2003) observed that the

withdrawal of white students from Philadelphia's public schools coincided with an increase in

residential segregation between whites and African Americans, where segregation between was

measured by the index of dissimilarity, which increased from .61 in 1930 to .80 in 1980 and

plateauing at .78 in 1990. Sixty-one percent of Philadelphia's public-school students lived below

185 percent of the poverty line ($23,495; same standard for free or reduced lunch for a family of

four). Although desegregation measures were implemented in 1968 by Pennsylvania statutes,

voluntary participation by families disallowed the enforcement of the mandates. Ndimande

(2016) finds that educational inequalities have an impact on the economic and social lives of

children, including the continuation of poverty conditions well into their adulthood. Educational

resource inequalities have continued even though funding levels have increased for many school

systems since the early 2000s. Research points out that inequalities are not eliminated merely by

increasing budgets, and that current deficits are so great that equalizing funding is not sufficient

to make resources in schools equal. This is caused by enormous education debt that must be

alleviated if resource disparities are to be eliminated or mitigated. While many of these studies

point to the voluntary nature of participation in programs designed to eradicate poverty, one is

wise to remember the advice contained in Proverbs 14:31, "He who oppresses the poor shows

contempt for their Maker, but whoever is kind to the needy honors God."

C. P. Kearney (1994) taught at the University of Michigan and served as a former president of the American Education Finance Association. He evaluated the decision of the Michigan state legislation in eliminating local property tax collection and moving to a fully state funded educational system. Data utilized for his study included information obtained through the 1993 fiscal crisis, historical legislative attempts and inactivity, reforms implemented after the 1990 Governor's race, and the influences of the 1993 passage of legislation to eliminate the property tax (36). Kearney noted that property tax rates were abnormally overused in Michigan, where the sales tax was underused, with individual and corporate tax rates higher per capita than the US average (36). A major component of the heavy reliance on property taxes is identified as a state failure to assume its share of the fiscal responsibilities for K thru 12 educational costs, with the equal split between state and local in 1967 becoming an 80/20 ratio through the early 1990s (37), with disparities in real estate millage ranging from eight to forty-seven mills between districts. Numbers initial show that per pupil revenues are not necessarily increased substantially with increased millage rates. Kearney demonstrated how resources available to pupils creates inequity in opportunity for students in less affluent areas, and proposes the Olmstead/Kearney Plan to create statute for a 50/50 split between government entities at state and local level for public school funding, a roll back of property tax rates to a maximum of 30 mills, additional support for 'at-need' students, a hold-harmless valuation for noncompliant districts, and a phase time of six years to without referendum on the tax shift/increases (40).

Sue C. Carnell (2018, 14-55) presented a doctoral dissertation on the 2013 Michigan shut down of financially challenged districts, where fifty-eight 'deficit districts' between school years 2010-11 and 2014-15 were the focus. Carnell's research methodology was a mixed methods approach of both qualitative and quantitative models to collect and analyze data in pursuit of answers to the stated research questions of: 1. What are the prominent factors that contribute to a

school district's deficits? 2. Are there specific strategies commonly used by Michigan school districts with financial deficits to reduce deficit budgets? 3. What barriers exist that would prohibit reduction of financial deficits for Michigan school districts? Carnell employed a study design of an exploratory sequential mixed methods approach, where the qualitative methods included two phone interviews conducted with two superintendents who worked in a district with a financial deficit, to ensure the appropriate open-ended questions were asked in an online survey of 58 superintendents. The quantitative approach methods used involved non-experimental survey research, in which the survey consisted of three standardized closed questions and Likert-type rating scales, where the respondents could write-in additional information beyond the preset choices. Data from the Michigan Department of Education Office of State Aid and School Finance on every school district in the state on per-pupil foundation allowance, student counts for each school district, and funding distribution by category were utilized in conjunction with the 2011–2015 Michigan Department of Education's Quarterly Reports.

Initial phone interview questions included: 1. How long have you been a superintendent in the school district with a financial deficit? 2. Are there any particular strategies you used to help reduce expenditure? If so, which strategies did you use to reduce expenditures and why? 3. Which strategies were considered but not used? 4. Were there any strategies you used to increase revenues? If so, which strategies did you use to increase revenues? 5. How much did that strategy save the district? 6. How long have you implemented that particular strategy? 7. What barriers did you face in attempting to reduce your deficit? 8. Was the board of education supportive of your recommendations to reduce cost? 9. Did your board of education support your recommendation to increase revenues? 10. What is your perception of the role of MDE in helping to reduce or increase revenue? 11. Did you hire staff to assist with the DEP process? 12.

What are your thoughts about the DEP process as it relates to timelines, paperwork, and responsiveness? Closed ended questions for the survey included: The following standardized questionnaire was used for the electronic survey: 1. In your career, how long have you been a superintendent? 2. How long have you been a superintendent in your district? 3. Were you the superintendent of your current district between July 2010–June 2015? 4. Please rate your level of experience with working with school district budgets. 5. Did you inherit the financial deficit in your current district? 6. Which strategies were used to reduce the financial deficit? (Check all that apply.) a. Reduced spending (e.g., Cut overtime, Cut purchase orders) b. Adhered to budgetary constraints c. Layoffs d. Reduced staff through attrition e. Wage reduction/Concessions f. Cutting services/programs (e.g., Transportation, Music, Art) g. Outsourcing/Privatization h. Buy outs i. Closed building(s) j. Began or expanded School of Choice program k. Increased funding (e.g., Grants, Millage) l. Increased enrollment m. Strict adherence to contracts n. Other—Write in 7. Which strategies were considered but not supported by the union, board of education, and/or parents and the community? (Check all that apply.) a. Reduced spending (e.g., Cut overtime, Cut purchase orders,) b. Adhered to budgetary constraints c. Layoffs d. Reduced staff through attrition e. Wage reduction/Concessions f. Cutting services/programs (e.g., Transportation, Music, Art) g. Outsourcing/Privatization h. Buy outs i. Closed building(s) j. Began or expanded School of Choice program k. Increased funding (e.g., Grants, Millage) l. Increased enrollment m. Strict adherence to contracts n. Other—Write in 8. The Michigan Department of Education approved the deficit elimination plan promptly. (Responses ranged from strongly agree to strongly disagree) 9. If you currently do not have a deficit, what are the changes that the district may go into deficit again within the next three years? 10. What do you think contributed to the district's deficit? (Check all that apply.) a. Cut in

pupil foundation allowance b. Declining enrollment c. MPSERS increase d. Health care cost

increase e. Other—Write-in 11. When do you project that the district will be out of deficit?

(Choices ranged from June 2017 to over the next three years) a. Not in deficit this current school

year b. This year, June 2017 c. June 2018 d. June 2019 e. Longer than 3 years f. Unknown (47-

9). The three online survey questions to address the three research questions were: 1. What are

prominent factors that contribute schools district deficits? 2. Are there specific strategies

commonly used by Michigan school districts with financial deficits to reduce deficit budgets? 3.

What barriers exist that would prohibit reduction of financial deficits for Michigan school

districts?

Carnell (2018, 77-82) concluded by identifying three major factors influencing financial

deficits as reported by the superintendents who participated in the survey: (a) declining

enrollment, (b) cuts in pupil foundation allowance, (c) health care costs and costs associated with

Public School Employees Retirement Services (MPSERS), listing the prevalent strategies used

by superintendents to help reduce deficits as (a) reduction in spending for purchase orders and

overtime, (b) reduction in wages and wage concessions, and (c) reduction of staff and layoffs. A

lack of support by the unions, Board of Educations/Directors, and parental/community influence

was identified as a primary reason districts cannot reduce deficits, as the survey results showed:

18 (54%) out of 34 superintendents responding that the unions, Board of Educations/Directors,

and parental/community influence did not support outsourcing/privatization: 17 (48%) responded

that closing a building was not supported by all three groups; cutting services was not supported

as reported by 13 (41%); layoffs where 13 (33%) responded the lack of support by all, and; 8

(21%) responded that reducing spending was also not supported by all.

National CPR scholarships are proposed to increase safety and revitalization to distressed communities with high levels of poverty, appealing to higher-income families to relocate and revitalize urban centers. Poorer families benefit directly and indirectly through the program. Higher-income families will attract more local business options, providing jobs for lower-income families and increasing the overall economic prosperity of the urban area (Danielsen 2017). School voucher/tuition programs, as implemented in Milwaukee, Wisconsin, were noted to improve education for student achievement but did not necessarily improve the economic situation in the city, neglecting to reduce concentrated poverty pockets or attracting wealthier families to the urban areas. Levin (2007) notes how mismanagement of school choice programs exacerbates inequities, responding to the calls for governments and international agencies to intervene through the school systems to eliminate the effects of poverty. Reflecting on the failure of school choice policies on achieving educational equality, Ndimande (2016) asserts that inadequate resources are the dominant reason for the failure of less-affluent school districts, which directly contributes to the continuation of poverty for children in these systems. Nishimura and Raut (2007) concluded that low-income parents will invest less money into their children's educational experience, converging to a low-level equilibrium, perpetuating the intergenerational poverty trap. Improvements to the quality of lesser performing schools and free access to these services are proposed as a solution for poor and minority children. Investing in your children is modeled by the Lord in Isaiah 58:11, "The LORD will guide you continually, giving you water when you are dry and restoring your strength. You will be like a well-watered garden, like an ever-flowing spring."

The Societal Cost of Education and Government Intervention

Ideological differences between social welfare programs and economics highlights an emphasis on cost/benefit analysis. Where economics embrace efficiency and tangible returns on investment, social welfare programs are not as concerned with cost efficiencies and often employ policies that are not the least expensive options (Segal 2016, 212-3). Cost/benefit analysis is often associated with functions of the competitive marketplace, which does not consider human needs or recognize personal uniqueness. This method was advanced by Charles Murray (1984), who proposed that the inability of previous investments to alleviate poverty leads to the conclusion that these social welfare services should not be government funded. However, these programs generate outcomes that are often intangible or unquantifiable. K-12 education is not often associated with the laws of supply and demand, but the economic marketplace may have the answer to public school funding issues. Following the principles contained within this law, one would reason that the number of public schools available would produce a lower demand for services and lower the costs for such (Segal 2016, 215); yet this does not hold true in Pennsylvania's K-12 school system. The influences of teachers' unions have created an environment where good teachers are paid too little and poor teachers are paid too much, since these scales are negotiated en masse. Allowing teacher salaries to be responsive to market forces permits competition for better-paying positions promotes the development and improvement of school staffing as a result (Friedman 2002, 93-5).

K-12 education in Pennsylvania is funded through a variety of taxes (Segal 2016, 226), with the primary source being real estate taxes and the remainder coming from the state's general budget each year. A shift of the tax burden from real estate to sales and income taxes (the latter of which was enacted in 1913 by the Sixteenth Amendment of the US Constitution) would allow

homeowners to keep more of their earnings to purchase items in the marketplace, supporting

businesses and the schools simultaneously. The inherent conflict that exists between social

responsibility and the individual raises questions of who is responsible for the costs associated

with education and preparation for employment in the marketplace. While rationality should not

be the sole basis for social welfare policy, emotions should be kept in check when considering

policy questions and implementation (Segal 2016, 242). Government intervention in educational

processes have generally been rationalized through the 'neighborhood effects' produced by the

governmental spending (Friedman 2002, 85-6). These effects find significant costs being

subjected upon citizens for the immediate benefit of another, with the intention that the

improvements experienced by the recipient will bring about benefits for the immediate

community around them; circumstances that make voluntary exchange impossible.

Government intervention in K-12 education is generally justified by its position to

provide a common set of values, literacy, and knowledge to the general public, promoting a

stable and democratic society. Here, debates over whether parents should pay for their own

children's education directly led to proposals for the elimination of government administrative

functions to collect taxes, reducing the costs of government itself (Friedman 2002, 87). While the

government currently assumes responsibility to finance K-12 education, at the same time

enforcing minimum standards for educational institutions (Friedman 2002, 89-90), private and

non-profit organizations could be denationalized to allow for free market competition and

specialization of schools through a school choice voucher system with the government

concentrating solely on the revenues, distribution, and tracking of school vouchers at approved

educational institutions which are issued directly to parents of students. This would alleviate the

concerns of indoctrination which inhibits freedom of thought and belief. As American students

are required to attain a minimum level of K-12 education, it is asserted that these parents should

be able to choose their educational service provider in lieu of their students being forced to pay

for, and attend, assigned schools that may not fulfill their needs. By 'voting with their feet,' these

parents would use their vouchers to cover some or all of the tuition charged by these new non-

governmental schools, creating an environment where competitive enterprise presents more

efficient fulfillment of consumer demands for specific services (such as computer skills, sports,

advanced or remedial courses, etc.).

Government intervention has often to be found restrictive and unaccommodating in

resolving the issues faced by policy stances among various administrations. Potoski (2001, 97-

109) posed two research questions exploring the reasons state governments would choose to

exceed United States Environmental Protection Agency (USEPA) clean air standards when faced

with competition for economic growth among other states under the same federal mandates;

more especially when decreased standards might be conducive to the recruitment or expansion of

businesses within smaller jurisdictions. Potoski employed a methodology composed of

multivariate analyses involving two independent variables (Industry Groups and Total

Emissions) and three dependent variables (Ambient Air Standards, Emissions Standards, and

Ambient Monitoring), analyzing data collected in the 1998 State Air Pollution Control Survey

(SAPCS); a thirty-question assessment of each state's clean air programs in comparison to

USEPA standards, as conducted by the Council of State Governments. Potoski found a

statistically significant and positive coefficient indication of a higher score on the independent

variable leading to stricter levels of the dependent variable, or, that state/local demands

emanating from the citizenry strengthen environmental programs in defiance of economic

pressures to weaken them. Upon final tally, Potoski proclaims sixty-eight percent of respondent

states voluntarily exceed USEPA requirements in some way. Overall strengths of this research included readily applicable datum points available for comparison between the federal and state efforts for compliance, and easily verifiable compliance to the three policies reviewed (Ambient Air Quality Standards, New Source Performance Standards, and state ambient air monitoring requirements). Weaknesses included an under-representation of New England/East Coast states (Massachusetts, New Hampshire, New Jersey, North Carolina) which did not return surveys but have large industrial centers which may fall into the parameters initially proposed by the study (race to the bottom) with legal considerations for not enforcing compliance. Also, under-represented is a substantial portion of the Mid-West (Indiana, Oklahoma, Tennessee, West Virginia, Wisconsin), where information on compliance situations in the metropolitan business districts may affect the study's results. Gauging by the responses of states in these two regions, it would follow that the percentage of states actually exceeding USEPA requirements would be much less than presented (excluding monitoring) with a full sampling of states. The study is inconclusive to the degree to which a state will relax environmental standards for economic gain. Similarly, funding for education is subjected to federal standards which aberrate the original intentions of the individual school districts.

Fiscal crises for individual school districts are not dissimilar to the process experienced by Pennsylvania municipalities when they continually run budgetary shortfalls. C. K. Coe (2008) studied the legislative measures taken by nine states to predict fiscal distress in local governmental units. Administering telephone interview to the state officials who were asked about the oversight agency's staff size, how the agency predicts fiscal distress, and the steps taken to remediate fiscal distress. The study revealed three best practices: predicting fiscal distress before units are overcome with strife; proactive assistance by states to local governments

to prevent the situation from worsening, and; the presence of strong state authority to require local governments to take remedial action. The author asserted that use of the annual financial reports relies on independent financial auditors to make fiscal assessments for local governments. Pennsylvania requires local jurisdictions to complete an annual survey using information culled from the annual financial report through the Department of Community and Economic Development (DCED). Additionally, the Municipal Financial Recovery Act (MFRA) of 1987 provided state technical assistance, loans and grants, and special taxing authority to distressed local governments. DCED oversees the financial affairs of 66 counties, 56 cities, 962 boroughs, and 1,547 townships, and requires local units to annually report 11 measures in a survey of financial condition. Other stakeholders can claim local government fiscal distress, including creditors in excess of $10,000, petitions from ten percent of those voting in the last municipal election, pension fund trustees, municipal bond trustees or paying agents, and the governing body itself. After a community is found to be financially distressed in Pennsylvania under Act 47, the DCED appoints a coordinator to prepare a recovery plan (Harrisburg). If a local government rejects the plan, it must prepare an alternative plan approved by the state. Pennsylvania cannot require local units to implement the plan, so most local units never get out of Act 47 status, with 16 of 21 local units remaining in Act 47 status since 1987, even after receiving state loans and grants which may cause a lifting of state tax limits. Among the 16 Act 47 cities, Pittsburgh has the most sizable continuing general fund deficit. These local tax considerations are important implications of whether local taxing authorities can generate enough funding to eliminate property taxes to fund their local school district.

Funding for K-12 school education in Pennsylvania would do well to implement the principles of the multiplier effect, where an original amount of funding is cycled through

numerous entities in a chain of events that benefits more than just a primary and secondary party (Segal 2016, 216-7). These funds produce more income over time by being used by more than one set of actors. As such, where Pennsylvanian homeowners currently pay their school taxes directly to the school, a shift in tax burden to an alternate source (sales tax) would allow the homeowner to spend that tax money on a good or service, which supports the businesses and local economies, from which the sales tax is forwarded to the state for distribution to voucher families, who then use their funds to purchase services from a school of their choice. Keynesians have long professed the advantages of government spending and the multiplier effect, which has been utilized by recent presidents of both parties (Friedman 2002, 79-82, 84).

Many local municipalities in many states assess a tax on real estate to fund their portion of the public-school expenditures locally, although there have been challenges to the use of such a tax. Property tax assessment validity under the Missouri Constitution came before the Supreme Court of Missouri in 1994 in Committee for Educational Equality (CEE) v. State of Missouri, which heard the argument that state funding of public schools through property tax created inequalities in distribution of money to state schools and inequities in the quality of education provided to students in different parts of the state. Previously, the Circuit Court of Cole County had determined that the public-school funding formula based disproportionately on district property taxes failed to provide free schooling and equal protections under the Missouri Constitution; ordering the General Assembly to account for the funding formula's violation by providing adequate funds. Given no final judgment upon which the plaintiffs could appeal, the Supreme Court of Missouri dismissed the appeal for lack of jurisdiction. Rowe (2013) determines that CEE provides no precedential commentary regarding the nature and meaning of the education provisions of the Missouri Constitution because the Missouri General Assembly

had already enacted the Outstanding Schools Act (OSA) of 1993, which included provisions to address the constitutional deficiencies discussed in CEE, including the transfer of public funding of schools away from only property taxes toward a formula that established funding levels based on overall equality and adequacy of funding. No subsequent challenges to OSA have been significant enough to note (Rowe 2013, 1049-50).

Rowe (2013) declared that the 2009 Missouri Supreme Court decision upholding the state's school funding formula (SB287) was erroneous for two reasons: 1) the new school funding formula violated equal protection provisions of the Missouri Constitution because it did not provide equal treatment under the law with respect to the fundamental right of education, and 2) the tax assessment within the new formula, as implemented by the State Tax Commission, did not comply with the Missouri Constitution and related statutory requirements. SB287 provided state aid to Missouri public schools under the following calculation: [weighted daily attendance average] x [state adequacy target] x [dollar value modifier] = [subtotal of dollars needed] - [local effort] = [state funding]. The amended formula assumes that school districts with greater contributions from local funding require less state financial assistance to provide free public education (equalization). Opponents of SB287 argued that the formula was improperly based on assessment calculations that varied considerably among regions across the state and noted the inaccurate market values being used in some areas which were unacceptably low. An expert for the opposition testified that Missouri's school funding system was most disparate among US states due to the significant burden placed on local districts by the funding formula, which increased their fiscal responsibility for public-school funding.

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Rowe concluded that the court should have given more consideration to whether education, not equal or adequate funding, was a fundamental right in Missouri for the equal protection issue raised by CEE, leaving the matter unanswered (1063). Locking in assessment property assessment values based on previous year's data can rob some districts of revenue while failing communities would see higher values on older data. Equalization needs to begin, Rowe contends, with the proper assessment of properties to current market values (1064). Failing to reassess county property on a regular schedule creates inequalities when public school funding is based predominantly on property taxes.

Weichelt and Zeitler (2021) discussed the shifting of tax revenue sources from strictly

residential property taxes for pubic-school funding to one that includes alternative sources, based

on the situations faced concerning non-resident 'vacation' homes in the Northwoods, Wisconsin,

and a declining permanent local population due to the demand and price increases of local plots.

Financial investments in land and second homes by multi-generational seasonal visitors are

examined to determine the economic impacts of second homeownership via analysis of four

school districts, chosen for their appeal to outside tourists, considering property values and

property taxes. The levying of property tax varies throughout the US due to differences in the

types of services rendered by local governments. In Wisconsin, most public-school funding is

raised from annual property taxes paid by the owners of parcels lying within school district

boundaries. The team identified the extent to which local public-school funding benefits from

non-resident property owners. They utilized data from the Wisconsin State Biennial Budget of

2013–2015 and the statewide digital parcel database of the Wisconsin State Cartographer's

Office (WSCO), resulting in a database that included 3.486 million parcels across the state, with

particular notice to the parcel tax mailing address to determine the classification of parcel owners

(resident or non-resident). Data assessed included the assessed value of the land, the assessed

value of improvements, the total assessed value, the class of property, the estimated fair-market

value, the total property tax, and any acreage data pertaining to the parcel. Supplemental

information included the local address of the parcel (if applicable), the school district in which

the parcel is found, value of forest land (if applicable), the classification of the property, the

auxiliary class of the property, and the latitude and longitude of the centroid of the parcel, in

efforts to identify the extent of nonresident land ownership in the study area. The research

focuses on the patterns of parcel ownership at a school district level, in an effort to calculate the

economic advantages to local communities regarding the availability of parcel land value and taxes collected from individual parcels. The addresses in the data were utilized to categorize parcel owners to determine from which categories the majority of landowners occur.

In Wisconsin, local governments determine tax rates for public school funding, with school district taxes being calculated via a millage rate applied to the assessed value of a parcel of land. The 2018 mill rate for the Northland Pines School District in Eagle River was 5.88 per one thousand dollars, or $588 for school tax. Weichelt and Zeitler (2021) proposed that local officials avoid creating the perception of overburdening second homeowners by increasing the local tax rates, due to the tax exporting effect for non-local property owners in Northwoods school districts. The successful passage of referenda for school funding means increased tax rates for all property owners, which can be contentious for second homeowners because, as non-residents, they are unable to participate in the public vote. This creates a 'taxation without representation' issue since the property in the four districts compared were found to be only between forty-two and sixty-six percent local population.

Weichelt and Zeitler (2021) concluded that, as inflated prices of second home ownership increased in vacation areas of Wisconsin, resulting tax revenues will increase, benefitting residents through improved local economies and infrastructure, lower tax rates, and better funded schools. In Wisconsin, as in Pennsylvania, local governments determine tax rates for public school funding, with school district taxes being calculated via a millage rate applied to the assessed value of a parcel of land. The 2018 mill rate for the Northland Pines School District in Eagle River was 5.88 per one thousand dollars, or $588 for school tax. The team proposed that local officials avoid creating the perception of overburdening second homeowners by increasing the local tax rates, due to the tax exporting effect for non-local property owners in Northwoods

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between forty-two and sixty-six percent local population.

Martinez (et al. 2019) noted that Arizona has the forty-ninth lowest per-pupil funding

rate, spending with a total per-pupil expense for K–12 education reaching $8.4 billion in Arizona

(2011). Fifty percent of that total was provided by local sources, pieced together through general

revenues of personal and corporate income tax, and sales tax. Arizona used an equalization

formula to fund its state educational obligations, off-setting funding differences between

property-poor and property-rich districts while supplementing deficiencies in local and state

revenue for education. Martinez (et al. 2019) presented a longitudinal descriptive analysis of

public-school funding revenues from 2006 to 2012, considering the Navajo K–12 against

Arizona public school districts. The researchers compared Navajo K–12 demographics to

Arizona public school districts during this time frame, contrasting academic performance

between the two systems, and observing the Navajo tax rates and assessed property valuations

compared to Arizona public school districts. The research design is a univariate statistical

analysis (i.e., mean, median, standard deviation, range, and percentile) examining general

descriptions of individual fiscal revenue variables for schooling from public data available

through the Arizona Department of Education. Development of Excel files (Excel v14.0) merged

this information into one consolidated dataset imported to SPSSv22.0. Analysis employed by

selecting Navajo public-school districts from the dataset and comparing to Arizona public

districts. The research found evidence for two separate conclusions: 1) the existence of a

growing achievement gap between Navajo and Arizona districts; and 2) Arizona's equalization formula is not counter-balancing the impact of local property wealth, as shown by the disparities in combined state and local revenue between Navajo K–12 and Arizona districts. The team recommended that Arizona address educational policies and practices to lessen the educational disparity between Navajo and non-Navajo students. They also recommended the formation of agencies to oversee the state funding process and designated priorities to assist Navajo schools.

Calling upon previous work on Arizona public-school funding in Navajo schools and the use of local tax revenues to expand charter school funding, the team asserted that Arizona's leadership has expanded their school choice agenda through education policy permitting students on reservation lands to use Arizona's voucher system as a solution to educational underachievement by attending off-reservation private and charter schools via Senate Bills 1332 and 1431. The latter would allow ninety percent of per-pupil funding to apply to private school tuitions. Opponents of these measures point to the automatic ten percent loss of student funding and the lack of documented student achievement or improvements in these schools. Such expansion of these polices are said to pull vital revenues from the public education system.

Arizona uses an equalization formula to fund its state educational obligations, off-setting funding differences between property-poor and property-rich districts while supplementing deficiencies in local and state revenue for education. Notwithstanding federal contract/grant financing and private/parochial financing, which will not be considered here, the financing of Navajo K–12 public schools are like traditional public-school finance in Arizona, traditional public Navajo K–12 school district funding is allocated through local and state tax dollars, supplemented by federal source, with the same state equalization formula that determines the amount of revenue allocated to school districts. Calculated student counts are multiplied by a

base level amount of funding to determine revenue allocations. Additional assistance funds, previously unrestricted capital outlay, and soft capital funds are also available to the districts. The property tax component involves a qualifying levy, calculated on the assessed valuation of all property within a district. A county equalization tax is calculated based on qualifying rates set by the Arizona State Legislature. Weightings provide schools with more revenue based on qualifications. Notwithstanding federal contract/grant financing and private/parochial financing, which will not be considered here, the financing of Navajo K–12 public schools are like traditional public-school finance in Arizona, traditional public Navajo K–12 school district funding is allocated through local and state tax dollars, supplemented by federal source, with the same state equalization formula that determines the amount of revenue allocated to school districts. Calculated student counts are multiplied by a base level amount of funding to determine revenue allocations. Additional assistance funds, previously unrestricted capital outlay, and soft capital funds are also available to the districts. The property tax component involves a qualifying levy, calculated on the assessed valuation of all property within a district. A county equalization tax is calculated based on qualifying rates set by the Arizona State Legislature, with the weightings providing schools with more revenue based on qualifications.

Kurban (et al. 2012) provided evidence of local redistribution amounting to $2.3 billion in property tax funded school systems in Chicago, provided by households with no children in the public schools to families with children in the schools, instead of between districts with higher and lower valued homes. The study addressed the gap in literature concerning the amount of redistribution occurring through property tax funded school systems, along with the economic and demographic factors associated with intra-community redistribution of funds, measuring the size and extent of these types of redistribution payments. The team focused on the statutory

incidence of education property taxes and does not account for any offsets due to the capitalization of education property taxes or benefits. The sample consisted of suburban Chicago public school districts relying heavily on local property taxes, where these suburban districts are partially equalized through the state system of educational finance, with local property taxes providing the largest share of school revenues. This approach can be used anywhere employing property taxes for education funding, and the extent of redistribution as a fraction of school revenues will vary depending on a number of factors. The share of school district revenues financed by local property taxes is crucial. Estimates of property-tax-financed education redistributions should begin with estimates of educational property taxes currently being collected to determine each household's levy via the school district tax rate multiplied by the equalized assessed value (EAV) of a home. While the research found that the state's estimate is for this total in Illinois is $2,426 million, the research team came to an estimate of $2,304 million. Compiling totals across all weighted household observations, total redistribution payments were estimated to be $2.3 billion, or roughly two-thirds of the $3.5 billion in Illinois homeowner education property taxes, highlighting redistribution as a major source of suburban Chicago public school financing.

How to create an atmosphere of fairness and equality regarding access to quality K-12 public education is a process that has eluded many in its pursuit. Debates over parents paying their children's way through K-12 education meet staunch opposition from those pointing to income inequality issues and poverty concerns in urban school systems. Municipal jurisdictions and school districts rely on property and non-property taxes for revenues to provide services to their communities, but also employ user fees and service charges, intergovernmental transfers

from state and federal sources to provide educational funding and comply with municipal budgets (Ray and Lao 2019, 112).

Alm (et al. 2011, 321) observes the collapse of housing prices and the resulting negative impact on local government budgets as a catalyst for consideration of alternative tax sources for local governments and school systems, documenting an overall decline in property values after the housing bubble to find a negative impact which varies between states and municipalities. The team then focuses specifically on the data in the state of Georgia with their empirical analyses indicating several factors causing changes in property tax revenues, with the dominant factor being housing prices. Alm began by establishing the various taxes available to local government agencies, including individual income taxes, general sales taxes, specific excise taxes, fees, and charges; with local property taxes being the predominant source of funding. Here, the strengths and weaknesses of each of these sources is explored. The team proposed that changes in economic activity levels are affected by changes in tax bases due to variations of the economic environment, which can be written as $\Delta Bi/Bi=\varepsilon i(\Delta Y/Y)$, where εi is the elasticity of tax base with respect to the level of economic activity. The percentage change in total revenues becomes: $\Delta R=R=\sum isi\Delta Bi=Bi+\varepsilon i\Delta Y=Y\eth P+\Delta ti=ti½Š$; where $\Delta Bi/Bi$ represents the deliberate administrative or policy change in the tax base of tax i, $\Delta ti/ti$ represents the administrative change in tax rate, and $\varepsilon i(\Delta Y/Y)$ denoted the (automatic) change in the tax base of tax stemming from its link with economic activity. This summarized the various channels by which revenues of a single or collection of taxes are affected by a change in policy actions or in external circumstances.

Utilizing data from the US Census Bureau Quarterly Summary of State and Local Government Tax Revenue for each quarter 1998 through 2009 and property tax collections reported by the Census Bureau by state by fiscal year through 2008, the team found that overall

collections of local property taxes steadily rose over the last decade to about $440 million in 2009, roughly doubling over this period (Alm, et al. 2011, 322-7). Regarding data from the Georgia Department of Revenue on the annual property tax base and on annual property tax rates for each of the 180 school districts in Georgia for 1997 through 2009, Georgia Department of Education data on total local source revenues for school districts for 1999 through 2009, and property tax liability totals by school district for 2006–2009, Alm (et al., the team observed that Georgia's property tax revenue share reached 65.1% in compared to 72.3% for the US., with national disparities of 40.1% for Louisiana to 98.7% for Maine. Alm et al. concluded that Georgia has very few property tax limitations, allowing school district boards to set their property tax rates without voter approval, unless it exceeds 20 mills and noted that there is no general assessment limitation, witnessing only one county with an assessment freeze on homesteaded property. Local government reliance on property tax as a revenue stream been advantageous for many local governments and predicts continued reliance on these funds in the immediate future.

Ray and Lao (2019, 110-122) examine potential differences in achievement levels of economically disadvantaged students with consideration to property valuations and home prices between 2006 and 2014. Schools receive more money when local property valuations are higher. The team's objective is to document the financial management of Georgia state's reliance on local property tax revenues for public school funding. Analysis of test score results as a reliable method of measuring student performance reveals a correlation between property tax revenues in high and low poverty districts and student academic achievement. Municipal jurisdictions and school districts rely on property and non-property taxes for revenues to provide services to their communities, but also employ user fees and service charges, intergovernmental transfers from

state and federal sources to provide educational funding and comply with municipal budgets. The

researchers utilized a quantitative methodology with independent variables of student

populations taking the state standardized test, the total school property values for the selected

groups, the district's property value total, and average median sale prices of houses, with the

dependent variable being total number of the group who passed the test. Multiple regression

analysis concluded that success levels on the standardized test correlated with average median

sale prices of the homes in the district, and that higher scores were anticipated in higher valued

districts. However, the model's predictor variable created a false inverse relationship between

lower property value districts and test performance. Additionally, no statistically significant

relationship was found between the number of resources offered to a school and the learning

processes that occur within.

Urban areas of poverty tend to have lower property values from which to pull these

school funds compared to suburban and rural areas. The Idaho Department of Labor has

documented that nearly half of rural Idahoans exceed national poverty rates. The Idaho State

Department of Education notes that 72.4 percent of the state's schools are considered rural and

that 37.8% of students are served through rural-based districts and charters, while urban districts

tend to have significantly more racial diversity and a more transient population. Carr-Chellman

(et al. 2020, 411) examined the imbalances in public school funding and fiscal practices across

the rural state of Idaho. Data includes state documents subjected to secondary data analysis,

extending earlier explorations of the intricacies of public-school funding (casino income and

recent state funding levels. While per-pupil funding by school districts in the state of Idaho was

equalized by state distributions through 2008, impacts of state cuts due to the Great Recession

increased inequities upon comparisons of districts across the state, causing rural, remote, and

tribal schools to be underfunded relative to perceived need. The Idaho Department of Labor has documented that nearly half of rural Idahoans exceed national poverty rates. The Idaho State Department of Education notes that 72.4 percent of the state's schools are considered rural and that 37.8% of students are served through rural-based districts and charters, while urban districts tend to have significantly more racial diversity and a more transient population. Urban districts have more concerns about poverty, crime, and affordable housing, while rural districts are concerned with the availability of jobs and access to public transportation. Both types of communities have needs that can be addressed within their public-school systems. The conservatism of rural districts promotes the high importance of funding on achievement, community participation in education, and teacher qualifications.

Carr-Chellman (et al.) cited Hendricks (2015) to note that teacher pay impacts teacher levels of experience, suggesting that maintaining a strong teacher pool involved raising the levels of new teachers, rather than veteran teachers, in order to retain strong teachers over time. They also call upon the work of Clotfelter, Ladd, and Vigdor (2010) which found that schools offering higher salaries attracted teachers who earned higher scores on teaching certification exams, finding it difficult to retain highly qualified teachers in urban and minority schools but that providing very high raises was the only effective measure successful. The research team found that teacher salaries vary from state to state, with an average of $44,921 in Oklahoma and $77,957 in New York. The average teacher salary in Idaho is $48,113. With significant disparity among Idaho, where Blaine County is 60% above and smaller Pleasant Valley is 29% below the average. This has been noted to cause a teacher shortage in Idaho, in part due to the salaries in neighboring states, as Washington state is an easy commute from many rural areas and pays $8K more per year (416).

Culturally diverse educations include those providing lessons in the classical arts. Cuts to the state school budgets during the Great Recession and rising education costs inhibit the providence of high-quality education, including cultural courses such as art and music education. 'No Child Left Behind' exacerbated the effects of these cuts, with the federal program stressing student performance expectations on federal standardized achievement tests. This forced many schools to put their resources towards subjects fostering better test performance, disregarding classical liberal studies such as art and music. Major (2013) examined qualitative data collected through interviews and documents to determine the key decision-making processes employed regarding the maintenance or cutting of the school music program in Lekbery School District (Michigan). Cuts to the state school budgets during the Great Recession and rising education costs inhibit the providence of high-quality education including cultural courses such as music education. No Child Left Behind created a further exacerbation of these cuts, with the program stressing student performance expectations on federal standardized achievement tests. This forced many schools to put their resources towards subjects fostering better test performance, disregarding classical liberal studies such as art and music. The NCES reported the district's student population at 4,499 during the 2006–2007 school year, placing Lekbery exactly in the median of six neighboring school districts. Lekbery spent $10,469 per-pupil during the 2006–2007 school year, spending and receiving far less per student compared with the neighboring districts. To avoid potential biases, Major collected interview data from different populations: parents, school board members, music teachers, upper administrators, and building administrators. The study found that Lekbery staff and parents placed strong value on music, with interviewees observing music as integral to a total educational package capable of developing each child's full potential by providing as many educational opportunities and

experiences as possible. Valuing music's aesthetic and utilitarian functions and recognizing that learning music is a lifelong skill of appreciation with potential crossover skills for other subjects, a music program helps each individual student achieve overarching educational goals.

Shifting the funding burden of public schooling from property tax to alternative forms of revenue generation has found favor by some board, including those in Michigan, where a reduction in property tax assessments were replaced by increases in other taxes during state centralization efforts. Proposed changes in tax rates considered during this transition to state centralization include an increase in state sales tax from 4% to 6% and a reduction in general property taxes from an average of 33-mill to only a 6-mill statewide property tax and an 18-mill property tax on non-homestead property (business and rental property). The reduction in property taxes and increase in state sales tax centralizes the sources of funding, reducing the ability to increase local revenues through local ballot decisions (Zimmer and Jones 2005). Zimmer and Jones (2005) explored the notion that policies designed to centralize control of public-school funding can produce unintended consequences, such as the efforts of multiple states to create greater equity among school districts by shifting the school funding responsibility from local school districts to the state. The team contended that Michigan's attempts at centralized control of public-school funding (with the objective to equalize operating expenditures such as salaries, supplies, and other operational expenses) while leaving capital acquisitions (such as real estate and facility purchases) under local control results in resource-rich school districts becoming more reliant on debt financing Michigan's state operating budget typically provides less than 5% of the total revenue needed to service school debt and no revenue for capital expenditures. Proposed changes in tax rates considered during this transition to state centralization include an increase in state sales tax from 4% to 6% and a reduction in general

property taxes from an average of 33-mill to only a 6-mill statewide property tax and an 18-mill property tax on non-homestead property (business and rental property). The reduction in property taxes and increase in state sales tax centralizes the sources of funding, reducing the ability to increase local revenues through local ballot decisions. The effects on per-pupil expenditures entails districts spending less than $3950 per pupil (low-spending districts) being guaranteed an inflation-adjusting foundation grant of no less than $3950, increasing their revenues.

School districts spending more than $6500 per pupil (high-spending districts) found their spending levels limited. These districts were allowed an inflation-adjusting foundation grant starting at no more than $6500 per-pupil, although the state permitted assessment of an additional 3-mill enhancement tax on homestead property for up to three years. Nearly all of the school districts that spent more than $6500 voted for the 3-mill enhancement, producing a weighted-mean fixed local rate (weighted by the percent homestead and non-homestead property value) of 13.84 mills; less than the mean rate of 30.85 mills before the proposal. The 3-mill enhancement failed to increase funding for high-spending districts to locally desired levels, with no local option for other revenue sources. This created a dependence on capital markets and debt financing for high-spending districts while circumventing the intent of the policy. The effects on per-pupil expenditures entails districts spending less than $3950 per pupil (low-spending districts) being guaranteed an inflation-adjusting foundation grant of no less than $3950, increasing their revenues. School districts spending more than $6500 per pupil (high-spending districts) find their spending levels limited. These districts are allowed an inflation-adjusting foundation grant starting at no more than $6500 per-pupil, although the state permits assessment of an additional 3-mill enhancement tax on homestead property for up to three years. Nearly all

of the school districts that spent more than $6500 voted for the 3-mill enhancement, producing a weighted-mean fixed local rate (weighted by the percent homestead and non-homestead property value) of 13.84 mills; less than the mean rate of 30.85 mills before the proposal. The 3-mill enhancement fails to increase funding for high-spending districts to locally desired levels, with no local option for other revenue sources. This creates a dependence on capital markets and debt financing for high-spending districts while circumventing the intent of the policy.

Role of Government in Education and Effects on Social Retirement Programs

Milton Friedman (2002, 85-101) asserted that a rationalization could be made for government intervention with public education on two grounds. First, the neighborhood effects which exist concerning how the benefits of betterment extend not only to the one receiving direct benefits but also by those around them who indirectly benefit, provide potential improvement of the community at large (Kling et al. 2007; Sykes and Musterd 2011; Wodtke et al. 2011; Mathur et al. 2013; Martens et al. 2014; Van Dyck et al. 2015; Altonji and Mansfield, 2018; Hicks et al. 2018). The other rests in the altruistic endeavors of paternalism for children and the less fortunate. He states that literacy and knowledge, distributed at a minimum level in which the promotion of a stable and democratic society can flourish, are proper investments providing neighborhood effects. The imposition of a mandatory level of education, a burden which would normally be placed upon the parents directly, would require children to leave their families to those which could provide such opportunities, degrading the very essence of the familial unit in American society. Friedman hypothesizes smaller family units in a society that charges only the parents for educational costs, but also a reduction in the bureaucracy of public-school administration and finance. Under governmental purview, societal investments in education lead

to neighborhood effects on increased local incomes through better educational opportunities, increasing local revenues and expanding governmental bureaucracy.

Kling (et al 2007, 84-109) avoided the issue with endogenous neighborhood selection by utilizing data from a randomized experimental process where primarily female-headed minority households with children, living in high-poverty public housing projects in five US cities were offered housing vouchers by lottery in what was termed the "Moving to Opportunity" program through Section 8 funding, to analyze the neighborhood effect in adult and youth populations concerning health and socio-economic outcomes. Cities chosen were Baltimore, Boston, Chicago, Los Angeles, and New York City in coordination with the US Department of Housing and Urban Development, where no geographical restrictions were placed on where these families could re-locate with their vouchers, although poverty rates could not exceed ten percent. The team assembled a sample size of 4,248 households in the study. The Boston, Los Angeles, and New York families in this sample were mostly black or Hispanic; those in Baltimore and Chicago were nearly all black. Drawing data from their observations, focusing on fifteen primary outcomes for both adults and youth and four population groups (adults, all youth, male and female youth), the team found no significant evidence of treatment effects on earnings, welfare receipt, or government assistance after five years of random assignment, contrary to the belief that residence in a distressed community limits an individual's economic prospects. The team concludes that there are no discernable effects on adult economic self-sufficiency, improvements in adult mental health, beneficial outcomes for teenage girls, and adverse outcomes for teenage boys, showing that housing mobility (or 'voting with your feet') does not necessarily provide an effective anti-poverty strategy over a five-year time period, and finding no consistent evidence of treatment effects on adult earnings or welfare participation. The team did note important

neighborhood effects for teens, who exhibited broad ranges of outcomes, with the hypothesis presented that perhaps interventions to improve distressed neighborhoods could have similar positive effects on children, education, etc., as moving them to a lower poverty neighborhood.

Sykes and Musterd (2011, 1308-26) examined the influence of schools on neighborhood effects of children within the community. They stated that neighborhoods are influential in that they group students into schools based on location and in affect the conditioning of families' school choices, citing research suggesting influences from internal school processes such as peer relations, school organization and management, teacher instruction, classroom climate, and discipline. The team cited studies that concluded neighborhood effects were mediated by school characteristics for children born locally. For immigrant youth, significant associations between school performance and neighborhood conditions persisted after the introduction of school factors. The team's literature review suggested there are longstanding notions that neighborhood conditions might influence young people's outcomes via the local school systems and that there is some mediation of neighborhood effects through the school context. The three research questions for their study included: (1) Are neighborhood and school characteristics associated with youths' educational achievement after controlling for a set of individual and family background variables? (2) Is there evidence that the school context mediates the neighborhood's association with youth achievement? Are there indications of direct neighborhood effects as well? (3) Can interactions effects between these two contexts be identified? Analyzing previously gathered data from a 1999 Dutch study and demographic information of the neighborhoods involved, the team found that the associations between school systems and educational achievement are significant, whereas the associations of the neighborhood effects diminish and lose their significance when considering concurrent memberships of students in

school and neighborhoods, suggesting that schools act as a mediating factor in the neighborhood's effect on youth achievement.

Wodtke (et al. 2011, 715-25) continued their contributions to the field of neighborhood effect by examining the theory that suggests neighborhood effects depend not only on where individuals live today, but also on where they lived in the past, with current recent only observing present situations and not those who may have been displaced from socioeconomically different neighborhoods previously. A sample of 4,154 students were followed to determine the effects on disadvantaged neighborhood students during the duration of their residence through high school graduation. Pointing to social isolation theories that contend residents of poor neighborhoods are isolated from social networks and institutions that provide access to job information, as well as important links to mainstream culture, causing adults in such neighborhoods to fail in providing proper role models to encourage local children to succeed in their academics. The team noted that deviant subcultures develop in disadvantaged neighborhoods which devalue formal education and glorify behaviors leading to poor educational outcomes. Linguistic isolation, where Black children raised in poor, racially segregated neighborhoods speak Black English Vernacular, can hamper success in school as it is devalued by mainstream institutions. The longer children are exposed to these conditions, the more permanency is observed. The researchers found that sustained exposure to disadvantaged neighborhoods has a severe impact on high school graduation, in excess of the effects reported in prior research, estimating that growing up in the most disadvantaged quintile of neighborhoods reduces the probability of graduation from 96 to 76 percent (compared to the best quintile) for black children, and from 95 to 87 percent for nonblack children. Among Blacks, 68.71 percent lived in the most disadvantaged quintile of neighborhoods at age 10, while only 3.60 percent

lived in the least disadvantaged neighborhoods. By contrast, only 14.93 percent of nonblack children lived in the most disadvantaged neighborhoods at age 10, and 19.14 percent lived in the least disadvantaged neighborhoods.

Mathur (et al. 2013) perform a study to determine neighborhood effects on adolescent smoking from ages 12 to 18 in Minnesota. Correlations can be made between their results and suggestions of neighborhood effects of lesser-quality education opportunities and life outcomes such as education level and potential for occupation income. A superior definition of 'neighborhood' is offered here as "a geographic space (although geographic boundaries can be imprecise and variable) in which individuals, their proximal contexts (e.g., families and peer groups), and their physical structures (e.g., stores, churches, farms, schools, hospitals, playgrounds, businesses, billboards, roads) are embedded, resulting in a larger, more distal context that has aggregate social and cultural characteristics of its own." It is assumed that individuals in a neighborhood share resources and a common sense of identity. The dependent variable was categorized into six stages of experimentation which were mutually exclusive, combined with independent variables containing level of education in two levels (HS or less, and college or above) as a dichotomous indicator. Six census variables were used to determine socioeconomics such as employment, income levels, and housing values. Samples were predominantly White (85.2%), so there were no racial separations in the study, as they were all combined. This modeling will serve well in this study.

Martens (et al. 2014) explored differences in education and health outcomes for children living in social housing and more affluent neighborhoods, and the effects of social housing's neighborhood socioeconomic status. Data was provided by the Manitoba (Canada) Centre for Health Policy and included children to age 19 in Winnipeg from 2006 to 2009 (approx. 13k in

social housing and another 174k otherwise), employing a regression strategy on five socioeconomic outcomes including completion of high school. The team discovered that children in social housing performed the worst out of the other income quintiles identified. Although immunization and school readiness were similar, achievements in school and an avoidance of teenage pregnancy were higher in the two more impoverished groups. Socially housed children exhibited poorer education and health outcomes than more affluent students, although those socially housed in more affluent neighborhoods tended to fair better than the others in their economic group. The group acknowledges the work performed in the "Moving to Opportunity" by Kling (et al. 2007).

Van Dyck (et al. 2015) studied the potential moderating effects of gender, education, and age on the associations of perceived neighborhood environment attributes with accelerometer-based MVPA (including meeting Physical Activity (PA) guidelines for weight gain/cancer prevention) in a multi-country study, and also examined whether such moderating effects might vary by study site and estimated the associations of socio-demographic factors with PA outcomes. 2002 to 2011 data of the International Physical Environment Network (IPEN) Adult Study were used. IPEN adult is an observational epidemiologic multi-country cross-sectional study examining associations between the built environment and PA across 17 city-regions (sites) from 11 countries: Belgium (Ghent), Brazil (Curitiba), Colombia (Bogota), Czech Republic (Olomouc, Hradec Kralove), Denmark (Aarhus), China (Hong Kong), Mexico (Cuernavaca), New Zealand (North Shore, Waitakere, Wellington, Christchurch), Spain (Pamplona), United Kingdom (Stoke-on-Trent), and the USA (Seattle, Baltimore). Participants were from neighborhoods stratified into four quadrants: high walkable/high socio-economic status (SES), high walkable/low SES, low walkable/high SES, and low walkable/low SES.

Ethical approval from each local institutional review board was obtained, as well as participants' informed consent prior to data collection. A total of 11,572 participants made up the sample across the various geographic regions. Analyses showed that a limited number of moderating effects were present, including age moderated associations with crime safety and no major barriers to walking, as well as a negative association with accelerometer-based PA outcomes and perceived environmental attributes.

Altonji and Mansfield (2018) listed the key insight of their study as following directly from the students' parents' choice of schools and the effects on student achievement. Data was acquired from four different datasets: three cohort-specific panel surveys (the National Longitudinal Study of 1972 (NLS72), the National Educational Longitudinal Survey of 1988 (NELS88), and the Educational Longitudinal Survey of 2002 (ELS2002)), and administrative data from North Carolina. The researchers observed that conservative results suggest that choosing a ninetieth quantile school and surrounding community instead of a tenth quantile school increases the probability of graduation by at least 7.9 percentage points, compared to 4.8 and 4.1 in the NELS88 and ELS2002. The research notes randomized lottery outcomes from school choice plans in the Charlotte-Mecklenburg district to estimate the impact of winning a school choice lottery on high school graduation, college enrollment, and college completion, finding strong effects for students from low-quality urban schools. They also noted that the same efforts to use admissions lotteries in Boston high schools found positive effects on test scores and attendance at four-year colleges relative to two-year colleges. However, the same results could not be replicated using similar identification strategy with lotteries in Chicago Public Schools, where negligible effect on the high school graduation probability was found.

Hicks (et al. 2018) investigated the suggestion that disadvantaged neighborhood have lower achievement test scores but note that similar studies have not estimated causal effects that account for neighborhood effects on school choice, proposing cumulative neighborhood effects be modeled as a continuous treatment variable. The study was conducted using data from Los Angeles school districts. The team asserted that randomized experiments and observations have lent credence to the importance of neighborhood effects on children's achievement. They also observed the fact that neighborhood characteristics are endogenous as parents decide on where to live and how much to contribute to their children's education. They asserted that parents may choose a neighborhood because of low housing costs and a shorter commute to work but discover that the local school is subpar and may choose to move to a different neighborhood with a longer commute but better schools; an act called "dynamic neighborhood selection." Hicks (et al.) considered the problem of modeling the effects of cumulative histories of neighborhood disadvantage on children's test scores while accounting for endogenous neighborhood selection in Los Angeles, as Chicago is usually the center of attention for these studies. Limited neighborhood resources in poorer areas are not privy to the same educational processes as students of parents in more-affluent neighborhoods, who typically demand more and better public resources and can afford to pay for private resources (tutoring, etc.), while poorer neighborhoods suffer due to the greater needs of residents that may overtax the existing resources. These effects may also lead to low levels of trust, shared norms, social capital, and willingness to take collective action to regulate behavior, such as truancy, violence, and gang activity, as well as children receiving less reinforcement for school attendance, achievement, and less censure for anti-social and self-destructive behaviors. Additionally, low-skilled, low wage adults with a high frequency of unemployment are usually concentrated in disadvantaged

neighborhoods, which are physically distanced from good jobs and offer few successful adult role models for the children while having weaker norms about the importance of school achievement.

Friedman continued to note that the societal acceptance of financing public education, and even higher levels of education in some countries, has resulted in a refinement of those with abilities for particular subjects, who then utilize these skills later in life to provide better social and political leadership for others unable to perform these functions in society. In kind, some are predisposed to vocational endeavors, showing promise and skill in trades that the former group would have no success in. The argument continues that, by promoting and financing students to pursue careers that will exemplify their natural skill sets, improvement to those fields will result as these students have a greater desire for these subjects and a drive for success. This will result in higher wages, which is transferred to the government to provide for even more educational funding opportunities for students in the pipeline. These neighborhood effects are the proof proposed by supporters of education nationalization, the desirability of which Friedman contends has "seldom been faced explicitly." Through this process of nationalization (or centralization), Friedman notes that it is possible to allow the government to administer standards of educational minimums through a school voucher program, in which the government would either require parents to pay the full amount for their children's tuition to an approved institution, or the government could develop a funding model which distributes the burden of educational costs to all, since all will be beneficiaries of indirect neighborhood effects.

A federal study (Jacobsmeyer 1980) investigated a growing concern that rural youth did not receive equality in the quality of public education expected in non-rural areas. A seminar aimed at developing federal education policy was held, including six topic areas of discussion:

1) equity and quality.

2) linking rural education and rural development.

3) delivery of services.

4) data collection and research.

5) vocational pd career training.

6) energy and rural education.

Twenty-eight recommendations were generated and discussed at regional meetings to validate the findings. Participants agreed to 20 recommendations, while some participants strongly felt:

1) the federal government should not have a role in rural education.

2) education was a local function.

3) they did not have staff or time for additional bureaucratic work.

Through a societal investment in better educational opportunities for the children in our communities, it is noted that increases in future earnings will continue to supply the other governmental social insurance programs, such as Social Security, Medicare, and more, which will increase the quality of life for these children when they reach retirement age (Segal 2016, 248-88). Lifetime educational investments are not opposed to the wisdom of God, who inspired Proverbs 22:6, which tells us to "(t)rain up a child in the way they should go; even when they are old, they will not depart from it." An investment in our children deserves firm attention and diligence on the part of the proud parents. While teaching them the skills to perform productive work in society, remember also to teach them the ways of the Lord for their spiritual journey, in keeping with "…these words that I command you today… You shall teach them diligently to

your children and shall talk of them when you sit in your house, and when you walk by the way, and when you lie down, and when you rise" (Deuteronomy 6:6-7).

Chapter Three: Methods

A 2021-22 survey was taken with 366 participants, all of whom were current school board members at one of the 501 school districts across Pennsylvania. Eight demographic questions were asked identifying sex, age group, race, region of state in which they serve, education level, income level, their partner's race and education level, and whether or not they had children in their current or another school district. Also polled were twelve questions concerning the use of property, sales, and income taxes to fund public schools, support for state voucher and school choice programs, perceived effects of these programs on social justice reform, and funding for "at-risk" and special needs students. Responses to these questions were taken on a 5-point Likert scale, where 1 = Strongly Disagree to 5 = Strongly Agree. Statistical analysis was performed using IBM® SPSS® data analysis software to test the hypothesized model using descriptive frequencies, graphing the mean, median, and standard deviations from the survey results, as well as analysis via independent samples Kruskal-Wallis H and Mann Whitney-U testing with Crosstab analysis.

Engaging the Kruskal-Wallis H test was appropriate for this study (with Mann Whitney-U engaged for dichotomous variable categories, such as "sex" in this study), as the Likert scale answers provided by the survey participants were labeled as ordinal, dependent variables and the demographic data served as the nominal, independent variables. Non-parametric ANOVA tests identify whether several variables were from the same population. This was conducive to discovering if there are any groups that support the concepts discussed in this study. When the hypothesis experienced a significance $< .05$ (single-tailed); the null was rejected and evidence of support within a subgroup was explored through Crosstabs analysis. Crosstab analysis described samples where the mean was not useful, such as with nominal and ordinal variables. Tests such

as the Spearman rho, Pearson, Simple Linear Regression, Single Sample t tests, and

ANOVA/MANOVA tests rely, in part or in whole, on scale variables. As such, they were not

employed in this study.

Data Analysis

While experts generally classify quantitative analysis as deductive, the inductive traits of

qualitative analysis are designed to provide for the psychological, social, economic, or political

circumstances of the research question (Tolley et al. 2016, 174). In-depth inductive analysis

includes five inter-related processes which aid in the formation of cohesive results reflective of

the sample providing influence within the study. These five steps of data analysis include:

1. reading the data
2. data coding
3. data display;
4. data reduction
5. interpretation.

In reading the data, the research or team must determine if the data collected meets its

criteria. Responses to questions should be full and detailed from adequately framed and

sequenced questions, with important leads being probed as they are discovered (Tolley et al.

2016, 176-8). Identification of emergent themes and subthemes or the development of tentative

hypotheses may help the researcher find specific topics that were not addressed or that emerge

suddenly in the data. These should be noted using brackets or italics in the transcripts to separate

them from original text. A field journal or separate memos can also be used to document the

ideas. Reviewing these notes as soon as possible after the field activity will increase the potential

avoidance of certain methodological issues affecting credibility (one of the four criteria

mentioned previously to assess the truth value of the findings). Here, an audit trail is useful for

others to review the analytical work and to track the progress towards the proposed conclusion,

which should consist of six categories of information: raw data, reduction and analysis

documents, reconstruction and synthesis diagrams, any and all notes during the process, the

study's protocols and expectations, and interview guide development and protocols (Tolley et al.

2016, 178-9, 213-4). The audit trail also acts as an influencer on the confirmability of the study

(another criterion for truth value), where a peer-review of the process used can help to identify

potential subjectivity of the original researcher or team. Keen scrutiny of initial findings may

reveal patterns, relations, gaps, or contradictions which could uncover new leads, questions, or

implications for future research.

     During the data coding process, common themes and subthemes were identified from the

data using annotations that are not too complex or difficult to apply, and were easily refinable as

new leads, questions, or implications are discovered. The negotiation and reconciliation of

coding decisions should have a defined process and be duly documented if more than one person

is coding data (Tolley et al. 2016, 179-80). New codes should be added if data do not fit into

existing ones. Structural codes that align with specific questions or research objectives should be

developed, such as a specific sequence of questions for interviews or the organization of

information for further examination. Emergent codes which derive from the text of the actual

data are often used to avoid the imposition of words or concepts which eclipse new data

revelations. Codes can also be produced from theoretical and pragmatic descriptions or verbiage.

The development of a code book through team collaboration can increase the dependability of

the findings (the third criterion for truth value), where replication of the results can be tested

(King, Keohane and Verba 1994) and individual biases, differences in power, status, or influence

over the interpretations can be rectified (Tolley et al. 2016, 213). Where conflicting, irrevocable

interpretations come to light, the researcher or team should present both versions for the reader to

determine their merits. As such, codes should be applied consistently and checked regularly within the code book to avoid similarities and promote understanding of their application, which can be accomplished with periodic team exercises as referenced by Tolley (et al. 2016, 185-6).

Intercoder reliability (ICR) can be calculated using a kappa statistic (Hruschka et al. 2004) if the researcher recognizes its limitations of quantification. Complexities within the code book or inconsistent application of the codes could result in the skewing of scores towards lower reliability. Continuous coding identifies gaps or questions with a systematic approach to reveal early biases and the redefinition of concepts to help refine the coding schemes chosen, and to form subcodes to break down broad categories. The use of computer programs or notebooks aids the researcher or team in tracking changes made, the reasons for the changes, and should be administered by a select few to avoid audit trail errors or omissions (Tolley et al. 2016, 189-90). Basic data manipulation with computer software is also valuable to insert codes into text, index the work, insert hyperlinks for quick retrieval of associated data, and selective text retrieval (Kelle 1997). Coding reports aggregate similar codes from original transcripts which can be compiled manually, completed in word processing programs (searching for specific words in the documents), or used in connection with qualitative text analysis software (Tolley et al. 2016, 197), helping to identify text pertaining to the same theme in various documents.

Displaying data involves "taking inventory" of related concepts to the themes, the variations between themes, and differences between participants or subgroups (Tolley et al. 2016, 199), where subthemes reflect more refined distinctions of the data themes. Data display memos detail information from the larger codes for better understanding of the important themes or the documentation of insights experienced by the interviewers. These memos should focus on individuals and summaries of the information provided across several interviews on personal or

social influences, but the memos could also reflect the personal and professional experiences of the researcher that may influence the collection or interpretation process. Memos will include: a header; summary statement; subthemes, and; text that represent subthemes (Tolley et al. 2016, 201-2). The researcher will then begin to form hypotheses while also formulating new questions, interpreting the received responses, offering theoretical explanations, and validating or rejecting emerging conclusions. Data credibility is ensured by offering open-ended questions rather than leading the answers, a first-person account of beliefs, motivations, and experiences by the participant, and a conversation that avoids generalities and drills down into the specifics of the research question. Confirmation or rejection of early conclusions will result from weighing credibility as the data is interpreted but keeping in mind that the raw data is the final determinant for the validation or rejection of any emerging conclusions or other ideas (Tolley et al. 2016, 203-4).

Data reduction efforts provide essential concepts and relations among data points (Tolley et al. 2016, 2004). Here, the researcher should break away from the data to distinguish central and secondary themes using matrices, diagrams, or taxonomies (Ryan and Bernard 2000, 769-802; Maxwell 2010; Namey, Guest, Thairu and Johnson 2007). Matrices can contain numeric, textual, or a combination of both types of data and should include traceability back to the original participant transcripts, identifiers of unanswered questions, and a numeric scale to help visual the data and differences in subthemes. This is helpful as data that is sorted in various configurations may contribute to the emergence of significant differences. Summary information on participant characteristics, knowledge, and experiences can be tracked by hand or through computer programs and can be made available to multiple researchers for the pursuit of different themes and findings; beneficial to the discovery of the previously noted emergent themes and

subthemes (Tolley et al. 2016, 206-7). Other useful documents include decision trees, taxonomy, and graphs (Miles, Huberman and Saldana 2014). While some codes benefit from data reduction, other codes may not necessitate reduction and may even be reduced so far that the researcher may want to combine such codes with other smaller codes where dominant traits prevail and where reduction minimizes quality.

Interpretation of the data is the final step of the collection and analysis process, where the researcher or team arrives at the essential meanings of the data, ensures trustworthy interpretation, and the careful blending of qualitative and quantitative interpretation methods (Tolley et al. 2016, 207-8). Communication of the central ideas of the study to a wide audience while remaining faithful to the perspectives of the participants can be achieved while producing relevant results for other populations (outside the study group) to answer questions of social and theoretical significance. These interpretations should make sense to those who provided the data and offer credible, trustworthy understandings of the information obtained, but should also acknowledge the inherent reluctance of those participants who oppose the study's goals or wish to suppress its findings. Additionally, different researchers could interpret the data in differently, and any findings that seem to be irreconcilable due to opposing conclusions should be reported as such for peer review and analysis of the contradictions. Gaps and connections between the concepts can be identified from the analysis of interpreted results to synthesize new concepts or themes, and visual displays can help to provide a central organization structure for data presentation (Tolley et al. 2016, 210-11).

In a mixed-methods study, consideration as to whether one method or the other will be dominant, and if the two will be conducted sequentially or simultaneously. In this study, quantitative analysis was conducted to provide a list of topics or specific questions and structured

responses that were easily understood by the participants. Should contradictions of data arise, additional analysis of the data sets should be considered to promote reconciliation. The use of stratification or regrouping of data may contribute to resolving such arguments, and vice versa. Any unresolved disputes should be presented for the reader or future researchers to decide upon after review. The final of the four criteria for determining truth value, transferability, allows flexibility of the findings to be applied to other populations. Here, the researcher or team is careful to avoid general conclusions (which limits potency and effectiveness of the findings) and confined contexts (which does not allow for the application of findings to other situations), carefully drawing conclusions, providing adequate descriptors of research context for potential application to others, and accounting for an original research design testing new models or building theories (Tolley et al. 2016, 214-5). The theoretical constructs of these conceptual models can then be adapted and adjusted to other study populations during replication, which will refine the model, offer insights on the generalizability of the study, or offer an alternative model or theory; all of which advances the understanding of research topics.

Measurements

In computing the responses to the pre-coded surveys, IBM SPSS Statistics 25 was used to analyze and compare the data utilizing non-parametric associations to determine the strength of relationship between variables. While multiple linear regression analysis could have been employed to discover predictive behaviors of the independent variables, this was not explored in this particular study. Variables coded included positive or negative responses to the survey questions based on a five-point Likert scale or dichotomous variables for yes/no questions and general demographic identifiers, while scaling variables were used to determine the level of support for various funding alternative options by those surveyed. SPSS was used for

quantitative results from surveys, and the programming of the survey questions can be found in

the appendix (Table 2). Plans for the results of this study include distribution to participants, the

dissertation committee, and finally, published in a book format and/or published online.

Quantitative Research and Data Collection Methods

A statistical approach to decision making is essential for today's public administrators,

aiding in the planning and staffing of their municipalities by providing systematic information

with more precision and quantification than any other approach (Meier et al. 2015, 3). Statistics

provide an empirical utility in testing hypotheses developed from informed conjectures and

speculations and are the best method for connecting full population data with collected subset

facts (Meier et al. 2015, 3-4). In this dissertation, the strengths and weaknesses of quantitative

methods are noted and the informational and educational applications of data analysis evaluated

in decision making. Employment of quantitative methods does not ensure exact results, as

several factors can affect these numbers. Managers can utilize the one-tailed or two-tailed

significance tests to determine the probability of an event, although the one-tailed is the most

often used of these two. Additionally, many two-tailed tests can be broken down into two

separate one-tailed tests, which is the suggested method for use by public and nonprofit

administrators (Meier et al. 2015, 192-3). One-tailed tests specifies direction while two-tailed

tests state differences (Meier et al. 2015, 197). Social scientists often use the value .05 for the

standard probability when considering rejecting the null hypothesis, although this may be too

large a risk factor of many managerial situations (Meier et al. 2015, 190). When testing for the

null hypothesis, managers can potentially make two types of errors: a Type I error where they

reject the null hypothesis even though it is true, and a Type II error which observes the

acceptance of the null hypothesis as true when it is really false (Meier et al, 2015, 194-5). Errors

of Type I can be reduced by increasing the rejection probability, but raising the alpha level raises the chance of a Type II error, which can be minimized by increasing the sample size of the study. This trade-off must be realized and pre-determined by the administrator.

Modern advancements in quantitative techniques and the complementary technology needed to perform these tasks now address previous inherent weaknesses in the field from administrators ignoring vital statistical data due to an inability to discern the information, and concerns of other managers accepting such data uncritically. For this reason, today's administrators should seek to receive training in quantitative techniques to develop an appreciation and understanding of the basic elements of quantitative and statistical analysis (Meier et al. 2015, 5-6). New statistical techniques and the advancement of computer technology has enhanced the development of public administration as a true discipline (Groeneveld et al. 2015, 81). The emergence of computer networking has created a quantifiable opportunity of study for public administrators (O'Toole 1997, 47). However, many administrators do not select or calculate the correct statistics for their specific problems, usually receiving outside data with an expectation that they will be able to make reasoned and responsible decisions based upon it, which makes it doubly important for these problem solvers to become more educated and critical of statistical information. Public and nonprofit administrators are often exposed to some of the most difficult problems in modern society and the use of statistics is a major advantage for them to track an innumerable collection of variables simultaneously, observing their interrelationships and manipulating them to evaluate their strength and contribution to potential solutions, thereby assisting their elected and appointed leaders make better decisions through informed deliberation (Meier et al. 2015, 4). Questions like "how many" and "how much" are most common in these municipal dilemmas, with managers being accountable to politicians and citizens, parents, Board

members and others to answer these numerical puzzles (Rassel et al. 2016, 1). The discipline of public administration is increasingly using quantitative analysis in governance, however, very few of them use a mixed methods design, employing both quantitative and qualitative methodologies, which are worthwhile for consideration by future studies in this field (Groeneveld et al. 2015, 80). Indeed, studies in the fields of policy and politics are often dominated by qualitative methods, while public management professionals rely more on quantitative methods for their financial, performance and strategic duties, but the discipline would greatly benefit from advances in the quantitative sciences. Using the mixed methods approach, qualitative research can be used to develop theories, and quantitative methods can be incorporated to validate measurements and test those theories (Groeneveld et al. 2015, 81).

Individual worldviews directly influence how the researcher interprets the data they are analyzing. As such, Christians who work in this field should exercise Faith espoused by the Lord God in pursuit of the absolute truth while maintaining the values of the Church. When a Christian is presented with data that seemingly opposes their beliefs, they should take solace in the fact that God has presented them a test of strength for their Faith and carry on with their project cheerfully, trusting in God's authority and omniscience (Creswell 2020, slide 5). In Genesis 22, God tested Abraham. In Job 23: 8-10, the Bible says that life is a test, with God continually assessing mankind's character and faith. There are several other examples in both Testaments about individuals being tested by The Almighty. So, while our social scientists and public administrators test their theories, God will continue to test us so that they may "emerge as pure gold" to those who rely on their unbiased analysis to promote the Greater Good. A.A.S.M.I.B.

Theory Testing Using Quantitative Analysis

Public and nonprofit administrators deftly handle many different situations; from changes in procedures within the organization, to staff productivity and effectiveness of internal programs (Meier et al. 2015, 183). Determining the cause or relationship of an event is a core element of social research, allowing social scientists and administrators to examine the causes of phenomenon in order to evaluate potential rival causes through the use of quantitative methods, strengthening their qualitative observations (Meier et al. 2015, 43). Research design is then defined as the systematic attempts to empirically evaluate the determined causal relationships, guiding the various steps of collecting, analyzing, and interpreting relevant data (Meier et al. 2015, 53). One approach that may be helpful is utilization of the Q methodology which was developed in the 1930s and can be used to correlate participant responses to find norms through mathematical factor analysis to plot attitudes, perspectives, values, issue prioritization and more among the management of an organization (Miller 1998, 599-638). This can also facilitate the study of administrative roles with potential applications in the study of public management roles, which have yet to be largely explored. One consideration going forward with the use of Q methodology in the public administration field applications will be to avoid the common flaw of using closed ended questions on the participant surveys, which may influence the responses received (Ban 1995). A practical solution for this flaw would be to use open ended questions where the responses by the participants define the parameters mentioned by Miller above. When performing these experiments, one must remember Philippians 4:8, "Finally, brothers, whatever is true, whatever is honorable, whatever is just, whatever is pure, whatever is lovely, whatever is commendable, if there is any excellence, if there is anything worthy of praise, think about these

things." In analyzing the attitudes and perspectives of others, one must focus on the good things found and try to exemplify them within the constitutions and culture of their organizations.

<div align="center">Statistical Interference</div>

The problems surrounding the use and implementation of formal methods of statistical inference in studying the field of public administration do not build confidence for the teaching in methods and statistics courses, and earnest consideration of the role of statistics in producing viable knowledge is needed. The overwhelming influence of statistical interference is held within frequentist methods for generalizing from sample to population in enumerative studies and in the drawing of scientific inferences that the two are equivalent in the management sciences, despite the fact that legitimate employment of these methods is difficult to implement on practical grounds alone (Hubbard et al. 2019, 91-98). Formal statistical inference is critically geared to the conduct of enumerative studies focusing on the estimation of fixed population parameters from random samples, but these types of investigations are the exceptions, not the rule (Deming 1975, 146-152). Analytic or predictive studies are involved in most scientific research which are not privy to analysis by formal inferential approaches (Deming 1975, 146-152 and Hahn and Meeker 1993, 1-11). The randomized controlled trial procedure, touted as ideal for showcasing the merits of formal statistical inference, has incompatibilities in meeting the assumptions justifying its adoption and can yield troublesome results (Cartwright 2007, 11-20). This type of data crunching would have come in handy to the lifestyle of the fisherman in Judea, as John 21:11 tell us that, "… Simon Peter went aboard and hauled the net ashore, full of large fish, 153 of them. And although there were so many, the net was not torn." Upon compiling data of the various loads of fish that their nets were able to carry, they could estimate their intake over time, calculate how much to keep or sell, the profits from those sales, and invest in research to better their net

technology to carry increased weight and more units per haul. Since they were often accompanied by The Greatest Fisher of all, they probably felt little need for such analysis.

Text Mining

Text mining is a field of theoretical approaches and methods with the commonality of text as input information, ranging from an extension of classical data mining to texts to more sophisticated formulations such as using large online text collections to discover new facts and trends about the world (Hearst 1999, 3-10). Text mining is an interdisciplinary field of activity of data mining, linguistics, computational statistics, and computer science where standard techniques are text classification, text clustering, ontology and taxonomy creation, document summarization and latent corpus analysis. The earliest text mining applications come from the data mining community (Weiss et al. 2004), like document clustering (Boley 1998) and document classification (Sebastiani 2002, 1-47). The desired result is to transform text into the structured format based on term frequencies and apply standard data mining techniques, for which typical applications in document clustering include grouping news articles or information service documents (Steinbach et al. 2000), whereas text categorization methods are used in e-mail filters and automatic labeling of documents in administrative libraries (Miller 2005). Almost every major statistical computing product offers text mining capabilities and many well-known data mining products provide solutions for text mining that can be implemented into the toolbox of our public administrators to better identify and analyze data from a variety of source documents. Matthew 7:7-8 reminds us that in order to find the solutions we need in life, all we need to do is put our Faith in God and seek them both, and they shall be found. These are not found without effort on our part, as we are reminded in 2 Timothy 2:15 to, "(d)o your best to present yourself to God as an approved worker who has nothing to be ashamed of, handling the

word of truth with precision," so that we are careful to safeguard the trust given us by our communities and constituents to care for their affairs.

Supporting and Analyzing Survey Research in Policy Decisions

An essential ability for public administrators to possess is to identify research questions, correctly state the research hypotheses, and analyze policy decisions based on survey data available. (Meier et al. 2015, 185-6). Many organizations make use of client survey data to provide information about performance, as an outside view of the agency's operations can help raise awareness of problems that the internal managers cannot readily identify (Meier et al. 2015, 33). Public administrators need to be able to measure, describe and analyze certain variables in order to suggest policy changes or track performances of previous decisions (Meier et al. 2015, 14). Using outcome measurements provided by these surveys, administrators can analyze the number and cause of client complaints about service levels, certification levels within the organization, or deficiencies of performance levels as detected by outside auditors. Measurement is a technique used to assign numbers or values to otherwise non-quantifiable events by public and nonprofit administrators using a statistical approach to analysis (Meier et al. 2015, 14). SPSS can be utilized to process and analyze data from a wide variety of sources, especially that from research surveys and external sources (Cronk 2018). In this dissertation, we identified the components of research analysis with regards to the use of these surveys to monitor and improve internal operations and to make better policy decisions by public administrators.

When implementing surveys to measure public and nonprofit policy decisions, researchers use interval, ordinal and nominal measurements. Measurement theory implies that the concepts for which the analyst is interested is not able to be measured directly, using the operational definitions as a statement describing the proposed measurement of the concept in

question (Meier et al. 2015, 15), and employing indicators or variables from a set of observational inputs resultant from the application of the operational definition. Encouragement for the use of operational definitions by research analysts should be conveyed by the administrator when available, and the complicated concepts of the proposed measurements should be known to and understood by the administrator in order to explain them to others (Meier et al. 2015, 16). These concepts often have multiple indicators, used to analyze situations having more than one dimension and utilize the technique of triangulation to hone-in on a concept with such. The general theory in the use of multiple indicators is to help the administrator even out any errors created by individual indicators, measuring the concept far better than with a single indicator and is a highly recommended method for use by public and nonprofit management (Meier et al. 2015, 17). An indicator containing little error is called "valid," and the degrees to which these indicators can be distinguished results in them being "convergent" or "discriminant." Additional validity considerations with measurement data of indicators fall between face, consensual, correlational, and predictive validity (Meier et al. 2015, 17-18). A good approach for research managers in finding or developing valid indicators is to review contemporary published literature in the field of study, which carries additional benefits, such as finding a desired answer to a specific research question within existing studies and collected data.

Researchers use a variety of quantitative and qualitative measurements to analyze policy decisions, as well as the effectiveness and performance of their organizational operations (Meier et al. 2015, 14). The administrator can use actual numbers in the measurement of events to perform arithmetic calculations to find the averages or means of a data set to discover quantifiable information necessary to their operations, such as the amount of garbage collected

by a municipality, response times for emergency personnel, etc. (Meier et al. 2015, 23).

Distinctive research patterns of public administration and accounting disciplines concerning

public sector performance measurement (PSPM) examine the types of performance indicators in

PM systems and contingent factors for PM design (van Helden et al. 2008, 641-51). However,

available data often lacks precision depending on the state of the art of the measurement

technique employed by the researcher, and some variables lack numerical precision inherently

(Meier et al. 2015, 23), such as survey results for race, gender, or religious identification. Levels

of measurement that are conducive to such numerical interpretations include height, weight, time

and distances; known as interval levels of measurement. Ordinal measurements are used by

administrators to assign units of measure to events or observations of attitude or opinion (Meier

et al. 2015, 24-5), and nominal measurement lacks any sense of relative size or magnitude,

merely identifying if the variables are the same or different. When selecting the type of

measurement to use in creating or analyzing survey data, the public or nonprofit administrator

must remember that variables coded at higher levels of measurement can be transformed into the

lower-level variables as more precise measurements are grouped into broader categories (Meier

et al. 2015, 26). More integrated models of governance linking capacity and performance are

needed and can be accomplished using bibliometric and content analyses to explore a scholarly

treatment of capacity constructs, and by reporting on a specific capacity's meaning and

measurement through an analysis of private, public, and nonprofit management literature

(Christensen and Gazley 2018, 265-79). This study will consider expanded concepts of the

material herein contained concerning the use of survey research to support and analyze policy

decisions by public and nonprofit administrators. We know by The Word that, "It is the glory of

God to conceal things, but the glory of kings is to search things out" (Prov 25:2), and that we

should "…not be conformed to this world, but be transformed by the renewal of your mind, that by testing you may discern what is the will of God, what is good and acceptable and perfect" (Romans 12:2). Accordingly, we are reminded, "…not believe every spirit, but test the spirits to see whether they are from God, for many false prophets have gone out into the world" (1 John 4:1). Here, we are told that God puts things here in this world for us to discover through our own efforts and to test everything before believing anything, for there are many out there willing to deceive and give false information. It is up to us to make sure what we hold true is actual Truth from the will of the Divine, which will make us stronger in our Faith and more valuable servants for His Great Plan.

<div align="center">Non-Probability Samples in Public Polling</div>

G. Terry Madonna, former director of the Franklin and Marshall College Poll and Professor of Public Affairs at Franklin and Marshall College in Lancaster, PA, originally founded the Keystone Poll (renamed after sponsorship by F&M College), which was/is the oldest Pennsylvania statewide poll exclusively directed and produced in the state (F&M 2020). In addition to administering this long-standing political poll, Madonna has written much on the subject. He documents the origins of political polling to the Harrisburg Pennsylvanian newspaper that conducted and published the first presidential preference poll during the controversial election of 1824, with Andrew Jackson winning the poll over John Quincy Adams and House Speaker Henry Clay. This was the election where Jackson won the popular vote, but Adams won the vote in the House of Representatives after none gained a majority of electoral votes (Johnson 1997 330-2). The type of poll used at that time, and for the next 110 years until the Gallup poll was introduced, was a non-probability sample (or straw poll), which were often "uncannily accurate" compared to other methods (Madonna and Young 2002). As these polls as a valuable

source of information, one has been formulated, coded, and employed within this study. In promoting the opinion of man and the will of God, Proverbs 2:2-5 offer, "(make) your ear attentive to wisdom and inclining your heart to understanding; yes, if you call out for insight and raise your voice for understanding, if you seek it like silver and search for it as for hidden treasures, then you will understand the fear of the Lord and find the knowledge of God."

<div align="center">Accountability in Reporting</div>

Recent discussions on critical research orientations encourage a range of approaches to research reporting besides the scientific-empirical approaches that have dominated most disciplines (Shcanagaraj 1996, 321). It has been suggested that research methods can be deconstructed for their hidden assumptions and interests in keeping with a poststructuralist, postmodernist perspective on knowledge, while the ideological nature of research reporting has been overlooked (Peirce 1995, 569-576; Pennycook 1994, 690-3). A report proposed guidelines for all scientific inquiry, to include posing significant questions that can be investigated empirically (NRC 2002, 3), arguing that the significance of a question could be established on a foundation of existing theoretical, methodological, and empirical work, and suggesting that some practical, specific guidance could help researchers develop a significant question or make the case for the significance of a research question when preparing reports of research for publication. When entering into a field of research, particularly on subjects such as discrimination and racism, the scientist will heed the wisdom of 1 Peter 3:8, to "…have unity of mind, sympathy, brotherly love, a tender heart, and a humble mind" in their pursuits, so as not to propagate the very implications for which they seek solution.

Mediation, Moderation, and Regression Analysis

There are many advantages when mediation and moderation are applied to the public administration quantitative methods toolbox. Mediators provide additional information about how or why two variables are strongly associated. In contrast, moderators explain the circumstances that cause a weak or ambiguous association between two variables that were expected to have a strong relationship. Mediators and moderators are often overlooked in research designs, or the terms are used incorrectly (Bennett 2000). Statistical tools exist to make the modeling easy, and people are beginning to use these methods in many areas of research, especially public administration (Hayes 2014). Simple combinations of moderation and mediation can be put together to yield complex models that are yet fairly simple to estimate and interpret, giving public administrators and elected officials valuable information with which to make fiscal and policy decisions (Hayes 2014). For example, county prisons can utilize these methods to determine the self-control and substance misuse post-release for jail inmates (Malouf et al 2012).

The routine inclusion of mediating and moderating variables holds the promise of increasing the amount of information from outcome studies by generating practical information about interventions as well as testing theory (MacKinnon 2011). Methods for testing mediation and moderation effects in a dataset should seek to gain valuable information from both together and separately. Investigations of this kind are especially valuable in prevention research to obtain information on the process by which a program achieves its effects and whether the program is effective for subgroups of individuals, enhancing the utility of combining the effects of mediation and moderation into a single model (Fairchild and McKinnon 2009). Theorists and researchers should take care not to lose sight of the importance of not using the terms moderator

and mediator interchangeably, by elaborating the many ways in which moderators and mediators differ, both conceptually and strategically (Baron and Kenny 1986).

The mediation myth is the false belief that mediation is actually estimated in the typical mediation analysis, based on three distinct shortcomings: the typical mediation study relies on an inadequate design; the researcher uses a flawed analysis strategy; and there is little attention to assumptions that are required when estimating mediation. These problems stem from overgeneralizing the classical product method for estimating mediation and overreliance on statistical significance testing as a decision criterion in mediation analysis (Kline 2015). The omission of at least some relevant variables and the strong likelihood of intermediate confounding (Pais 2017). Inadequate statistical power to detect treatment effects in health research is a problem that is compounded when testing for mediation. The preferred strategy for increasing power is to increase the sample size, but when there are situations where additional participants cannot be recruited, the use of other methods to increase statistical power becomes necessary. Many of these other strategies, commonly applied to analysis of variance and multiple regression models, can be applied to mediation models with comparable results. Additional predictors or blocking variables will increase or decrease statistical power depending on whether the variables are related to the mediator, the outcome, or both. The effect of these two methods on the power for tests of mediation is illustrated through the use of simulations (Fritz et al. 2015).

The statistical analysis of mediation effects is an indispensable tool for helping researchers investigate processes thought to be causal, but in spite of recent advances in the estimation and testing of mediation effects, methods for communicating effect size and the practical importance of those effect sizes have been left largely unexplored (Preacher and Kelley

2011). Assumptions should be observable variables in a linear combination, where factors (unobserved variables) are assumed to be independent of one another. The designer must ensure that the variables are ordinal or interval scale, as nominal variables will not compute accurately (Liberty University 2020). Other errors could stem from measurement error, range restriction, and unequal sample sizes across moderator-based subgroups; insufficient statistical power; the artificial categorization of continuous variables; assumed negative consequences of correlations between product terms and its components (i.e., multicollinearity); and interpretation of first-order effects based on models excluding product terms (Aguinis et al. 2017).

If the researcher lacks a theoretical framework concerning variables, they may lose sight of overlapping reasons for including mediating variables in a research study, such as providing a check on whether the intervention produced a change in the mediating variables it was designed to change or understanding that when an intervention component did not change the mediating variable, then the actions selected to change the mediating variable need improvement. Additionally, a lack of intervention effect on a mediator can suggest the measures of the mediator were not reliable or valid enough to detect changes, therefore, if no program effects are found on norms, it may be that the method used to measure norms is not reliable or valid. The researcher must also understand that when the intervention does not have the desired effect on an outcome variable but does significantly affect theorized mediating variables, it is possible that effects on outcomes will emerge later after the effects of the mediating variable have accumulated over time (McKinnon 2011).

Jesus was considered the 'Mediator between Man and God' in 1 Timothy 2:5-6, "For there is one God, and one mediator also between God and men, the man Christ Jesus, who gave Himself as a ransom for all, the testimony given at the proper time." We started off this article

stating how mediators provide additional information about how or why two variables are strongly associated. Here, Jesus provided Mankind with additional information about the Nature and Will of God, explaining the strong association between the Creator and His children. The Son of God, "…Jesus, the mediator of a new covenant, and to the sprinkled blood, which speaks better than the blood of Abel (Hebrews 12:24).

Mediation Analysis

The use of mediation analysis can be beneficial to promoting understanding of seemingly unrelated variables in public administration. One such study focused on organizational commitment as a mediator and examined why turnover intention among child welfare workers would be affected by worker's perception of inclusion at the organizational level, at multiple organizations, using multilevel analysis. The results of the study showed that individual worker's organizational commitment played a mediating role between organizational inclusion and individual turnover intention. Their findings suggested that intervention aimed at reducing turnover and retaining quality workers may be more effective with a combined approach of targeting individual attitudes with changing organizational structures (Hwang and Hopkins 2012). Proponents of the "Ferguson effect" suggest the "defund the police" movement is responsible for the recent surge in crime across the United States. The hypothesized mechanism through which public scrutiny of police impacts crime has remained unexplored. One study deconstructed the effects of public scrutiny on crime trends in New York City police precincts over a two-year period (2014–2015), finding partial support for the Ferguson effect. The results showed de-policing did not predict increases in crime and found that public scrutiny had a significant positive direct effect on crime rates, suggesting it increased crime through alternative causal processes. These findings have important theoretical and policy implications for

understanding the causes and prevention of crime among public administration officials (Capellan et al 2020).

Moderation Analysis

The use of moderation analysis is be beneficial in the promotion of understanding seemingly unrelated variables in public administration. Regarding the direct effect of public service motivation on job satisfaction, one study theorized that the relationship is moderated by the joint effects of person–organization fit and needs–supplies fit. Based on 623 full-time public employees in China, the results revealed a significant three-way interaction effect: employees have higher job satisfaction when public service motivation, person–organization fit, and needs–supplies fit are all high, but lower job satisfaction when public service motivation, person–organization fit, and needs–supplies fit are all low. Public service motivation fuels the job satisfaction fire when both person–organization fit and needs–supplies fit are low (Liu et al. 2015). A study within the realm of public healthcare investigated the impact of residential versus outpatient treatment setting on treatment completion and how this impact might vary by demographic characteristics and drug of choice. The data came from a national sample of publicly funded substance abuse programs in the United States. The results were many. Clients in residential treatment (vs. outpatient) were 3 times more likely to complete treatment. Treatment completion was particularly moderated by age, race and ethnicity, and drug of choice. Opioid users were more likely to benefit from residential treatment than users of other substances. Marijuana users were less likely to benefit from residential treatment than users of other substances (Stahlera et al. 2016). These examples demonstrate the value of using moderation analysis in public administrative functions, similar to the considerations and duties of the school board members surveyed in this study.

Regression Analysis

The use of regression analysis is a third tool to employ when dealing with seemingly

unrelated variables in public administration. Water level prediction of ground water is an

especially important tool in water resources management. Current research implements artificial

neural network models in order to build the optimal forecasting models for predicting the water

levels and regression analysis in order to evaluate the prediction accuracy. An Artificial Neural

Network Perceptron (ANNP) is applied in order to construct forecasting models for predicting

water levels of ground water. The developed models are compared to find the optimal according

to the best performance leading to the most accurate predictions. Several topologies were tested

in order to discover the best forecasting model. The different predictive models were constructed

by implementing different number of the nodes in the hidden layers, also by testing different

number of the hidden layers. The results showed an increased prediction accuracy of the

developed ANNPs. This research provided the scientists and engineers with optimal prediction

models used for forecasting the ground water levels with increased accuracy compared to other

prediction techniques and methods. The developed forecasting models can provide accurate

predictions of ground water levels which can be very valuable for the public administrators and

stakeholders in water resources management (Kouziokas et al. 2017). Within a favor topic of my

own, intermunicipal cooperation is an important public service delivery reform, whose drivers

move beyond simple concerns with costs and economic efficiency, to policy issues related to

governance structure and spatial context. A meta-regression analysis was conducted based on the

existing multivariate empirical literature to explore what factors explain divergence in results in

the existing empirical studies, to find robust evidence that fiscal constraints, spatial, and

organizational factors are significant drivers of cooperation (Bel and Warner 2016). The meta-

regressions did not yield results to explain divergence in results on community wealth, economies of scale, or racial homogeneity. The researchers suggested more studies on these factors are needed to understand how they might affect cooperation, while future theoretical and empirical research should give more attention to spatial and organizational factors to develop a better understanding of factors driving cooperation, and how they differ across local government structures and regions (Bel and Warner 2016).

Research and Data Collection Methods Employed

A mixed methods approach utilizes both qualitative and quantitative data, which has been shown to provide for a more powerful study design than either one method used alone (Obermeyer 1997; Tashakkori and Teddlie 1998). A structured survey of demographics, economic preferences, and attitudes toward various funding methods for public schools in Pennsylvania was employed. Opinions concerning budgets and financial data for school funding will be quantitatively compared for support of a funding source change. This researcher did not utilize third-party collectors; thus, training was not required, and the data was collected consistently within the scope of this study. This required reviewing the data as it was collected to identify areas for clarification or further probing (Tolley et al. 2016, 72).

While follow-up studies can probe the opinions and insights of elected officials in Harrisburg concerning the policy recommendations to be presented in Chapter Five, this study will only include qualitative feedback from one source, John Fairchild, outside of the quantitative data analysis towards the research question and hypotheses presented.

Field Logistics

Vital is the predetermined method to be used by those conducting the research in the field through data collection and rapport building. Establishing links in the community with

stakeholders, partners, and advisory committee members where the research will be conducted

will forge relationships and foster partnerships. An effective research team must be built and

trained using the proper tools and techniques to conduct quality research activity, with special

considerations to ethical concerns that may arise during the project.

Relations in the community can be improved to the benefit of the study. Building rapport

with key stakeholders involves listening to many voices, understanding perspectives, and

engaging on their terms (Tolley et al. 2016, 145). The formation of a study brief provided the

purpose of, and clear expectations for, the implementation of the study while respecting the

social context of those who may fear negative consequences or expect unrealistic support on a

local issue from the research. Included was a description of the research goal and objectives,

those funding the project, community partners involved, and the activities of the study. This

aided the researcher in acquiring the necessary support, access, and understanding of the local

culture, customs, or personalities that may affect the data.

Stakeholders can be external to the community, such as those funding the project,

sponsors, or the researcher's employer or university (Tolley et al. 2016, 146). Important

considerations in identifying viable stakeholders for participation in the study include:

1. Those impacted in positive or negative ways by the research results.
2. Those with influence to affect community participation in the study.
3. Those with specific interest in the research topic.
4. Those who may potentially invest in the project, either with time or funding.
5. Other researchers who may be conducting similar studies in the same time period.

Informal community leaders who do not occupy formal positions of authority, such as

community elders and former officials, were consulted for the valuable information they possess

on the subject matter. Current officials were contacted in time to set appointments to explain the

study and gain support for the proposed activity. Appointments were made to discuss interview

questions with local and state elected officials, school district personnel, and community members who often have their own busy schedules with their involvements. Appointment setting is time consuming and possible delays must be accounted for in time budgeting, regarding the introductory phase as vital to the process. A stakeholder register was established to keep track of important information concerning those involved, to include their name, organization, contact details, type of stakeholder (elected, school, taxpayer, etc.), their preferred method of contact (phone, email, text), frequency of communication (dates, times), their role in the community and in the research (if any), their personal interests, expectations, and community influence held (Tolley et al. 2016, 147). A diagram to connect and track evolving relations between the stakeholders can help to identify the emergence of new sources of data or other stakeholders.

Quality research often influences current and future policy decisions, and the inclusion of service providers, policymakers, and non-governmental organizations (NGOs) early in the design of the study and during the implementation phase increased the articulation of the research questions to better fit their goals, creating a 'buy-in' that is valuable to the body of data to be collected. Through reciprocity, a greater access to the study population resulted in a stronger research design, with findings more relevant to the policy needs of the stakeholders (Tolley et al. 2016, 149). NGOs often use current research to support their advocacy messages. Project advisory committee members are influential people in the community tasked with reviewing the study's progress and advising the researcher on implementation issues. Members promote and use the findings of studies when the research questions are clearly formulated to address policy or programmatic issues (Tolley et al. 2016, 150). These members can come from local or state government, schools, churches in the community, or specialized groups, providing

a broad representation of the community in lieu of favoring specific segments. Duties assigned to this committee can include:

1. Reviewing protocols.
2. Suggesting culturally appropriate questions.
3. Identifying key messages in the findings.
4. Finding links between results and recommendations for policy.
5. Development and implementation of dissemination plans.

The development of a field team, composed of a few local citizens interested in the project, who know the community, and are willing to work with the researcher, may have helped in some of the smaller tasks in the research, such as making appointments or other arrangements. Local assistants who are respected by their peers and are not controversial figures in their communities are invaluable to assist in the interpretation of the study to others in the community, helping to identify members of the sample selection criteria, welcoming participants to interviews, organizing refreshments, and distracting those not directly involved who accompany respondents. They must be willing to respect the privacy of those participating. These assistants can be offered a small stipend or simply a letter or certificate to document their vital role in the study, which can be later used to acquire other positions in their research field. These assistants can be of varying levels of responsibility, to include:

1. Field supervisors.
2. Interviewers/moderators.
3. Notetakers.
4. Data managers.

Each of these positions have specific duties in the data collection process and should be properly trained to conduct interviews and safeguard the data. Employment of a training plan, as outlined by Tolley (et al. 2016, 152-6), where qualitative collection skills are taught and practiced for familiarity and adherence to the research goals can be developed. Coverage of

ethical behaviors and an awareness of sensitive topics should be considered to keep safe the participants, their data, and any risks that may arise from a breach of confidentiality. Field materials, such as written instructions, checklists, and summaries, are valuable during the collection process. These can include project overviews, summaries of ethical standards, task descriptions for the field team members, activity calendars, sample introductions to the study, and the contact information of those that can be contacted should questions arise in the field. By developing this master study manual, valuable information and essential documents can be stored, changed, and copied should there be a need.

A pilot test of the consent materials and interview questions is important to ensure that the language is easily understood that participants know the purpose and their part of the study, and that sufficient confidentiality is assured to all respondents (Tolley et al. 2016, 158-9). Recording equipment, computers, and transcribed notes can be beneficial methods of data documentation and help identify areas of additional training needed to increase the effectiveness of the interviewers' skills. A trial run of the administrative procedures for protecting confidentiality and managing data will also benefit the research team through preparation and team building. Other important considerations include feasibility of sampling, issues related to the use of technology, the safety of transporting data collectors, and scheduling time for data collection and analysis. Supervision of these activities is essential to participant protections, privacy considerations, and other situations that arise during field work. Reinforcement of these topics can be conveyed by asking participants to sign confidentiality pledges. Due to the nature and scope of this study, assistants nor field team members will not be necessary.

Surveys and Interview Participant Information

Selection criteria for participants in this study included a survey sample of 4500 public school board directors. Under the Act 84 of 2020, school districts must publish on their websites an email address for each school director that can be used by students, staff, or members of the public to communicate with members of the school board about school district governance matters. The email addresses must be available on an easily found public area of each district's website no later than June 26, 2021. These officials served as the source of data for the study's quantitative survey. Ineligible participants for this study in either group consisted of anyone who is not a current school board member in Pennsylvania and will not be surveyed. As these identified officials are selected to serve and represent their districts, they are the only group that will be approached for the online surveys. As school board members' emails are required by law to be published on school websites. emails with survey links and recruitment letter were sent to each school board member listed on these websites in the state.

Screening for potential survey participants consisted of acquiring the posted emails of school board members on each of the 501 school districts' websites in Pennsylvania (which were to be posted by June 2021 by PA statutes). Those listed as school board members received an invitation to participate in the initial survey. Survey participants clicked on a link in the recruitment email to the consent form and survey. Due to the time constraints and COVID-19 protocols still being engaged at the government buildings in Harrisburg at the time of this study, qualitative interviews were not conducted as part of this study, but the researcher encourages future studies to consider such.

Management and Storage of Collected Data

General standards of criteria for judging the trustworthiness of qualitative data include concerns of credibility, dependability, confirmability, and transferability (Kirk and Miller 1986; Lincoln and Guba 1985; Miles and Huberman 1994). These criteria in qualitative analysis can be directly compared with counterparts in quantitative analysis, allowing for the blending of both in this mixed-methods approach. Credibility, or truth value, is akin to validity in quantitative studies and focuses on the confidence of truth in findings, with a potential cause-effect relationship (Yin 1994). Findings that show logical relationships are grounded in narrative data that determine whether the original study group considers the reporting to be accurate (Miles and Huberman 1994). The survey questions developed for this study sought to identify these relationships without ambiguity of accuracy.

Dependability couples with reliability in that the results of the study can be replicated, even if conducted in different cultural contexts (King, Keohane, and Verba 1994). Here, caution should be taken to use vocabulary whose definitions are not imposed by the research design and avoid those ambiguous terms that can be debated ("expensive" or "acceptable"), with clear and logical questions connected to the purpose and design of the study, with parallels across data sources, and comparable data collection protocols (if conducted by more than one person). While dependability does not require all answers to be the same, consistent patterns should emerge which complement the general tone of the groups surveyed.

Confirmability and objectivity minimize any possible influence of the researcher's values in the inquiry process (Tolley et al. 2016, 37). Here, the researcher is cautious to avoid assumptions, biases, or reactions influential to the collection and interpretation of the data collected, so that the data reflects the participants' thoughts and experiences. Transferability, and

its compliment generalizability, is the ability to transfer the findings of the study to the analysis

of the larger population, where a statistically representative sample can lead to conclusions about

society as a whole. Where this study will analyze the population of Pennsylvania, properly

concluded findings could be applied to the funding systems of other states similar in their

pursuits of property tax elimination, such as Texas and Michigan, to name just two.

If utilizing qualitative interviews, generating data files from recordings or hand notes

should occur as soon as possible after the interview to preserve its integrity. Computers can be

used to store the data and facilitates revisions and updates to the coding system used (Tolley et

al. 2016, 163). Establishing an audit trail documenting revisions and changes will help protect

the integrity of the electronic data files. Use of a microphone can enhance results through

multiple interpreters, but such recording methods should be approved by the participant, who is

informed directly at the commencement of the interview of the researcher's intent to record, and

any requests to avoid such data collection should be granted. Transcripts and translations of

recordings should be addressed immediately after the interview to protect loss of subtle,

nonverbal points made, the clarification of ambiguities, the investigation of new leads, or the

follow-up to emerging hypotheses. In general, the researcher should allow 1 ½ hours for

introduction, interview, and closing activities, then another 2-3 hours for transcription and

review. Excellent transcription protocols can be found in the work of McLellan (et al. 2003).

A proper filing system should be developed for each of the following components:

1. Original proposal.
2. Protocols for data collection.
3. Field notes.
4. Community maps.
5. Topic guides.
6. Informed consent forms.
7. Sociodemographic data sheets.
8. Collector and field assistant instructions.

9. Transcripts of interviews, and other study materials.

Interviews, when utilized, should be conducted in a private setting where others will not overhear. Online surveys will be anonymous and stored securely in an online database, the results of which will be put into a spreadsheet and coded for SPSS analysis. Any hardcopies of these interviews and surveys will be stored in a locked cabinet in my personal office. Data will be stored on a password-locked computer and a locked filing cabinet. Only the researcher will have access to these records.

Email communications will be used for qualitative interviews with permission by participants at start of recording. Any participant wishing to withdraw prior to publication should result in immediate removal and disposition of these records upon request. Survey results were shared without direct identities provided. Qualitative feedback provided comments from the interviews which were attributed to contributors after review. Raw data from surveys were not be to be identified to contributor. For survey participants, only the school district name and zip code in which it lies was requested. These results were recoded to a pre-determined map of five regions for comparison. Names nor email addresses were asked for on the surveys. Only this researcher has access to the original email list of participants and anonymous survey answers via SurveyMonkey. Interview participants and attributed comments identify the participant's identity and title. Survey participants did not provide their identities when submitting their anonymous surveys via SurveyMonkey. Qualitative answers were designed to openly identify contributors who will be aware of this prior to participation. If they chose to no longer participate prior to publication, their responses and records of participation were to be immediately destroyed and not used in the final product. After three years, data will be deleted from all computers and paper copies will be shredded. The only potential risk to participants would include events in which the

data is lost or stolen. Completing a survey or participating in an interview did not result in direct benefits to participants, as no stipend was offered for participation. Societal benefits will include increased public knowledge on the topic and potential solutions to funding issues for public schools.

Data Sources

Selection criteria for participants in this study included a maximum survey sample of 4500 school board directors, as well as a potential qualitative sampling of expert school administrators and elected officials from Harrisburg with experience concerning the study's topics. As stated, under Pennsylvania Act 84 of 2020, school districts must publish on their websites an email address for each school director that can be used by students, staff, or members of the public to communicate with members of the school board about school district governance matters. The bill was amended to make provisions applicable to charter school and cyber charter school board trustees. The email addresses must have been available on an easily found public area of each district's website no later than June 26, 2021. These officials served as the source of data for the study's survey.

This study was proposed to provide information-rich data from a group of individuals who have specific information concerning the study's objectives (Patton 1990; Patton 2015, 264). This manifested in an *a priori* sampling, which is the defining in advance of data collection the sample's characteristics and structure (Tolley et al. 2016, 56-7). In these quantitative samplings, the strategic approach of purposiveness was employed by selecting participants for their ability to provide such rich information on the effects of property taxes on their constituents (Patton 2014, 300). Locally elected school board members were approached to complete a pre-structured, in-depth questionnaire of scaled questions. Other data sources considered were

demographic information on the population of Pennsylvania as provided by the Department of Revenue, the Census Bureau, and other agencies in Harrisburg that collect such data to properly identify viable regional zones within the study sample, in effort to make larger assumptions based on these results.

The use of categorical thinking benefited the design of this study, as the survey questions had pre-coded answers for quantitative analysis efforts. When reviewing the data, these answers helped to place the respondents into categories of those negatively affected by the burden shift, those positively affected, and those not affected at all. From here, we can develop follow up questions for future studies which will gauge why they feel that way, and ultimately, if they can be supportive of a method that may not be best for their households. This is done through a process called 'coding' (Freeman 2017, 24), which identifies data and sorts them, attaching labels to depict what they represent, while raising analytic questions from the start of collection (Charmaz 2014, 4). This technique was beneficial to our mixed-method study of qualitative and quantitative results. Although there may be some qualitative elements in questionnaires, survey research is far more quantitative than qualitative, even with the inclusion of open-ended questions which are usually pre-coded in order to be analyzed quantitatively. They rarely are contextually interpreted because a major objective of survey research is to make 'generalizations' from a sample to a population, which requires quantification leading proponents and field experts to classify survey analysis as quantitative research (Czaja and Blair 2005; Fowler 2008). This study attempted to frame questions for which the responses, although pre-coded, will present a qualitative narrative in addition to these quantitative results.

Dissemination

Quality pre-planned dissemination strategies aid the researcher in improving frequency of communication with participants and key stakeholders, developing awareness of the issue tackled (Barwick 2011), and in solving programmatic problems (Tolley et al. 2016, 220-2) to discover what answers are most beneficial to the questions faced by the public and policy makers. Introducing a public study from commencement to these groups will create buy-in which will promote greater activity and involvement through on-going, collaborative dialogue. This participation reduced the resource constraints and skepticism about the validity of the findings or claims of anecdotal information by opponents of the results. Establishing a clear communication and dissemination strategy at the start of the study helped audiences find the credibility in the processes used and results discovered. Some experts contend that it is unethical to collect data without disseminating the results to the participants, as reciprocity is a trust-based expectation for sharing information between parties, for which guidelines can be presented in the informed consent process. Considerations were made for logistical and financial planning for dissemination, as doing so will increase the likelihood of the use of the results (Cernada 1982; Havelock 1971, Rogers and Storey 1987; Huberman 1992), which can help create a stronger influence of the work on these populations with constant interactions throughout the process (Huberman 1990, 365). Overarching communication strategies were important to strengthen the research with such a plan, while dissemination strategies can be used to simply relay the results of the study. Links to strategic communication/dissemination planning templates are provided by Tolley (et al. 2016, 225-9) which were utilized to develop the strategies for this research. These covered the needs assessment, goals, and objectives, identifying key stakeholders (policy makers, taxpayers, school officials, etc.), communication and controversy-control strategies,

dissemination plan for results, and study support materials. In this study, a formal public

presentation by Zoom and posting of its recording to a public website was employed with the key

stakeholders identified. This afforded for discussion and the posing of questions related to the

findings from the community. A brochure to summarize the results was produced for the general

public, with distribution of the study to various universities, libraries, and journals for further

peer-review. Twelve essential components of a communication or dissemination strategy are

outlined in detailed by Tolley (et al. 2016, 235-40) to aid in this process.

The process for formatting information for dissemination should account for the various

levels of knowledge on the topic by the diverse groups that will read the study. Visual or artistic

presentations can capture individual insights (Gergen and Gergen 2000), which differ from the

executive summaries for busy politicians, or factsheets given to summarize key points.

Participants should be given a 'first look' at the results as part of the 'reciprocity trust' discussed

earlier (while protecting their identities through individual, not group, dissemination efforts).

Policy audiences who can help build political consensus (Porter and Hicks 1995), or

advocate for implementation of the proposed solutions of the study (Health Policy Initiative

2010), can be found within the survey community via respected, credible local champions of the

work, accomplished through behavior change intervention and leading towards commitments to

change (Stevens and Tornatzky 1980). Upon development of a letter inviting such stakeholders

to participate, the researcher established a date, location, topic, and short description of the

survey contents. Tolley et al. (2016, 245-6) again offered an outline for such, including

introduction, presentation, background information for proper interpretation of results (with

slides that include no more than five bullets each), which prepared discussion questions to

encourage increased participation, highlighting the significance of the results with next steps, and

offering closing remarks while affording discussion and evaluation on the survey by proposed participants. Other researchers will receive the results as disseminated through written or oral formats, to include academic or professional meetings, or publication in peer-reviewed journals.

Oral presentations on these results can include a structure where the opening, introduction of the study, body of the work, and a summary of results containing short and simple visuals, with the presenter practicing their speech ahead of time. A final report can also be produced according to standard scientific formats, including an executive summary to explain what was studied and why, and how the conclusions lead to recommended policy action by policymakers and funders who may want to expand the research (Tolley et al. 2016, 247). Outcome indicators for dissemination will gauge the effectiveness of the research towards a solution or accomplishment. Considering how the study might be used by various groups and its influence on future research, public awareness of an issue, or settling a policy debate question will help determine the proper application of the findings offered.

Results from this study will be presented in report form and distributed first to the participants, then to other school districts in Pennsylvania, as well as the elected officials in Harrisburg who are directly involved in the conversations regarding future legislation on public school funding sources, with a general public access point established for study review. A narrative report format will constitute a valid means for making sense of the views on public school funding; an approach that is well-established in this area (Clandinin 2007; Polkinghorne 1988; Riessman 2007). The report will be primarily distributed in electronic format, reducing the financial burden associated with such dissemination. Peer-reviewed journals will receive copies as will the Jerry Falwell Library of Liberty University and other academic outlets for knowledge

dissemination identified. Additionally, the elected officials from other states in which this problem is being investigated will be privy to the results of this study.

Research Ethics

Special considerations should be made to address potentially culturally sensitive material in the study. Respect for the opinions of those involved in data collection should be displayed in a manner where the participants are protected as an ethical priority (Tolley et al. 2016, 148). Potential participants of this study will receive an executive summary of its purpose, the factors involving those chosen to participate, what is expected of them as participants, any possible risks or benefits they might experience from participation, an assurance of confidentiality and voluntary participation, and contact information for the researcher, in order to satisfy the informed consent aspect of this study (Tolley et al. 2016, 75). This study will present no more than minimal risk of harm to participants and involves no procedures for which written consent would normally be required (Williamson 1995).

Proposed Timeline/Milestones and Other Considerations

Timelines and budgets should be established and modified as needed, to allow for adequate resources to conduct quality research. The proposed timeline of the research proposal commenced September 1, 2021, with final survey results collected in the early months of 2022. Reviewing materials while collecting data provided an opportunity for preliminary analysis. As the study proceeded, considerations were needed to adjust or alter the level of funding or time restraints, as unexpected costs sometimes exceed any contingencies considered.

Funding was sought in the amount of $5,000 by the researcher to provide for copying paper, ink for the printer, overhead expenses such as utilities and travel (gasoline) expenses, acquiring licensed usage of SPSS and SurveyMonkey platforms, as well as final report

production, dissemination costs, and eventual printing. Time invested included development of

the above related elements of the study (September 2021), the distribution and collection of the

responses (December 2021 to January 2022), analysis of the responses (March-April 2022),

finalizing the results (June 2022), producing a completed study report (August 2022), and

disseminating the results of the study to the target foundations and professional/governmental

audiences. The work was successfully defended on September 28, 2022 at Liberty University.

Target Foundations and Professional/Governmental Audiences

1. Elected Members of the Pennsylvania Senate and House Committees on Budget, Education, and Appropriations.
2. Pennsylvania School Boards Association.
3. Pennsylvania Association of Realtors.
4. Pennsylvania Department of Community and Economic Development.
5. Pennsylvania Institute of Certified Public Accountants.
6. Pennsylvania State Association of Boroughs.
7. Pennsylvania State Association of Townships.
8. County Commissioners Association of Pennsylvania.

Chapter Four: Results

Demographic data collected from the 3,387 invitations emailed and the 364 unique participant respondents found that over 97% of the total respondents identified as Caucasian (White). Almost 90% of the board members reported household incomes well above poverty levels ($55,534+), and most were married or in a home partnership, with only 8% identifying as "single" (see Figures 4-1 through 4-3). As such, these homogenous groups do not lend to further analysis for differentiation.

Other sections of the demographic data lend itself to further analysis. Differentiation resides in the survey answers concerning age groups, sex, education level, and whether the respondents have children who actively attend the district in which they serve. Exactly half of these public servants reported as having children currently attending the district they serve in, while 3.8% have children who attend a different district than the one in which they live (Figures 4-4 and 4-5). However, analysis of this group determined no significant differentiations, as all survey questions were returned as retaining the null, so this group was not further investigated. The majority of the respondents were in the 36-55 age group (50.8%), with another 44% in the 55+ group, with 62.6% of the total identifying as males (Figures 4-6 and 4-7). The respondents were also grouped into five regions throughout the state, consistent with groupings used by state and local agencies in Pennsylvania. Those regions include Northern PA, Pittsburgh, Central PA, Harrisburg, and Philadelphia (Figure 4-8 and Table 1). All of the examples represented above were identified as the independent variables to be explored through nonparametric Mann Whitney U (dichotomous variables) and Kruskal Wallis H tests (Lippert scale responses) to determine the validity of the proposed hypotheses by testing whether or not the independent samples come from the same population (Cronk 2018, 113), with further exploration possible through crosstabulations in SPSS. These are appropriate tests to be utilized, as the dependent variables are not normally distributed, giving the study an opportunity to compare the medians. The nonparametric tests demand few assumptions outside the dependent variables being of ordinal measurement and the independent variables being nominal or ordinal (Cronk 2018, 114).

In an effort to address the research question, "What policies are supported by locally elected school board members for implementation to resolve the perceived financial and social disparities between school districts created by the collection of property taxes to fund the Pennsylvania K-12 educational system?", the study will begin by addressing the three individually proposed hypotheses.

SQ 1: Is there support for a viable, socially acceptable alternative method of funding to replace property taxes in the Pennsylvania K-12 educational funding formula?(Survey Questions 1-3)

- $H_0 1$: There are no viable, socially acceptable alternative methods of funding to replace property taxes in the Pennsylvania K-12 educational funding formula.

- $H_a 1$: There is/are viable, socially acceptable alternative methods of funding to replace property taxes in the Pennsylvania K-12 educational funding formula.

There is support for a viable, socially acceptable alternative methods of funding to replace property taxes in the Pennsylvania state public school funding formula; the null is rejected. Survey questions one through three addressed this hypothesis. Demographic statistical data from the survey results showed that 55% of respondents believed that K-12 schools could be funded without the use of property taxes in the first question, whereas 59% actively support efforts to eliminate property taxes from the school funding formula in the second question. However, nearly 70% of the school board members stated that they would personally pay a higher sales and/or income tax rate to fund K-12 schools in Pennsylvania if it eliminated property taxes in the third question (Figures 4-9 thru 4-11). Crosstabulation of the survey results showed that all regions overwhelmingly support alternative funding methods, except for Philadelphia, which indicates a majority of respondents there are opposed to alternative revenue sources (Figure 4-12).

SQ 2: Are there demographic/geographic groups that support a school choice voucher system for the Pennsylvania K-12 education system?(Survey Questions 4-7)

- $H_0$2: There are no demographic/geographic groups that support a school choice voucher system for the Pennsylvania K-12 education system.

- H_a2: There are demographic/geographic groups that support a school choice voucher system for Pennsylvania K-12 education.

There are demographic/geographic groups that support a school choice voucher system for the Pennsylvania K-12 education system; the null is rejected. A Kruskal Wallis test was conducted comparing respondents' education level with their responses to Survey Question #4 ("How likely are you to support the concept of school choice in Pennsylvania?"). A significant result was found ($H(3) = 12.980$, $p < .01$), indicating that the groups differed from each other. Follow-up pairwise comparisons indicated that those with a high school diploma or GED generally supported school choice in Pennsylvania, whereas those with progressively higher education levels lent less and less support for this concept (Figures 4-13 and 4-14). Crosstabulation showed that 51% of the HS/GED respondents supported school choice, while none of the other three demographic educational levels could top 38% support (Figure 4-15).

A Kruskal Wallis test was conducted comparing respondents' education level with their responses to Survey Question #5 ("How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"). A significant result was found ($H(2) = 8.766$, $p < .05$), indicating that the groups differed from each other. Follow-up pairwise comparisons indicated that those in the 18-35 years of age group supported this policy, while those in the other two groups showed similar asymptomatic significances to this group (Figures 4-16 and 4-17). Crosstabulation showed that just over 70% of those in the aforementioned age group stated that they were in favor of school choice (Figure 4-18). However, this age group constituted less than six percent of the total respondents.

Additionally, employing the independent variable "Region" to the same question resulted in the identification of respondents in the Northern PA region as being 44% in favor and 43% opposed to school choice, while the other regions could not garner more than 31% total support among respondents (Figure

4-19). Here, significance was found (H(3) = 9.493, p = .05), with deeper investigation into the pairwise data showing a rejection of the null when comparing the Northern region to both Pittsburgh and Philadelphia regions, with an .009 and .021 significance respectively (Figures 4-20 thru 4-22).

A Kruskal Wallis test was conducted comparing respondents' education level with their responses to Survey Question #6 ("How likely are you to support a state voucher program excluding use of property taxes?"). A significant result was found (H(3) = 22.107, p = .000), indicating that the groups differed from one other. Follow-up pairwise comparisons indicated that those in the lowest educational group showed significance when posed against all three other groups. Support for a state educational voucher system excluding the use of property taxes was discovered among HS/GED respondents (median = 4), while the other educational categories gauged no higher than a median of 2 (Figures 4-23 and 4-24). Crosstabulation showed 53% of those in the HS/GED category supported this concept, while the remaining groups just barely topped 30% in support (Figure 4-25).

SQ 3: Are there demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system?(Survey Questions 8-12)

- $H_0 3$: There are no demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system.

- $H_a 3$: There are demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system.

There are demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system; the null is rejected.

A Kruskal Wallis H test was conducted comparing Educational Level with Survey Question #8 ("Do you agree that disparities exist in educational opportunity between Pennsylvania school districts?"). A significant result was found (H(3) = 8.826, p < .05), indicating that the groups differed from each other (Figure 4-26). Follow-up pairwise comparisons indicated a significance of .030 between the highest and

lowest levels of education, where 79% of PhDs strongly agreed to the 53% of the HS/GED group who felt the same. Nearly 87% of the total respondents acknowledged disparities in educational opportunities between school districts in Pennsylvania (Figures 4-27 and 4-28).

A Kruskal Wallis H test was conducted comparing Regions with Survey Question #9 ("Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?"). No significant result was found (H(4) = 9.313, p = .054), however, the Northern and Central regions showed significantly less support when comparing the medians (Figure 4-29). Crosstabulation provided that nearly 54% of respondents acknowledged racial and educational disparities between Pennsylvania school districts, however, those in the Pittsburgh and Philadelphia regions measured at 59% and 64% while the other regions averaged only 46% acknowledgement (Figure 4-30).

A Mann Whitney U test was calculated examining support for Survey Question #9 ("Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?") between the sexes. Women were significantly more in agreement with this question than the men, with respective mean ranks of 204.01 to 169.67, where U = 12,579.00 and p < .05 (Figure 4-31). Crosstabulations showed 54% of the female respondents answered in the affirmative, topping the 48% of men who could acknowledge such (Figure 4-32).

A Kruskal Wallis H test was conducted comparing Educational Level with the results to Survey Question #10 ("Do you agree that educational and racial disparities can be positively addressed through a school choice state voucher program?"). A significant result was found (H(3) = 15.431, p = .001), indicating that the groups differed from each other (Figure 4-33). Follow-up pairwise comparisons indicated that the lowest educational group showed significance of .000 and .007 for the Master and PhD levels respectively (Figure 4-34). Crosstabulations confirm the decreasing amount of support for this proposition with increasing educational levels (Figure 4-35), with a 45%-34% spread among the lower educated respondents opposed to a mere 23.3% support level from all others participating.

A Kruskal Wallis H test was conducted comparing Educational Level with the results from Survey Question #11 ("Do you agree that enhanced educational opportunities through the implementation

of a school choice state voucher program can help enhance social justice?"). A significant result was found ($H(3) = 11.882$, $p < .01$), indicating that the groups differed from each other (Figure 4-36). Follow-up pairwise comparisons indicated that the lowest educational group displayed significances of .005, .001, and .013 with each of the progressive levels respectively, whereas the former did not demonstrate significance among them (Figure 4-37). Crosstabulations confirmed the supportive group was nearly divided on the subject, while all other groups greatly opposed the notion, with less than 21% of the total responses in agreement with this assertion (Figure 4-38).

A Kruskal Wallis H test was conducted comparing Educational Level with the results from Survey Question #12 ("How likely are you to support a school choice state voucher program which gave increased funding for individuals with special educational needs or "at-risk" students?"). A significant result was found ($H(3) = 13.039$, $p < .01$), indicating that the groups differed from each other (Figure 4-39). Follow-up pairwise comparisons indicated again a significant variance between the HS/GED group and the two highest groups (Master and PhD), with 57% of the lowest educated vowing favor to this policy (with only 23.4% of this group rejecting it), while only 29.48% of the former agreed with the proposal and the Associate/Bachelor group almost evenly split on the topic (Figures 4-40 and 4-41).

Summation of Results

This study has determined that the null has been rejected in each of its three proposed hypotheses, with sound data analysis to support this claim. As such, it has been determined that there is support for viable, socially acceptable alternative methods of funding to replace property taxes in Pennsylvania state K-12 education systems. It is also confirmed that there exist demographic/geographic groups that support a school choice voucher system for Pennsylvania K-12 education systems. Further, it has been verified that there are demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 educational system. As previously stated, the social choice theoretical framework for analysis involves the combination of individual opinions, preferences, interests, or welfares

to reach a collective decision for social welfare (Sen 2008), which is what is employed when individual school board members are polled on their opinions, and the decisions they make at each vote of their boards dispenses policy positions reflective of these individual stances. Granted, their opinions may be shaped by the comments they receive from their constituencies. Regardless, it is ultimate what they think that drives policy in their districts. The next chapter will analyze the results of these polls towards the research question, with a discussion of current legislative efforts in Harrisburg on these topics and a proposal for public policy considerations moving forward.

Chapter Five: Policy Recommendations

Consideration of the study question "What policies are supported by locally elected school board members for implementation to resolve the perceived financial and social disparities between school districts created by the collection of property taxes to fund the Pennsylvania K-12 educational system?" has brought to light several demographic and regional differences among the school board members that responded to the study survey. While overall policy recommendations can be deduced based upon consensus of the whole, it would seem more conducive to consider the responses on a regional basis, as Pennsylvania has been well known to have its liberal and conservative areas, often espousing quite different policy considerations. This will be considered below with the suggestion of policy recommendations concerning the topics of this study.

There has been found support for viable, socially acceptable alternative methods of funding to replace property taxes in the Pennsylvania state public school funding formula, as presented in Sub-Question #1 of this study. 56% of respondents stated their belief that public schools can be funded in Pennsylvania without collecting property taxes, as proposed in Survey Question #1 (Figure 4-9). In Survey Question #2, 59% of the school board members polled stated support for eliminating property taxes as a revenue source, in lieu of sales and income taxes, to support these schools (Figure 4-10). Nearly 70% responded that they would personally be willing to pay a higher rate on sales and income taxes if it eliminated property tax as a revenue source to fund K-12 education in the state, as shown through the analysis of Survey Question #3 (Figure 4-11). Implementing the proponents of social choice theory, as previously discussed, shows that these policy makers are inclined to support legislative efforts to amend the public-school funding formula to eliminate property taxes as a revenue source for school

budgets. As such, policy makers in Harrisburg are correct to pursue such ends through partisan negotiations which will produce mutually agreeable statutes towards the elimination of annual property tax as a revenue stream. Efforts should continue to find common ground between the partisan groups in Harrisburg to eliminate the use of property taxes to fund K-12 education in Pennsylvania. However, the direct participation of the state may not be welcome when considering future legislative proposals towards these ends. Proof for this is found in analysis of the survey questions posed for Sub-Question #2.

There have been identified demographic/geographic groups that support a school choice state voucher system for the Pennsylvania K-12 education system, as presented in Sub-Question #2. However, there is little consensus across regions and other demographics that counter the one small group that does support school choice state voucher systems (Figures 4-15, 4-18, 4-19). Maintaining local controls has been a prevailing thesis among the respondents, with 66% of respondents affirming opposition or indifference to state controlled vouchers (Figure 4-25). One option that was not explored in this study is to discover whether local control of the funding, such as county collection and distribution to their school districts, would be a favorable situation for these board members. Local collection and distribution may be made easier if Pennsylvania considered changing its current school district structure from 501 independent school systems to a county school administration system, reducing the total districts to 67. County treasurers could set school tax rates established by the school district for collection among the businesses and individuals in their county and distribute those funds as a 'pass-through' to the district, where the board and administration would implement their budget activity. In this way, various counties may have different rates for sales and income taxes, creating competition among them to keep these rates low enough to attract new residents and businesses while ensuring that an appropriate

level of revenue is generated to provide a competitive educational system which will also attract new residents interested in bettering their children's opportunities.

While there have been found demographic/geographic groups that believe racial disparity and social justice will improve through the implementation of both a tax burden shift and a school choice voucher system within the Pennsylvania K-12 education system, the concept is not popular as a whole across the state. While disparities were identified and acknowledged by a vast majority of respondents (Figures 4-27 and 4-28), regional breakdowns showed that respondents in historically liberal regions (Pittsburgh and Philadelphia) contrasted significantly with the more conservative, rural areas of the state (Figure 4-29). This situation lends itself to the concept of state legislation recognizing county-run school systems and county-led revenue collection efforts. In this way, the counties employing more liberal ideals can implement policies conducive to combatting the more prevalent issues of racial disparity and social justice in their regions, while those in the more conservative counties (where minority populations are lower) can adjust their policies to address the more immediate concerns of their constituencies, such as agricultural or trade skills programs. Understanding that school programs addressing the issues faced by at-risk and minority students increase the budgets of these schools through staffing, materials, and other accommodations, each of the 501 school districts have to determine the immediacy of these needs by their students and may have to limit these services based on a 'lack of need' in comparison to the school's overall missions. For example, rural schools often offer agricultural programs that involve the purchase of large farm equipment for students to learn skills with, and with these large purchases, these smaller revenue schools do not have the funding or the need for social justice programs, as their minority populations are much lower than the larger city school systems. Conversely, inner city schools tend to offer more programs for at-risk students who may

get in trouble with crime, teenage pregnancies, or other issues that may arise from poor, split, or untraditional families. Programs to help prepare them for child rearing, job placement, or career training will need to be funded in these schools to address the immediate concerns and lives of their students. As such, allowing for county-wide school systems with local school boards and local tax collection to fund the system is an appropriate consideration that should be vetted by the legislature in Harrisburg.

Current events lend a sneak-peak to the thoughts and ideas being presented by legislators and judges concerning school funding. The Pennsylvania Property Tax/Rent Rebate Program is supported by the sales of lottery tickets through the PA Lottery and offers a maximum standard rebate of $650 to qualifying homeowners, but supplemental rebates can boost rebates to $975 (PaDoR 2022). 260,294 homeowners (65+), renters, and people with disabilities across Pennsylvania will be issued rebates totaling roughly $121.7 million this year (Stockburger 2022). This is but a fraction of the property tax bill sent out by local districts but helps those with fixed incomes to meet their portion of contribution to the public systems. However, private school systems have been essentially left out of the funding formula, receiving their budget revenues from privately paid tuitions for attendance, while those same parents are not exempt from their annual school tax billing, also. The state of Maine had established law that excluded private and parochial schools from public funding sources, until recently, when the US Supreme Court ruled 6-3 that Maine cannot exclude religious schools from tuition assistance programs allowing parents to use vouchers to send their children to public or private schools. So, whereas the respondents in this study did not support such blending of educational sources with public money, it looks like they will need to make some changes to their statutes to allow for attendance at these parochial schools and for-profit academies (*Carson v. Makin* 2022). Representing the

majority, Chief Justice John Roberts wrote, "The state pays for tuition for certain students at private schools so long as they are not religious. That is discrimination against religion, Maine's 'nonsectarian' requirement for its otherwise generally available tuition assistance payments violates the Free Exercise Clause of the First Amendment. Regardless of how the benefit and restriction are described, the program operates to identify and exclude otherwise eligible schools on the basis of their religious exercise." With Vermont being the only other state currently with a similar program, other states could now use this ruling to initiate state educational voucher programs which include parochial and private schools, such as Pennsylvania.

John Fairchild, who currently works as Director of Administrative Services at Lewisburg Area School District, and whose work was previously covered in the literature review of this study, was contacted with the results of this study, and asked to comment. He has graciously allowed for the inclusion of these comments here. Fairchild states that the data and results of this study can serve as a good basis for policy discussions in Harrisburg. He warns that anti-tax legislators could potentially take certain liberties with the data and use it as a reason to push the elimination of property taxes without understanding the levels of increase for the sales and income taxes to offset the eliminated real-estate source. In an email correspondence, Fairchild opined:

> I find the results that folks with lower educational levels support school choice and vouchers more than higher educated folks to be interesting, and (it) make(s) sense. I think this reflects an understanding of the more educated folks that their tax dollars that currently go to their good school district would be taken away and redistributed to other schools for other students - something I know most folks are not a fan of - i.e., NIMBYism. I think the lower educational level people may not get this, or if they do, maybe they're a part of a school district that needs significant additional funding and support. I think the same also applies to the younger members of the group who may not understand what all is involved in a statewide voucher system.

Fairchild, having explored the levels of increases proposed by both SB76 and

HB76 and finding them inadequate to fund the shortfall created by the elimination of

property tax as a source for K-12 school funding, noted:

> I also find it interesting that there is generalized support for doing away
> with property taxes and replacing them with sales and income taxes.
> However, as a topic for another study another day, I would bet that
> support for that proposal dries up pretty quickly if people found out how
> much sales and income taxes would have to rise in order to fully replace
> property taxes.

This consideration is crucial to the success or failure of future legislation designed to

eliminate property tax as a school funding source for Pennsylvania K-12 education. If the level

of taxation created through sales and income taxes exceeds the amount saved by not paying

property taxes to the local school district, there is no perceived advantage for the average

constituent and support should wain. Legislators should carefully consider these rate changes and

hold public meetings where citizens can voice their concerns over these proposals in effort to

fully understand how they will be directly affected by these changes in funding formulas prior to

any overhauls which may disrupt the budgetary responsibilities of the local school board

members. Additionally, considerations should be made as to whether to convert to county-wide,

locally controlled school districts in an effort to reduce budgets of redundant upper-level

administrative salaries and pension obligations. With a single administration covering the entire

county, many high-level salaries and pensions can be excluded upon merger of these districts

into one, reducing the strain on the alternative tax sources and potentially offering increased

funding for such programs as proposed in this study concerning at-risk and minority students.

Future studies should explore the rate levels appropriate to fully fund an elimination of property

taxes in Pennsylvania K-12 school funding and the acceptance of these rates by the constituency.

Future studies should consider whether there is still support among the same groups studied here

when presented with an actual tax rate increase that would sustain the school systems, which Fairchild believes will be too much for many current supporters to promote implementation.

The findings of this study can be generalized to prove that there is support for eliminating property tax funding in Pennsylvania K-12 education, as the sample size is significant enough to allow for such assumptions. As such, policymakers across the various school districts can use this information to discover prevalent attitudes among their colleagues within their counties and regions to create coalitions that can help educate and influence their elected officials to draft legislation conducive with their needs, while allowing for regional variations as noted. This is a natural extension of the social choice theory, as the individual officials in Harrisburg draw upon all the information received from this study and school district officials to form their own opinions, which will be thrust upon the policies they will eventually support. Legislators will be able to use the information in this and future studies to create laws that will allow for local controls, as currently experienced, and give County Treasurers the ability to collect the sales/income taxes as set by their county districts for distribution to the schools, as is currently practiced in some counties. By allowing for regional variations and locally controlled rates, state officials can avoid claims of overreach by state powers over local leaders, gaining trust and support from all parties involved.

Next step follow-up actions from this study should include a formal public presentation and posting of its recording to a public website will be employed with the key stakeholders identified. This will afford for discussion and the posing of questions related to the findings from the community. A brochure to summarize the results can be produced for the general public, with distribution of the study to various universities, libraries, and journals for further peer-review.

Theoretical and Empirical Contributions

Research contributions from academic work can be categorized as: applied research, conceptual/theoretical research, and empirical research (CIES 2021). With the inclusion of empirical quantitative analysis subjected to currently accepted scientific methods, and the presentation of theoretical policy recommendations situated within a specific geopolitical context, this study has accomplished two of these qualifications towards academic contributions to public policy and social choice theory. The theoretical contributions by each of the four proposed policy recommendations can be summarized as such:

Policy Recommendation	Theoretical Contribution to Social Choice Theory
No Property Taxes	Refutes Lav and Leachman's assertions opposing elimination of property taxes
County School Systems	Supports work by Pierre Bourdieu and others on sociological theory to school choice and influence of affluence
School Choice In-County; Voucher System	Informs Bourdieu's concepts on Cultural Capital and Value-Added School Options
Local Boards Set Rates; Administered by County Treasurer	Informs local tax rate competition theories by Buettner and others

Table 3: Theoretical Contributions to Social Choice Theory

Iris J. Lav and Michael Leachman (2018) proposed the repeal or reform of legislation imposing property tax rate limits, advocating for systems reliant on such revenue, and calling for increases in other sources to stave off increase to real estate-based taxes. The team concluded that personal income taxes for high-income residents were appropriate considering this group gained the most from rising socio-financial inequality, and that raising rates on other commercial

and industrial taxes for increased revenue was also appropriate. However, this study has shown

that the geopolitical respondents in Pennsylvania have refuted such policy. While property tax

limits were the primary focus of Lav and Leachman's study, and elimination of such sources was

not, the four states highlighted (Michigan, New York, Massachusetts, and Oregon) were shown

to be less than successful at limiting their dependence on property taxes with alternative revenue

sources similar to those presented in this study. A vast majority of respondents in this study

refute Lay and Leachman's conclusions while supporting property tax elimination.

The influential work of Pierre Bourdieu within the realm of sociological theory has been

expounded upon by his contemporaries: Stephen Ball, Richard Bowe, and Sharon Gewirtz (1994,

1995, 1996). The team published research on the relationships between school choice and social

class. Although Bourdieu had not studied school choice at the K-12 level (to include charter

schools, school vouchers issued for attending private schools, and other provisions), the context

of his contributions included insights between education and social class (Bourdieu 1986). The

application of social choice theory and those of Bourdieu are presented within this study to those

very issues. Ball, Bowe, and Gewirtz contributed arguments for using a sociological approach,

based almost entirely on the work of Bourdieu, to merge social sciences with political discussion

about education markets (Ball et al. 1994, 1995, 1996). The researchers recognized the

importance of social class habitus in school choice practices, identifying three major social

groups: the middle class, the semi-skilled, and the working class. The team proposed that the

more affluent families participated in choice programs more often since they would benefit from

the "possibilities of choice" (Gewirtz et al. 1994). It is stated that more affluent families

can better identify class-differentiated features of individual schools, in accordance with

Bourdieu's concepts (Bourdieu 1986). These assertions were further studied and confirmed in

contemporary research studies (Bagley and Hillyard 2015; Kosunen 2014; Larsson and Hultqvist 2018). Bourdieu's theories have rarely been applied in researching a specific geography on school choice. Upon the presentation of the four policy recommendations herein, the transition to a countywide district concept and the allowance of school choice within the county systems would lend support to such application, allowing for the expansion of empirical knowledge in this field.

Bourdieu's concept of cultural capital, applied to value-added school choice options through curriculum diversification within the county systems, can allow socially disadvantaged parents and their children access to schools that provide curricular and/or extracurricular enrichment in sports, special education, and other programs important to the family. This access has been presumed to help the child attain cultural capital, leading to higher academic positions, better careers, and more affluent lifestyles (Yoon 2020, Bereményi and Carrasco 2018; Gardner-McTaggart 2016; Roda 2017; Wettewa 2016). Specialized schools within these county systems, focusing on academic, trade, STEM, or other academic areas, offer students an opportunity to choose their own path and gain valuable knowledge and training applicable to immediate opportunities in the marketplace. These opportunities are theorized to lead to a better life overall for the individual and their future family. The cultural capital gained through these accomplishments supports Bourdieu's assertions and begs consideration for such a system.

The work of Thiess Buettner (2001) in the field of municipal tax competition can be gleamed in the policy recommendation of this study, as each county district system would set their own tax rates for school funding contributions to their various schools. With the local controls over the school funding tax rates, which may affect local business and consumer activity, tax competition could result in significant competitive effects between local

jurisdictions where differences between greater tourism income or decreased economic activity creates unique strains on the revenue sources employed. Buettner's work ultimately found that larger jurisdictions set higher tax rates in regards to interjurisdictional competition, and confirmed the existence of local tax competition from previous studies as applied within US jurisdictions (Ladd 1992, Besley and Case 1995, Brett and Pinske 1997). Implementation of the policy recommendations herein and the subsequent evaluation of these new funding systems would inform Buettner's theories with empirical evidence supported through an applied research opportunity.

Policy analysis is but a singular practice within the realm of scholarship, with equal considerations being given to the public policy and the political science aspects of such endeavors. The discussions that are created from the vetting of empirical evidence, as presented in this study, can lead to the expansion of knowledge within the field of social choice theory concerning the funding of K-12 education. The recommendations presented can be implemented within any jurisdiction with such powers, such as US states, foreign sovereigns, etc. However, the various differentiations of those state governments will lend unique obstacles to implementation, while others have already established some of these recommendations with various success. Whatever its future application, the expansion of knowledge presented in this study represents scholarship, defined as academic study or achievement. The application of scientific methods and quantitative analysis to determine policy recommendations and the presentation of the theoretical contributions contained herein are thus presented for consideration. God Bless. dwb
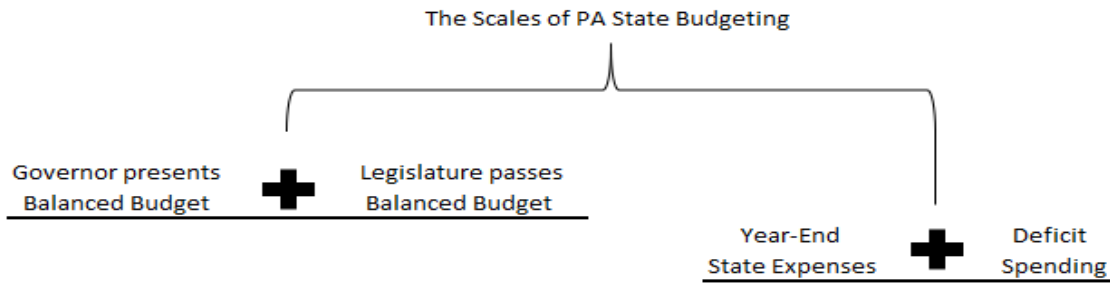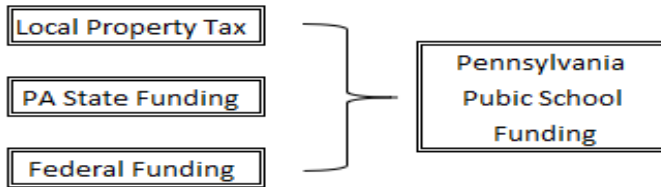
Appendix: Figures and Tables

The Scales of PA State Budgeting

Governor presents
Balanced Budget
➕
Legislature passes
Balanced Budget

Year-End
State Expenses
➕
Deficit
Spending

Figure 2-1: Weighing PA State Revenues vs Budget and Deficit Spending.

Current Revenue Sources for PA Public Schools:

Local Property Tax

PA State Funding

Federal Funding

Pennsylvania
Pubic School
Funding

Proposed Revenue Sources for PA Public Schools:

Alternate Tax

PA State Funding

Federal Funding

Pennsylvania
Pubic School
Funding
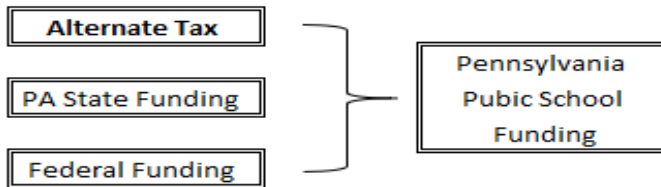
Figure 2-2: Current and Proposed Revenue Sources for PA Public Schools.

Category	Revenue Per Pupil	Percental Total Revenue
Local Revenue	$10,156	57.6%
State Revenue	$6,690	38.0%
Federal Revenue	$522	3.0%
Other Revenue	$255	1.4%

(Source: PA State Dept of Ed., 2020)

Figure 2-3: 2018 Per-student Revenues in Pennsylvania (PA DoE, 2020).

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White/Caucasian	354	97.3	97.3	97.3
	Black/African American	6	1.6	1.6	98.9
	Asian	3	.8	.8	99.7
	Native Hawaiian/ Pacific Islander	1	.3	.3	100.0
	Total	364	100.0	100.0	

Figure 4-1. Race of Survey Participant (self-identified).

Household Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to $26,854	6	1.6	1.6	1.6
	$26,855 - $55,363	36	9.9	9.9	11.5
	$55,534 +	322	88.5	88.5	100.0
	Total	364	100.0	100.0	

Figure 4-2. Household Income of Survey Participants.

Partner's Educational Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Partner/Single	27	7.4	7.4	7.4
	High School Graduate/GED	71	19.5	19.5	26.9
	Associate or Bachelor Degree	154	42.3	42.3	69.2
	Master Degree	94	25.8	25.8	95.1
	Terminal/PhD Degree	18	4.9	4.9	100.0
	Total	364	100.0	100.0	

Figure 4-3. Partner's Educational Level.

Kids in District?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	182	50.0	50.0	50.0
	Yes	182	50.0	50.0	100.0
	Total	364	100.0	100.0	

Figure 4-4. Does the board member have children that attend the district they serve?

Kids in Another District?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	343	94.2	96.1	96.1
	Yes	14	3.8	3.9	100.0
	Total	357	98.1	100.0	
Missing	System	7	1.9		
Total		364	100.0		

Figure 4-5. Does the board member have children attending another district?

Age Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 35	17	4.6	4.7	4.7
	36 - 55	185	50.5	50.8	55.5
	56 +	162	44.3	44.5	100.0
	Total	364	99.5	100.0	
Missing	System	2	.5		
Total		366	100.0		

Figure 4-6. Age Group of participants

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	136	37.4	37.4	37.4
	Male	228	62.6	62.6	100.0
	Total	364	100.0	100.0	

Figure 4-7. Sex of Survey Participants.

School Region

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Northern PA	55	15.0	15.1	15.1
	Pittsburgh Region	74	20.2	20.3	35.4
	Central PA	85	23.2	23.4	58.8
	Harrisburg Region	71	19.4	19.5	78.3
	Philadelphia Region	79	21.6	21.7	100.0
	Total	364	99.5	100.0	
Missing	System	2	.5		
Total		366	100.0		

Figure 4-8. School Region Served by Survey Participants.

School Region Geographic Illustration
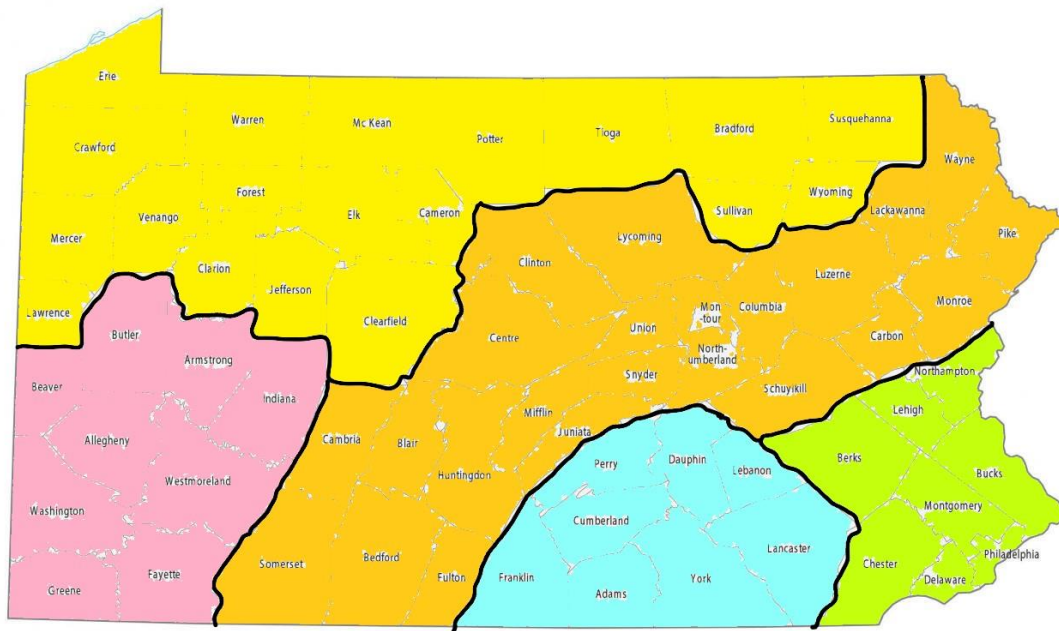
Region One: Northern PA	15.1% of total respondents
Region Two: Pittsburgh	20.3% of total respondents
Region Three: Central PA	23.4% of total respondents
Region Four: Harrisburg	19.5% of total respondents
Region Five: Philadelphia	21.7% of total respondents

Table 1: Pennsylvania counties broken into five geographic regions.

Do you believe that Pennsylvania public schools can be funded without the use of property taxes?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	161	44.0	44.2	44.2
	Yes	203	55.5	55.8	100.0
	Total	364	99.5	100.0	
Missing	System	2	.5		
Total		366	100.0		

Figure 4-9. Results from Survey Question #1, "Do you believe that Pennsylvania public schools can be funded without the use of property taxes?"

Do you support efforts to eliminate the use of property taxes for school funding in Pennsylvania?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	148	40.4	40.7	40.7
	Yes	216	59.0	59.3	100.0
	Total	364	99.5	100.0	
Missing	System	2	.5		
Total		366	100.0		

Figure 4-10. Results from Survey Question #2, "Do you support efforts to eliminate the use of property taxes for school funding in Pennsylvania?"

Would you be willing to pay higher sales and/or income tax to fund K-12 education funding in Pennsylvania if it eliminated property tax?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	109	29.8	29.9	29.9
	Yes	255	69.7	70.1	100.0
	Total	364	99.5	100.0	
Missing	System	2	.5		
Total		366	100.0		

Figure 4-11. Results from Survey Question #3, "Would you be willing to pay higher sales and/or income tax to fund K-12 education funding in Pennsylvania if it eliminated property tax?"

Crosstab

		Do you believe that Pennsylvania public schools can be funded without the use of property taxes?		
		No	Yes	Total
School Region	Northern PA	25	30	55
	Pittsburgh Region	28	46	74
	Central PA	41	44	85
	Harrisburg Region	27	44	71
	Philadelphia Region	40	39	79
Total		161	203	364

Figure 4-12. Results from the crosstabulation of Regions with Survey Question #1, "Do you believe that Pennsylvania public schools can be funded without the use of property taxes?"

Independent-Samples Kruskal-Wallis Test
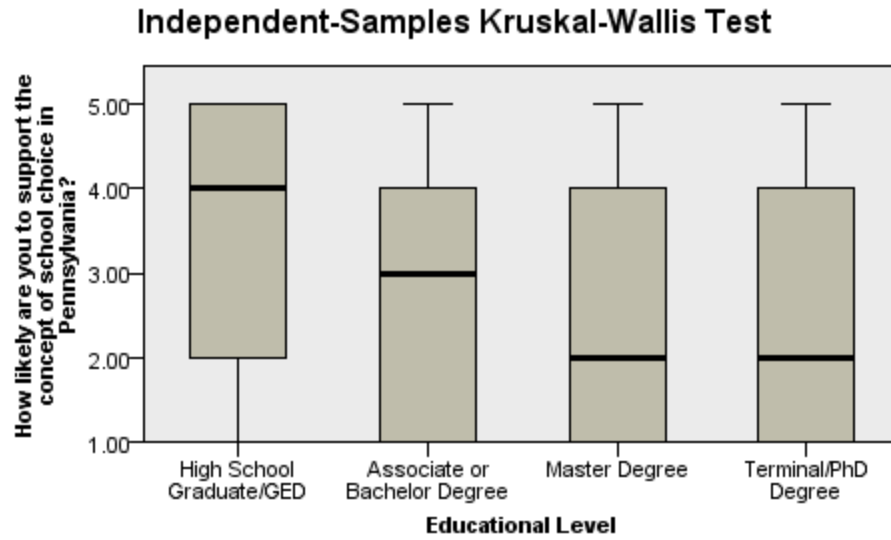
Total N	364
Test Statistic	12.980
Degrees of Freedom	3
Asymptotic Sig. (2-sided test)	.005

1. The test statistic is adjusted for ties.

Figure 4-13. Independent Samples Kruskal Wallis test for "Educational Level" with Survey Question #4, "How likely are you to support the concept of school choice in Pennsylvania?"

Pairwise Comparisons of Educational Level
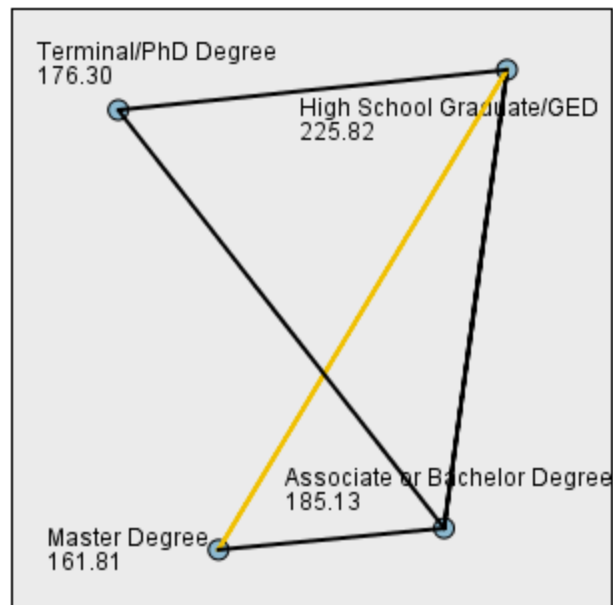
Each node shows the sample average rank of Educational Level.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Master Degree-Terminal/PhD Degree	-14.496	17.269	-.839	.401	1.000
Master Degree-Associate or Bachelor Degree	23.328	12.889	1.810	.070	.422
Master Degree-High School Graduate/GED	64.013	17.982	3.560	.000	.002
Terminal/PhD Degree-Associate or Bachelor Degree	8.832	16.178	.546	.585	1.000
Terminal/PhD Degree-High School Graduate/GED	49.517	20.468	2.419	.016	.093
Associate or Bachelor Degree-High School Graduate/GED	40.686	16.937	2.402	.016	.098

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-14. Pairwise Comparisons of Education Levels in Response to Survey Question #4, "How likely are you to support the concept of school choice in Pennsylvania?"

**Educational Level * How likely are you to support the concept of school choice in Pennsylvania?
Crosstabulation**

Count

		How likely are you to support the concept of school choice in Pennsylvania?					
		Highly Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Highly Likely	Total
Educational Level	High School Graduate/GED	9	6	8	6	18	47
	Associate or Bachelor Degree	50	30	20	31	30	161
	Master Degree	41	21	14	13	14	103
	Terminal/PhD Degree	22	6	5	8	12	53
Total		122	63	47	58	74	364

Figure 4-15. Crosstabulation of Educational Level with results from
Survey Question #4, "How likely are you to support the concept of
school choice in Pennsylvania?"
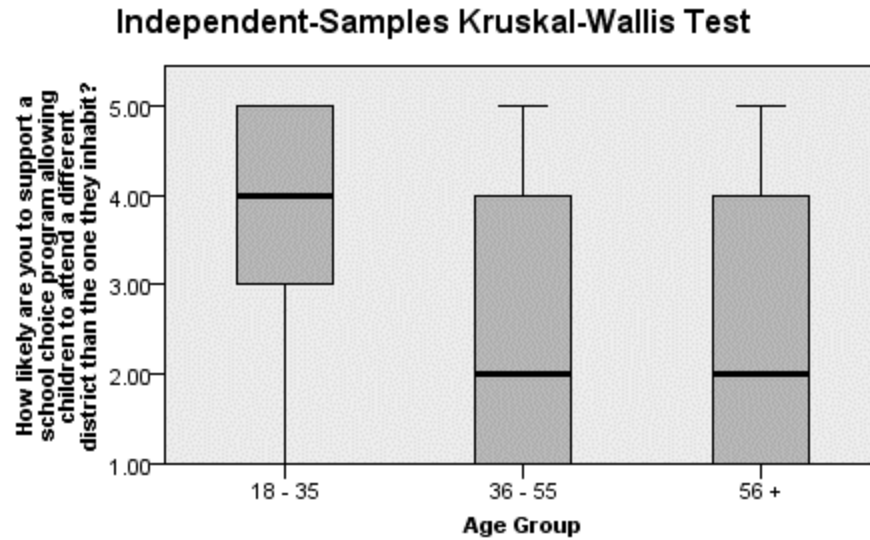
Figure 4-16. Independent Samples Kruskal Wallis test for "Age Group" with Survey Question #5, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

Pairwise Comparisons of Age Group

Each node shows the sample average rank of Age Group.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
56 +-36 - 55	4.853	10.863	.447	.655	1.000
56 +-18 - 35	75.986	25.738	2.952	.003	.009
36 - 55-18 - 35	71.133	25.585	2.780	.005	.016

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-17. Pairwise Comparisons of Age Group in Response to Survey Question #5, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

Age Group * How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit? Crosstabulation

Count

		How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?					Total
		Highly Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Highly Likely	
Age Group	18 - 35	3	1	1	6	6	17
	36 - 55	72	34	22	31	26	185
	56 +	71	26	13	27	25	162
Total		146	61	36	64	57	364

Figure 4-18. Crosstabulation of Age Group with results from Survey Question #5, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

School Region * How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit? Crosstabulation

Count

		How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?					Total
		Highly Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Highly Likely	
School Region	Northern PA	17	7	6	12	13	55
	Pittsburgh Region	36	12	6	14	6	74
	Central PA	32	18	7	12	16	85
	Harrisburg Region	23	14	8	15	11	71
	Philadelphia Region	38	10	9	11	11	79
Total		146	61	36	64	57	364

Figure 4-19. Crosstabulation of Region with results from Survey Question #5, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

Independent-Samples Kruskal-Wallis Test
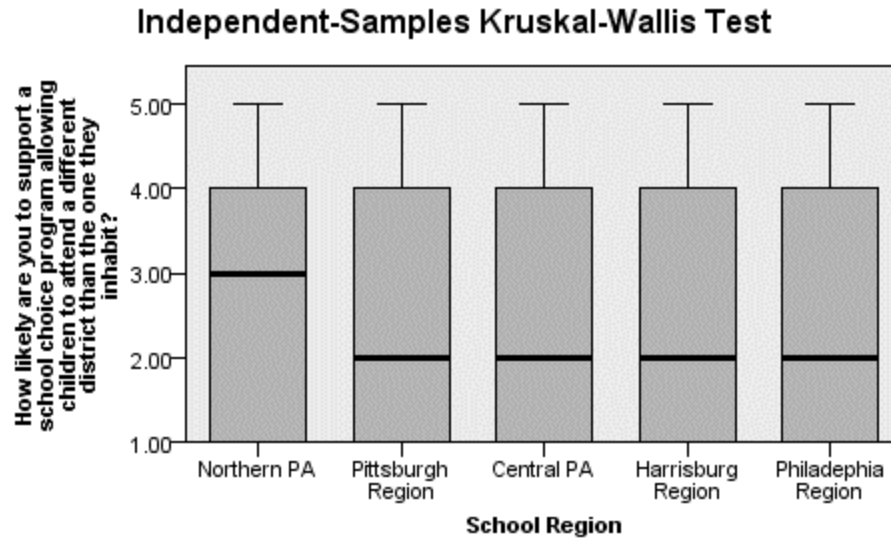
Total N	364
Test Statistic	9.493
Degrees of Freedom	4
Asymptotic Sig. (2-sided test)	.050

1. The test statistic is adjusted for ties.

Figure 4-20. Independent Samples Kruskal Wallis test for "Region" with Survey Question #5, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

Pairwise Comparisons of School Region
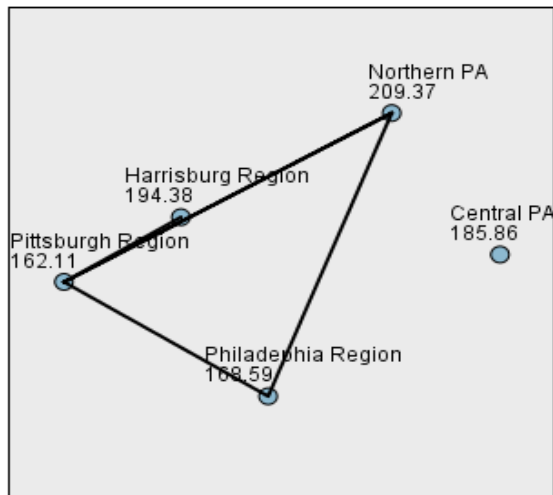
Each node shows the sample average rank of School Region.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Pittsburgh Region-Philadephia Region	-6.487	16.332	-.397	.691	1.000
Pittsburgh Region-Central PA	-23.757	16.051	-1.480	.139	1.000
Pittsburgh Region-Harrisburg Region	-32.272	16.771	-1.924	.054	.543
Pittsburgh Region-Northern PA	47.265	17.973	2.630	.009	.085
Philadephia Region-Central PA	17.270	15.777	1.095	.274	1.000
Philadephia Region-Harrisburg Region	25.785	16.509	1.562	.118	1.000
Philadephia Region-Northern PA	40.778	17.729	2.300	.021	.214
Central PA-Harrisburg Region	-8.516	16.231	-.525	.600	1.000
Central PA-Northern PA	23.508	17.470	1.346	.178	1.000
Harrisburg Region-Northern PA	14.992	18.134	.827	.408	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-21. Pairwise Comparisons of Region in Response to Survey Question #5, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

Pairwise Comparisons of Age Group

Each node shows the sample average rank of Age Group.

| Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
56 +-36 - 55	4.853	10.863	.447	.655	1.000
56 +-18 - 35	75.986	25.738	2.952	.003	.009
36 - 55-18 - 35	71.133	25.585	2.780	.005	.016

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-22. Pairwise Comparisons of Age Group in Response to Survey Question #5, "How likely are you to support a state voucher program excluding use of property taxes?"

Independent-Samples Kruskal-Wallis Test
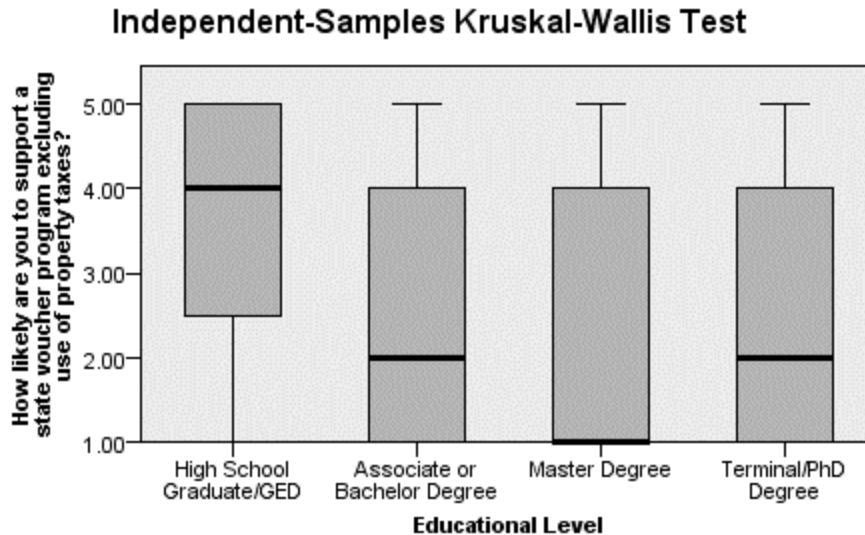
Total N	364
Test Statistic	22.107
Degrees of Freedom	3
Asymptotic Sig. (2-sided test)	.000

1. The test statistic is adjusted for ties.

Figure 4-23. Independent Samples Kruskal Wallis test for Education with Survey Question #6, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

Pairwise Comparisons of Educational Level
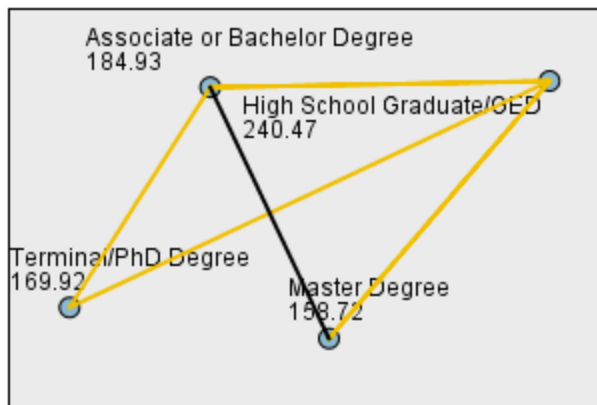
Each node shows the sample average rank of Educational Level.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Master Degree-Terminal/PhD Degree	-11.192	17.074	-.656	.512	1.000
Master Degree-Associate or Bachelor Degree	26.208	12.744	2.057	.040	.238
Master Degree-High School Graduate/GED	81.745	17.779	4.598	.000	.000
Terminal/PhD Degree-Associate or Bachelor Degree	15.017	15.995	.939	.348	1.000
Terminal/PhD Degree-High School Graduate/GED	70.553	20.236	3.486	.000	.003
Associate or Bachelor Degree-High School Graduate/GED	55.536	16.745	3.317	.001	.005

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-24. Pairwise Comparisons of Education Level in Response to Survey Question #6, "How likely are you to support a school choice program allowing children to attend a different district than the one they inhabit?"

Educational Level * How likely are you to support a state voucher program excluding use of property taxes? Crosstabulation

Count

		How likely are you to support a state voucher program excluding use of property taxes?					
		Highly Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Highly Likely	Total
Educational Level	High School Graduate/GED	7	5	10	10	15	47
	Associate or Bachelor Degree	59	28	20	29	25	161
	Master Degree	54	10	12	16	11	103
	Terminal/PhD Degree	26	6	4	8	9	53
Total		146	49	46	63	60	364

Figure 4-25. Crosstabulations of Educational Level with results from Survey Question #6, "How likely are you to support a state voucher program excluding use of property taxes?"

Independent-Samples Kruskal-Wallis Test
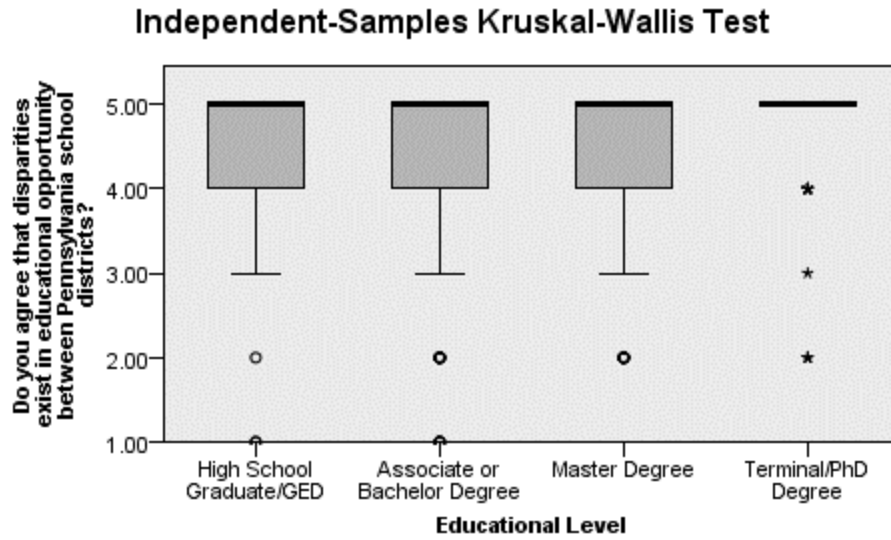
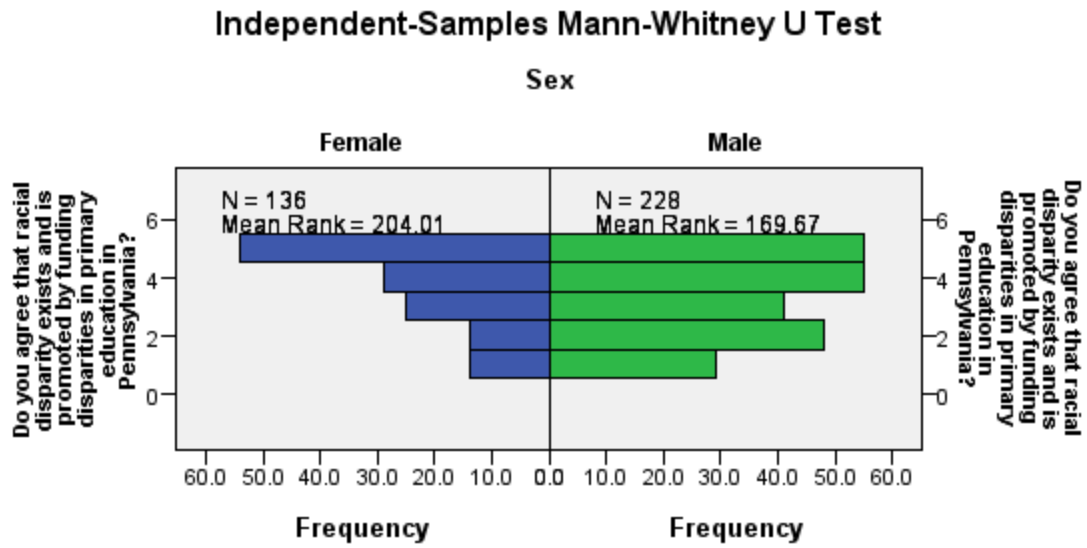| Total N	364
Test Statistic	8.826
Degrees of Freedom	3
Asymptotic Sig. (2-sided test)	.032

1. The test statistic is adjusted for ties.

Figure 4-26. Independent Samples Kruskal Wallis test for Educational Level with Survey Question #8, "Do you agree that disparities exist in educational opportunity between Pennsylvania school districts?"

Pairwise Comparisons of Educational Level
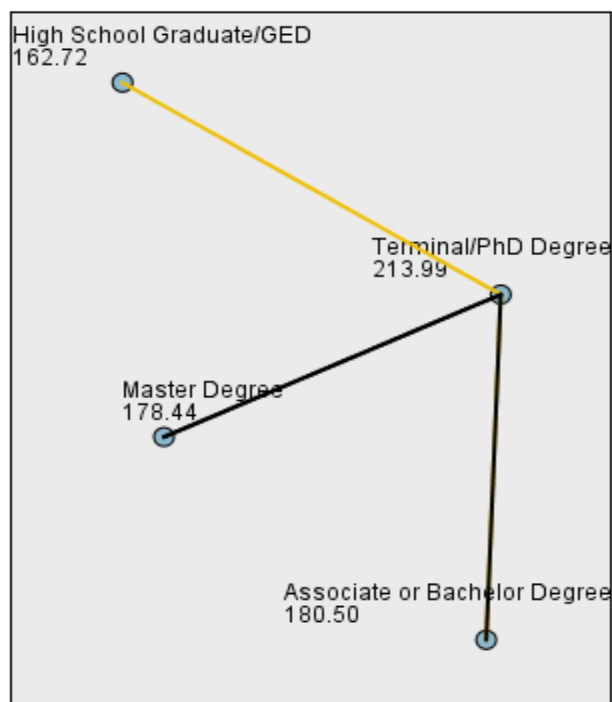
High School Graduate/GED
162.72

Terminal/PhD Degree
213.99

Master Degree
178.44

Associate or Bachelor Degree
180.50

Each node shows the sample average rank of Educational Level.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
High School Graduate/GED-Master Degree	-15.718	16.039	-.980	.327	1.000
High School Graduate/GED-Associate or Bachelor Degree	-17.780	15.107	-1.177	.239	1.000
High School Graduate/GED-Terminal/PhD Degree	-51.267	18.256	-2.808	.005	.030
Master Degree-Associate or Bachelor Degree	2.061	11.497	.179	.858	1.000
Master Degree-Terminal/PhD Degree	-35.549	15.403	-2.308	.021	.126
Associate or Bachelor Degree-Terminal/PhD Degree	-33.487	14.430	-2.321	.020	.122

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-27. Pairwise Comparisons of Educational Level in Response to Survey Question #8 ("Do you agree that disparities exist in educational opportunity between Pennsylvania school districts?").

Educational Level * Do you agree that disparities exist in educational opportunity between Pennsylvania school districts? Crosstabulation

Count

| | | Do you agree that disparities exist in educational opportunity between Pennsylvania school districts? | | | | | |
		Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Total
Educational Level	High School Graduate/GED	2	1	8	11	25	47
	Associate or Bachelor Degree	4	6	13	40	98	161
	Master Degree	0	6	3	35	59	103
	Terminal/PhD Degree	0	3	1	7	42	53
Total		6	16	25	93	224	364

Figure 4-28. Crosstabulation of Educational Level with the results of Survey Question #8 ("Do you agree that disparities exist in educational opportunity between Pennsylvania school districts?").

Independent-Samples Kruskal-Wallis Test
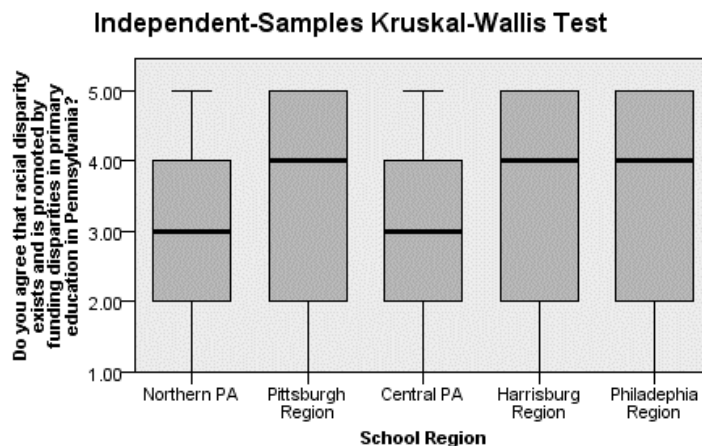
Total N	364
Test Statistic	9.313
Degrees of Freedom	4
Asymptotic Sig. (2-sided test)	.054

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

Figure 4-29. Independent Samples Kruskal Wallis test for Educational Level with Survey Question #9 ("Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?").

School Region * Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?   Crosstabulation

Count

		Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?					
		Highly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Highly Agree	Total
School Region	Northern PA	5	10	18	15	7	55
	Pittsburgh Region	4	16	10	18	26	74
	Central PA	12	15	18	20	20	85
	Harrisburg Region	11	10	14	14	22	71
	Philadelphia Region	11	11	6	17	34	79
Total		43	62	66	84	109	364

Figure 4-30. Crosstabulations of School Region with the results from Survey Question #9 ("Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?").

Independent-Samples Mann-Whitney U Test

Sex

Total N	364
Mann-Whitney U	12,579.000
Wilcoxon W	38,685.000
Test Statistic	12,579.000
Standard Error	945.734
Standardized Test Statistic	-3.093
Asymptotic Sig. (2-sided test)	.002

Figure 4-31. Independent Samples Mann Whitney U test for Sex with the results from Survey Question #9 ("Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?").

Sex * Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?   Crosstabulation

Count

		Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?					
		Highly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Highly Agree	Total
Sex	Female	14	14	25	29	54	136
	Male	29	48	41	55	55	228
Total		43	62	66	84	109	364

Figure 4-32. Crosstabulations of sex with the results from Survey Question #9 ("Do you agree that racial disparity exists and is promoted by funding disparities in K-12 education in Pennsylvania?").
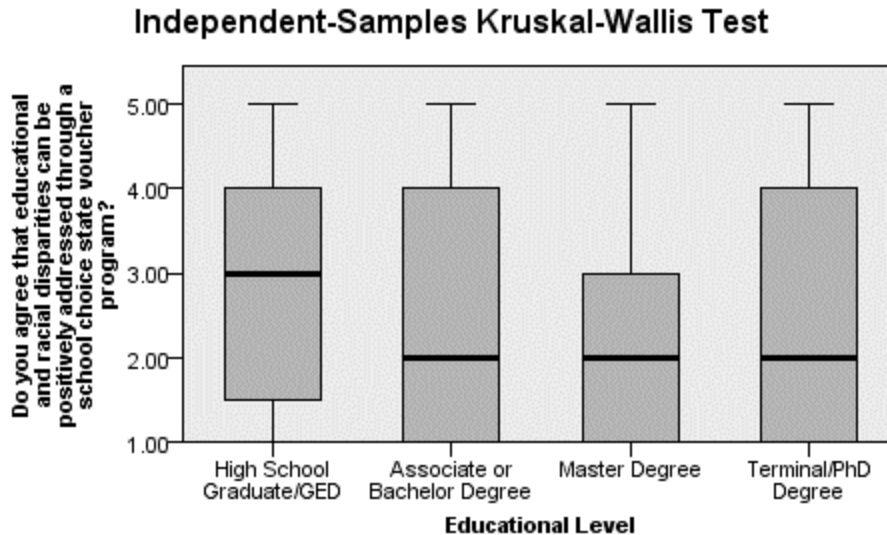
Figure 4-33. Independent Samples Kruskal Wallis test for Educational Level with Survey Question #10 ("Do you agree that educational and racial disparities can be positively addressed through a school choice state voucher program?").
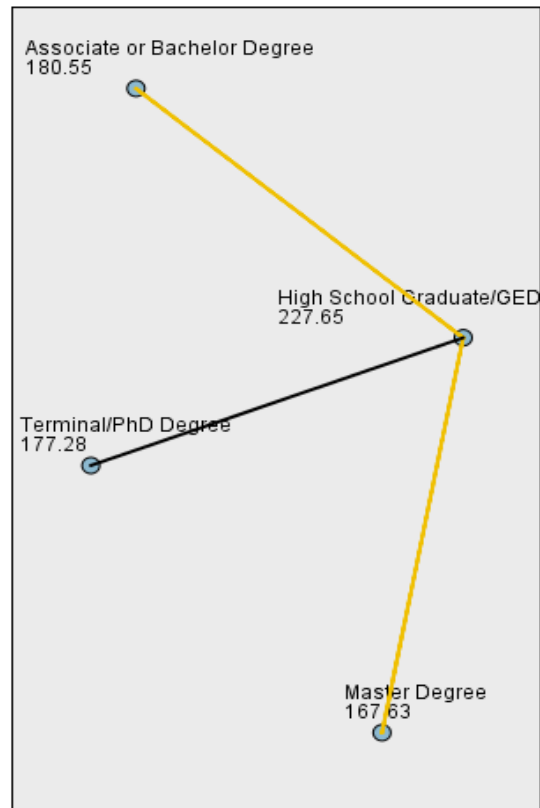
Pairwise Comparisons of Educational Level
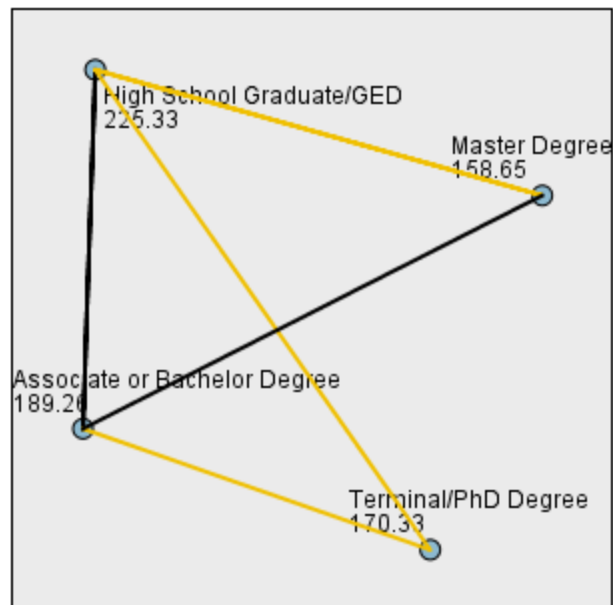
Each node shows the sample average rank of Educational Level.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Master Degree-Terminal/PhD Degree	-11.685	17.216	-.679	.497	1.000
Master Degree-Associate or Bachelor Degree	30.618	12.850	2.383	.017	.103
Master Degree-High School Graduate/GED	66.684	17.927	3.720	.000	.001
Terminal/PhD Degree-Associate or Bachelor Degree	18.934	16.128	1.174	.240	1.000
Terminal/PhD Degree-High School Graduate/GED	55.000	20.405	2.695	.007	.042
Associate or Bachelor Degree-High School Graduate/GED	36.066	16.884	2.136	.033	.196

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-34. Pairwise Comparisons of Educational Level in Response to Survey Question #10 ("Do you agree that educational and racial disparities can be positively addressed through a school choice state voucher program?").

Educational Level * Do you agree that educational and racial disparities can be positively addressed through a school choice state voucher program?   Crosstabulation

Count

| | | Do you agree that educational and racial disparities can be positively addressed through a school choice state voucher program? | | | | | |
		Highly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Highly Agree	Total
Educational Level	High School Graduate/GED	12	4	10	10	11	47
	Associate or Bachelor Degree	51	35	28	32	15	161
	Master Degree	42	27	21	7	6	103
	Terminal/PhD Degree	23	10	6	8	6	53
Total		128	76	65	57	38	364

Figure 4-35. Crosstabulations of Educational Level with results to Survey Question #10 ("Do you agree that educational and racial disparities can be positively addressed through a school choice state voucher program?").

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Independent-Samples Kruskal-Wallis Test
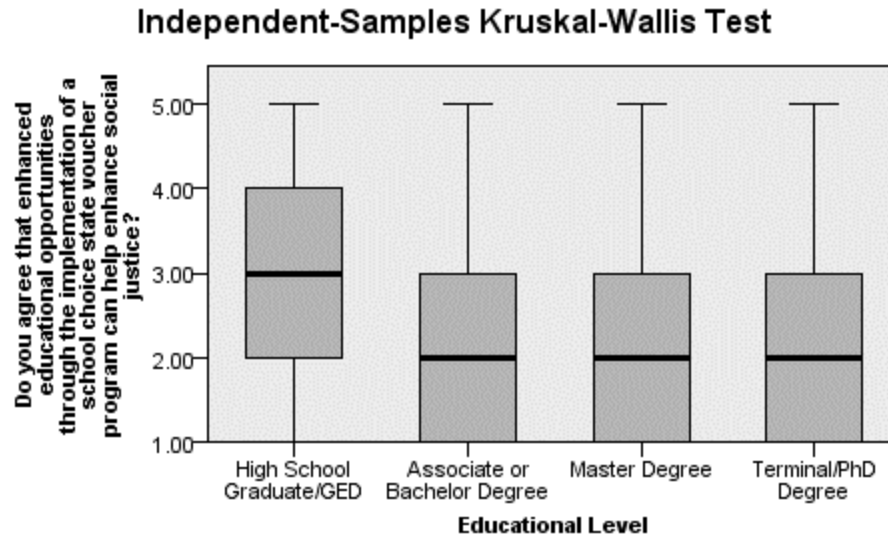
Total N	364
Test Statistic	11.882
Degrees of Freedom	3
Asymptotic Sig. (2-sided test)	.008

1. The test statistic is adjusted for ties.

Figure 4-36. Independent Samples Kruskal Wallis test for Educational Level with Survey Question #11 ("Do you agree that educational and racial disparities can be positively addressed through a school choice state voucher program?").

Pairwise Comparisons of Educational Level

Each node shows the sample average rank of Educational Level.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Master Degree-Terminal/PhD Degree	-9.652	17.033	-.567	.571	1.000
Master Degree-Associate or Bachelor Degree	12.919	12.714	1.016	.310	1.000
Master Degree-High School Graduate/GED	60.018	17.737	3.384	.001	.004
Terminal/PhD Degree-Associate or Bachelor Degree	3.267	15.957	.205	.838	1.000
Terminal/PhD Degree-High School Graduate/GED	50.366	20.189	2.495	.013	.076
Associate or Bachelor Degree-High School Graduate/GED	47.099	16.706	2.819	.005	.029

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-37. Pairwise Comparisons of Educational Level in Response to Survey Question #11 ("Do you agree that enhanced educational opportunities through the implementation of a school choice state voucher program can help enhance social justice?").

Educational Level * Do you agree that enhanced educational opportunities through the implementation of a school choice state voucher program can help enhance social justice? Crosstabulation

Count

		Do you agree that enhanced educational opportunities through the implementation of a school choice state voucher program can help enhance social justice?					Total
		Highly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Highly Agree	
Educational Level	High School Graduate/GED	11	8	11	11	6	47
	Associate or Bachelor Degree	63	36	31	27	4	161
	Master Degree	46	24	17	13	3	103
	Terminal/PhD Degree	25	6	10	9	3	53
Total		145	74	69	60	16	364

Figure 4-38. Crosstabulations of Educational Level with the results to Survey Question #11 ("Do you agree that enhanced educational opportunities through the implementation of a school choice state voucher program can help enhance social justice?").
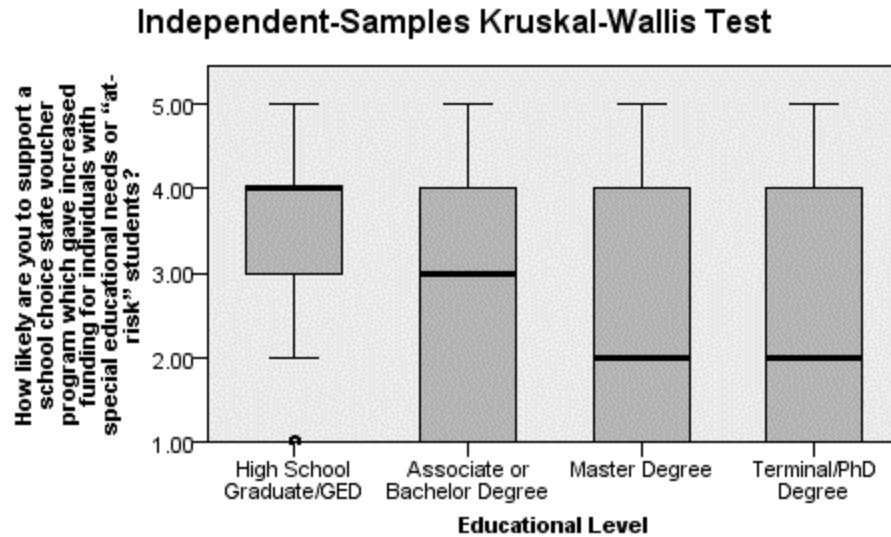
Figure 4-39. Independent Samples Kruskal Wallis test for Educational Level with Survey Question #12, "("How likely are you to support a school choice state voucher program which gave increased funding for individuals with special educational needs or "at-risk" students?").

Pairwise Comparisons of Educational Level
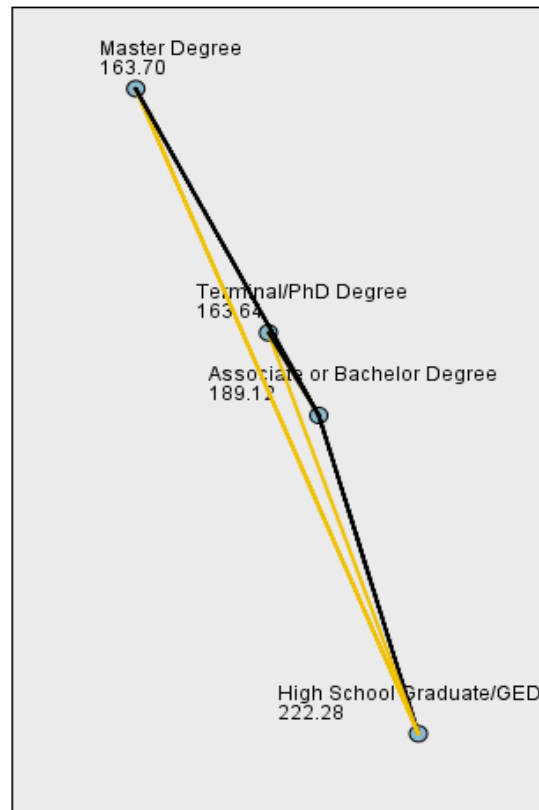
Each node shows the sample average rank of Educational Level.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Terminal/PhD Degree-Master Degree	.062	17.306	.004	.997	1.000
Terminal/PhD Degree-Associate or Bachelor Degree	25.480	16.212	1.572	.116	.696
Terminal/PhD Degree-High School Graduate/GED	58.635	20.512	2.859	.004	.026
Master Degree-Associate or Bachelor Degree	25.417	12.917	1.968	.049	.295
Master Degree-High School Graduate/GED	58.573	18.021	3.250	.001	.007
Associate or Bachelor Degree-High School Graduate/GED	33.155	16.973	1.953	.051	.305

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Figure 4-40. Pairwise Comparisons of Educational Level in Response to Survey Question #12 "How likely are you to support a school choice state voucher program which gave increased funding for individuals with special educational needs or "at-risk" students?").

Educational Level * How likely are you to support a school choice state voucher program which gave increased funding for individuals with special educational needs or "at-risk" students? Crosstabulation

Count

		How likely are you to support a school choice state voucher program which gave increased funding for individuals with special educational needs or "at-risk" students?					
		Highly Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Highly Likely	Total
Educational Level	High School Graduate/GED	8	3	9	19	8	47
	Associate or Bachelor Degree	44	26	24	42	25	161
	Master Degree	40	13	18	21	11	103
	Terminal/PhD Degree	17	10	12	10	4	53
Total		109	52	63	92	48	364

Figure 4-41. Crosstabulations of Educational Level with the results from Survey Question #12 ("How likely are you to support a school choice state voucher program which gave increased funding for individuals with special educational needs or "at-risk

Quantitative Survey Programming in SPSS

Table 2: SPSS programming for survey responses.

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VITA

David William Scott Bolton is the eldest son of James William Bolton, Jr. (dec'd. 2021) and Cynthia Lee Keener. He was born in Baltimore, Maryland, and raised in Hanover, Pennsylvania. David earned a Bachelor of Science in Business Administration from Western Governors University in 2016 and completed his Master of Business Administration from Western Governors University in 2018. He received University Excellence Awards in Marketing and for his Cornerstone CapSim, ranking in the 98th percentile in the nation for performance. David completed his doctoral coursework with a 3.97 GPA in four semesters. David has served in many elected and appointed government positions since first serving on the McSherrystown Borough (PA) Council in 2011, including the PA Governor's Rural Development Council, the Pennsylvania State Association of Boroughs' Board of Directors, and serving as Borough Manager for Abbottstown (Adams County, PA) and North York Boroughs (York County, PA) simultaneously. David has been bestowed many honors for his government and community work, including the PA Governor's Excellence in Local Government Affairs for Fiscal Accountability and Best Management Practices (2020), the Anthony J. DeFilippi Award for Outstanding Achievement in Government Affairs (2017), and the Distinguished Service Award from the Pennsylvania State Association of Boroughs (2019). He has two grown children (Kimberly Persephone and Matthew Solomon), and two stepchildren at home (Logan and Abigail), and has four grandchildren (Quinn, Emma, Lucien, and Nola). He lives in Hanover, Pennsylvania, with his wife, Tara Renee.