Education Equity for Low Income School Districts in Wisconsin

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Abstract

School budgets are being cut on every level throughout Wisconsin and other states. Due to current public school funding, the amount of income that schools are given to operate with is based on revenue caps calculated by property values and a small amount from the state funding based on the number of students in the district. This method of public school funding has caused a drastic disparity between low income and wealthier school districts. Schools in low income school districts have fewer resources compared to high income school districts, thereby providing an unequal opportunity for education. The federal Equal Educational Opportunities Act (EEOA) of 1974 required that all students have an equal opportunity for education. With the current public school funding system, this study investigated whether this law is being upheld in Wisconsin.

The researcher compared low income school district's standardized test scores to high income school district's scores. One hundred Wisconsin school district financial reports and test score percentages were analyzed to determine whether there is a difference in educational opportunities. The school data was collected from public sources and a t test was done to determine the significance between test scores of school districts with high cost per pupil expenses and low cost per pupil. The study found significant evidence that low income school districts have lower test score percentages than high income school districts.

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Chapter 1

Introduction

Background

Public school budgets are being cut on every level throughout Wisconsin and other states. Due to the current school funding formula, the amount of income that schools are given to operate with is based upon revenue caps calculated using local district property values and a small amount from state funding based upon the number of students in the school district. This method of public school funding has caused a drastic disparity among low income and wealthier districts. Low income districts will never be able to get the operating funding they need to provide an adequate education for their students because the majority of their funding is designed to come from local property taxes. This gives an unfair advantage to students in wealthier districts. Even though there are laws in place to deter this from happening, the gap in test scores and quality of education due to the lack of financial resources grows in many states.

Statement of the Problem

The Federal Equal Educational Opportunities Act (EEOA) of 1974 required that all students have an equal opportunity for education. It particularly protects against racial issues that could contribute to an unfair educational advantage. However, with the current school funding system, is that law being upheld? Currently, schools in low

income school districts have fewer resources because the majority of the funding comes from local property taxes. These property taxes are calculated based upon the local property values. If a student lives in a neighborhood where property values average $50,000, is that student getting the same level of education that a student is getting that lives in a neighborhood with property values that average $250,000 or more? The government has implemented grants and adjusted percentages for low income areas, but are they enough? According to the article, "Children Living in Low-Income Neighborhoods Less Likely to Graduate High School: Study" from the Huffington Post, "Children that grow up in poor neighborhoods have a significantly reduced chance of graduating from high school, … Black children who grow up in neighborhoods with high poverty and unemployment have a 76 percent chance of graduating high school, compared to a 96 percent chance for black students living in affluent neighborhoods". (Children Living In Low-Income Neighborhoods Less Likely To Graduate High School: Study, 2015) Are the present funding laws and adjustments closing the gap between the levels of education for low income students versus high income students?

Guiding Questions

Research questions that were investigated in this study are: Is there a difference in the amount of funding per student in a low income school district versus a higher income school district? How are the funds being allocated in the corresponding school districts? What are the student Wisconsin Knowledge and Concepts Examination

(WKCE) scores in low income school districts compared to the higher income school districts? Has the funding per student increased or decreased over the last 5 years? Is the percentage of change in the percentage of advanced and proficient WKCE scores the same for low income school districts and higher income school districts? How does the percentage of special education students affect school funding and standardized test scores? Do school districts with a low percentage of special education students have lower costs per pupil and higher WKCE test scores?

Purpose Statement

This research study explored the level of equality among low income school districts and high income school districts. It analyzed the amount of funding per pupil, the school district's spending for instruction, and the WKCE scores in one hundred different Wisconsin school districts. The researcher's goal was to determine whether students from high income school districts have an unfair educational advantage over students from low income school districts or are the levels of education received the same regardless of the monies spent on each student.

Hypotheses

This study involved the analysis of fifty low income and fifty high income school district budgets and their financial reports over the five years 2009 to 2014, along with

each school district's WKCE scores, to determine whether low income school districts with less funding have lower WKCE scores compared to higher income school districts in Wisconsin. The following five sets of hypotheses were studied:

Null Hypothesis 1: There is no difference in public school funding and the averaged WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

Research Hypothesis 1: There is a difference in public school funding and the averaged WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

$$H_0 = \quad \bar{X}_{Low} = \bar{X}_{High}$$

$$H_r = \quad \bar{X}_{Low} \neq \bar{X}_{High}$$

Null Hypothesis 2: There is no change in the averaged WKCE standardized test scores of eighth grade students from low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

Research Hypothesis 2: There is less change in the averaged WKCE standardized test scores of eighth grade students for low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

$$H_0 = \quad \bar{X}_{Change\ for\ Low} \geq \bar{X}_{Change\ for\ High}$$

$$H_r = \quad \bar{X}_{Change\ for\ Low} < \bar{X}_{Change\ for\ High}$$

Null Hypothesis 3: There is no difference in school funding and the Mathematics WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

Research Hypothesis 3: There is a difference in school funding and the Mathematics WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

$$H_0 = \bar{X}_{\text{Low Math}} = \bar{X}_{\text{High Math}}$$

$$H_r = \bar{X}_{\text{Low Math}} \neq \bar{X}_{\text{High Math}}$$

Null Hypothesis 4: There is no difference in school funding and the Reading WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period of 2009 to 2014.

Research Hypothesis 4: There is a difference in school funding and the Reading WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period of 2009 to 2014.

$$H_0 = \bar{X}_{\text{Low Reading}} = \bar{X}_{\text{High Reading}}$$

$$H_r = \bar{X}_{\text{Low Reading}} \neq \bar{X}_{\text{High Reading}}$$

Null Hypothesis 5: There is no difference in the averaged WKCE standardized test scores of eighth grade students in school districts with a high percentage of special education

students compared to school districts with a low percentage of special education students over the 3 year period 2011 to 2014.

Research Hypothesis 5: There is a difference in school funding and the averaged WKCE standardized eighth grade students in school districts with a high percentage of special education students compared to school districts with a low percentage of special education students over the 3 year period 2011 to 2014.

$$H_0 = \bar{X}_{\text{Low SPED}} = \bar{X}_{\text{High SPED}}$$

$$H_r = \bar{X}_{\text{Low SPED}} \neq \bar{X}_{\text{High SPED}}$$

Definition of Terms

WKCE test scores were used to determine the level of education that students are receiving in their school districts. A definition provided by the dpi.wi.gov website is, "The Wisconsin Knowledge and Concepts Examination (WKCE) is customized to measure the Wisconsin Model Academic Standards (WMAS) … WKCE is administered to all students enrolled in grades 4, 8, and 10 in Wisconsin public schools during the fall of each school year. The WKCE provides information about student attainment of subject-area proficiency to students, parents, and teachers, and information to support curriculum and instructional planning. The WKCE is designed to meet the requirements of NCLB accountability goals and Wisconsin Statutes."

Low income is defined as income below the Wisconsin Total Revenue per Member average. At or below income level will be defined as income below the Wisconsin income average. Wisconsin Total Revenue per Member average was $12,705 in 2013. (Wisconsin School District Performance Report, 2015)

High income is defined as income above the Wisconsin Total Revenue per Member average. At or above income level will be defined as income above the Wisconsin income average. Wisconsin Total Revenue per Member average was $12,705 in 2013. (Wisconsin School District Performance Report, 2015)

Chapter Summary

The current school district funding formula is based upon the number of students and the property values in a public school district. School districts with low local property values will generate less revenue than school districts with high local property values. This research study investigated the possible relationship between student achievement and the amount of financial resources available. It was the researcher's hypotheses that low income school districts will have lower WKCE scores than higher income school districts due to their lack of funding. The second purpose of this research study was to investigate whether the disparity between the levels of education provided is becoming more acute and generating larger gaps in student learning.

Chapter 2

Review of Related Literature

Background

The research hypotheses analyzed in this study, if accepted, illustrate the impact of school spending on student learning between low income public school districts and higher income school districts. This research investigation explored the level of equality among low income school districts and high income school districts. It analyzed the amount of funding per pupil, the school current educational cost per pupil, and the percentage of advanced and proficient Wisconsin Knowledge and Concepts Examination (WKCE) scores in one hundred different Wisconsin school districts. The data analysis was designed to determine if students from high income school districts have an unfair educational advantage over students from low income school districts or are the levels of education received the same.

Unequal Funding Among School Districts

Is there a difference in the amount of funding per student in a low income school districts versus a higher income school districts? Several studies have been done to investigate this issue. In the article, "A Research Synthesis / Unequal School Funding in the United States by Bruce J. Biddle and David C. Berliner (2002), the authors listed the average annual expenditures per student within each state in 1998. The list displayed a

range of $5,000 for spending per student. The article also stated that the disparity is even greater within states, with ranges of up to $9,000 per student (p.49). As stated in "Closing the Opportunity Gap" by Prudence L. Carter and Kevin G. Welner (2013), "Disparities also exist among states, with per pupil expenditures in 2008 ranging from nearly $18,000 in Vermont to just over $6,000 in Utah. The federal government has no policies that compensate adequately for these disparities. In fact, the largest federal education program, Title I of the Elementary and Secondary Education Act, which is intended to redress the effects of poverty on children's learning, allocates funds in part based on levels of state per pupil spending, reinforcing rather than ameliorating those wealth-based inequalities. … In California, for example, high-poverty districts spent, on average, $259 less per pupil than low-poverty districts, and high-minority districts spent $499 less than low-minority districts. In higher-spending New York, these differentials were even greater: $2,927 and $2,636, respectively" (p. 79). In Wisconsin, the recent difference between the lowest and highest educational cost per member was $30,117 in 2014 (Wisconsin School District Performance Report, 2015).

Current reported funding provides per-pupil revenue and costs per student, but doesn't account for the different types of expenses required to provide a quality education in low income districts. Twelve percent of student enrollment in Wisconsin public schools have a concentrated student poverty of 30% or higher. Costs to educate high-poverty districts are elevated due to the various needs of the child. Basic necessities, such as food, safety, warm coats, and school supplies, must be met in order for the student to concentrate in school and focus on their education. The financial

statistics provided to compare the cost of a student's education does not account for the variances in student need, amount of special education costs, or difference in labor markets. Wisconsin's funding level is the closest to the US average of $10,807 per student in 2009, yet at a 97% variation between the highest and lowest poverty simulation, the state does not account for the poverty level in its funding distribution. In fact, Wisconsin has a nearly flat state funding distribution, with a $10,984 per pupil to 0% poverty versus $10,653 per pupil to 30% and over poverty level (Baker, Sciarra, & Farrie, June 2012).

How are the funds being allocated in the corresponding school districts? The majority of funding comes from local property taxes. The percentage that comes from federal, state, or local taxes varies from state to state. The article, "Public School Funding and Performance" by John Mackenzie (2006), explored common arguments for increasing school funding. The author provided a bar graph of 2003 per-pupil education spending by state. The graph gave an excellent visual of the amount of money coming from different sources, such as federal, state, property taxes, or local taxes. In Illinois, Pennsylvania, Nebraska, Texas, South Dakota, and North Dakota, property tax funded the majority of school budgets. In Wisconsin, 39% of school funding came from local property taxes in 2003 (Mackenzie, 2006, Figure 7). In the 2012-2013 school year, 47% of Wisconsin's state revenue per member funding came from local property and non-property tax, 45% came from state aid, and 8% came from federal aid. Wisconsin's flat state funding distribution, coupled with local property tax funding based upon property

values, constituted 92% of the state's educational funding (School Financial Services, 2016).

Relationship Between School District WKCE scores and Per Pupil Funding

What are the student WKCE scores in low income school districts compared to the higher income school districts? Is the percentage of change the same for low income school districts and higher income school districts? Many of these same questions were addressed in Deborah A. Verstegen's (2015) article, "On Doing an Analysis of Equity and Closing the Opportunity Gap" regarding the equity of Nevada schools. Her research focused on the equity and amount of funding distributed to Nevada's school districts. Verstgen found that some Nevada school districts have 14 to 20 times more funding per pupil than other school districts and test scores were similarly unequal. The disparity in Nevada is large, there is a wide range of funding among school districts. As one would predict, the lowest funding is in the large urban school districts while the highest funding is in small isolated school districts.

Reports give various opinions on whether test scores are affected by lack of funding. John Mackenzie stated that participation rates are not always taken into account when analyzing test scores compared to funding per pupil, for example SAT and ACT test scores are not a student requirement in all school districts, therefore only college bound students tend to take the tests (Mackenzie, 2006).

Cost of Special Education

How does the percentage of special education students affect school funding and standardized test scores? Do school districts with a low percentage of special education students have lower costs per pupil and higher WKCE test scores? Special education students often get grouped into the average cost per student, or are overlooked completely when test scores are analyzed. In order to get a more accurate perspective of the effect school funding has on a student's education, analysis must take into account that special education students require and receive additional funding for their education and may produce lower test scores depending on their disabilities. As stated in "What Do We Know About the Costs of Special Education? A Selected Review" by Stephen Chaikind and Louis C. Danielson (1993), "Average special education costs range from approximately $1,000 per pupil for students with speech or language impairments to over $30,000 per pupil for those with deaf-blindness… total costs for those receiving special education have remained approximately two times the costs of regular education" (p. 2-3).

The Individuals with Disabilities Education Act (IDEA) of 1997 and 2004 states that exceptional learners are required to have a specific Individualized Education Plan (IEP) created by a team of professionals and the plan must legally be followed by the school and their teachers. A student's IEP outlines their educational accommodations, assessment procedures, short-term and long-term goals and objectives (Gensler, 2006). Rebecca Gensler stated it nicely in her article, "Effects on No Child Left Behind Act of Special Education Regarding Standardized Testing" (2006), when she wrote "Requiring

that all students' in the same grade levels progress be measured by the same standardized test ignores all the work and consideration of IEPs" (p. 12). She also addressed the levels of special education needs when she stated, "At the present time NCLB only acknowledges students with severe cognitive disabilities as needing alternate assessments. The legislation does not recognize the needs of students with moderate disabilities. These students are also recognized as needing special education because they are not meeting the same standards as their peers. This diagnosis should hold some value while they complete the standardized tests required by NCLB. To ensure the success and eliminate the discouragement of these students, student progress should be measured at the grade level and standards that are appropriate to their IEP goals" (p. 13). Gensler's work points out the significant gap between a student's IEP and the grade level standardized test that the student is being held accountable. If an IEP is created due to disabilities that hinder the student from preforming at grade level, then the standardized test should reflect that in the content tested (Gensler, 2006). Special education students increase education costs by receiving additional services legally required by IDEA, yet are typically tested and held accountable at a higher educational level than stated in their IEP. The literature reviewed reinforces the fact that the higher the percentage of special education students in a school district, the greater negative effect on the school district's educational expenses and test scores.

Laws Designed to Prevent Unequal Education

Are the funding laws and adjustments closing the gap between the levels of education offered to low income students versus high income students? Court cases have addressed unequal education for students in low income school districts. A dissertation by Rebecca Grade Gates (2005), titled "Fiscal Equity For At-Risk Students: A Quantitative Analysis of the At-Risk Index Component of the New Mexico Public School Funding Formula", presented an overview of litigation on equity and the disparity. She stated, "By 2005, according to the Campaign for Fiscal Equity, twenty-five plaintiffs [students, parents, school districts, or advocacy groups] had declared victories at their State's highest court, eighteen claimed victories, and seven states currently are waiting court decisions ... typically the results of the litigation results in the following pattern, of 'winning the case carries with it an increase in state funding and losing the case carries with it an increase in local funding'" (p. 29).

Education is not mentioned in the United States Constitution, therefore it is the sole responsibility of the state to educate its' citizens. All litigation regarding unequal education falls at the state level. Any litigation filed in the federal courts is either dismissed or no judgment is made because it is a state matter. Ultimately, court cases result in a funding issue. A win is on paper only, funding has not changed due to a court decision. The court case most referred to in the literature found was *Vincent v. Voight*, 614 N.W.2d 388 (2000). "The state supreme court held that Wisconsin students have the right to 'an equal opportunity for a sound basic education [which] will equip students for their roles as citizens and enable them to succeed economically and

personally' and defined that right to include 'the opportunity for students to be proficient in mathematics, science, reading and writing, geography, and history, and . . . receive instruction in the arts and music, vocational training, social sciences, health, physical education and foreign language.' However, the court also concluded that the plaintiffs had not presented evidence that students were being denied this opportunity" (School Funding Cases in Wisconsin, 2016). Test scores have not been enough evidence for plaintiffs to prove an inequality of education.

Attempt to Equalize Funding

What is Wisconsin currently doing to level out school funding and provide equal opportunities to all students? In Faith Crampton's publication, Wisconsin (2015), "Wisconsin remains the only state to use the guaranteed tax base formula, referred to as the "equalization formula," as its sole form of basic aid. Equalization aid is computed via a complex three-tier guaranteed tax base formula where the first tier acts like a flat grant and the second as a foundation without a required minimum local tax rate. The third tier most resembles a true guaranteed tax base approach although it also contains a "negative aid" feature, which, on paper, acts like a recapture provision. State aid also includes 32 categorical aid programs. Special education is the largest categorical aid program at $369 million, more than half of the total" (p. 283).

An additional initiative program that affects school funding is the charter and private school vouchers. Charter and private schools give citizens a choice in their

student's education. Students are not limited to the public school options in their school district, which is determined solely on their address. Both charter school and private schools are alternative options to public school and operate independently from other schools in the district. Charter schools primarily operate on state school funding and private schools get partial funding through school vouchers. According to Crampton (2015), "Under the previous biennial budget, vouchers to nonprofit and religious schools were expanded statewide and eligibility broadened to include middle class families. Total state funding for vouchers increased to accommodate higher enrollments, and funding per voucher increased dramatically. In the 2015–2017 biennium, this trend continues" (p. 283).

Chapter Summary

Many studies have included research on the topic of an unequal education in low income school districts versus high income school districts. The literature reviewed points to a disparity in school district funding. Other literature contradicts the agreement that test scores are affected by funding per pupil. It is the purpose of this research study to determine if students in Wisconsin are receiving an unequal education, based upon their required state standardized test scores, resulting from different levels of school funding.

Current laws are designed to prevent an inequality in the education provided to Wisconsin students. Court cases have been presented and found no evidence of an

unequal education, although many new court cases are filed every day and have not come to a verdict. The topic of an equal education for all student has been a hot topic in the political arena and has resulted in many studies done for legislators. It is from these studies that Wisconsin has initiated Equalization Aid and a school voucher program (School Funding Cases in Wisconsin, 2016).

Chapter 3

Methodology

Background

The school funding formula, in the Midwestern state studied, is based upon the number of students and the local property values in a school district. School districts with low property values generate less total revenue per member than school districts with high property values. This research study explored the possible relationship between student achievement and the amount of resources available to the school district. The second purpose of this research study was to investigate whether there is a disparity between the levels of education and generating larger gaps between low income and high income school districts.

Description of Data Collection Methods

Data was collected on total revenue per member in each district, percentage of revenue from local property taxes per district, current education cost per pupil per district, and the percentage of advanced and proficient Wisconsin Knowledge and Concepts Examination (WKCE) test scores for the one hundred Wisconsin school districts selected for the study. Data was obtained from the public Wisconsin Department of Instruction website and the Wisconsin Information System for Education (WISEdash) website. All data is public information and can be obtained by any internet user. A formal request to solely use public information provided by the Wisconsin Department

of Instruction was submitted and approved by the Institutional Research Board (IRB) at Carthage College.

Description of Data Sources/Participants

One hundred Wisconsin school districts were selected for the research. The researcher viewed the "Comparative Revenue per Member" and the "Comparative Cost per Member" spreadsheets provided by the Wisconsin Department of Public Instruction, which ranks all Wisconsin school districts based on total revenue per member and educational cost per member. The investigator selected school districts within the "Total Revenue Per Member" ranking range of 1 to 423, selecting districts ranked 1 thru 50 to represent the high income school districts and districts ranked 374 thru 423 to represent the low income school districts.

Procedures

Data was collected on the one hundred Wisconsin school districts, with special attention to various revenue per member comparisons, educational cost per member, and the district's percentage of advanced and proficient WKCE scores. Descriptive statistics were used to compare the difference in percentage of educational cost per pupil, difference between the educational cost per school district as well as the Wisconsin state average, and the district's percentage of advanced and proficient WKCE

score averages. Five years' worth of WKCE test percentages of eighth graders were collected for five content areas in each school district, then averaged to provide one percentage per school district, per school year.

A t test was used to compare the total educational cost per member data and the averaged percentage of advanced and proficient WKCE test data; the change in WKCE percentage of advanced and proficient scores for low income school districts and high income score districts; the total educational cost per member data and the averaged percentage of advanced and proficient WKCE test data for Mathematics only; the total educational cost per member data and the averaged percentage of advanced and proficient WKCE test data for Reading only; the percentage of special education students in the school district and the averaged percentage of advanced and proficient WKCE test data. Regression analysis compared the data, provided graphs and percentages, as well as displayed the type of correlation between total educational cost per member and averaged percentage of advanced and proficient WKCE scores. The data was also analyzed using regression to find the Line of Best Fit, gather relevant graphs, plus find the F factor and significance.

Data Analysis

School districts used in the study were ranked from low income to high income based upon their total revenue per member. Correlation percentages, t test results, and regression analysis data were calculated by comparing the school district's total

educational cost per member to the state WKCE test averages. The t test and regression data were used to provide the significance level value of the accepted or rejected null hypotheses.

Validity

Financial information provided by the Wisconsin Department of Public Instruction must follow strict accountability guidelines. Similar to the Generally Accepted Accounting Principles (GAAP) standards that accounting professionals are held to, school districts are held accountable to the Government Accounting Standards Board (GASB). All financial data reported to the state must follow the Wisconsin Uniform Financial Accounting Requirements (WUFAR) and are audited by the state. The state of Wisconsin is required to provide financial data and testing data to the public. Validity of the data is high due to the legal requirements and standards for collecting the data (School Financial Services, 2016).

Percentages of advanced and proficient WKCE test scores per district were greatly affected by the number of students participating the tests. The average of the high income school districts had an Enrolled Full Academic Year (FAY) of 28 students, while the low income school districts had an average of 208 students. Thus, any variance of the percentage of advanced and proficient test scores within the high income school districts had a greater effect on their overall test score percentages compared to the low income school districts.

Chapter Summary

Data for this research study was collected through public access of school district financial information and state test scores. The sample population was selected using the rankings of total revenue per member. Data collected was calculated using descriptive statistics, correlation, regression and a t test to determine the difference of funding and test scores between the school districts and to reject or accept the null hypotheses.

Chapter 4

Results

Background

The hypotheses tested in this study involved an analysis of one hundred Wisconsin school district budgets and financial reports over the five year period of 2009 to 2014, along with each school district's percentage of advanced and proficient Wisconsin Knowledge and Concepts Examination (WKCE) scores. The intent was to investigate whether low income school districts with less funding have a lower percentage of advanced and proficient WKCE scores compared to higher income school districts. The researcher collected data on the fifty highest and fifty lowest 'Total Revenue per Member' and 'Current Educational Costs per Member' school districts over 5 years from Wisconsin Department of Public Instruction District report cards. Included in the selected school districts report cards were the average percentage of advanced and proficient WKCE test scores for eighth grade. Scores were split into five content categories; Reading, Language Arts, Mathematics, Science, and Social Studies. Data was analyzed using a t test, regression, and correlation.

Data Analysis Results

Low income school district average 'total revenue per member' was $11,262. High income school district average for 'total revenue per member' was $17,729. The range of revenue per member over a five year period was $23,230. The hypotheses analysis and the results are as follows:

Hypothesis Set 1

Null Hypothesis 1: There is no difference in public school funding and the averaged WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

Research Hypothesis 1: There is a difference in public school funding and the averaged WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

$$H_0 = \quad \bar{X}_{Low} = \bar{X}_{High}$$

$$H_r = \quad \bar{X}_{Low} \neq \bar{X}_{High}$$

The decision rule used by the researcher was to reject Null Hypothesis 1 if $t > 1.96$ or $t < -1.96$. The analysis of the data from the t test resulted a t score of 92.1 with a p-value of 0%. The zero p-value demonstrated that the difference in spending was highly significant and this means that high income school districts have a greater percent of

advanced and proficient test scores than lower income school districts. The data in Table 1 below provided enough evidence for the researcher to reject the Null Hypothesis 1 and accept the Research Hypothesis 1. The regression analysis data presented a low Coefficient of determination of .0344 or 3.44% of scores can be explained by district income levels. However, the F significance is 0.005676%, which was significantly lower than the 5% significance level required to reject null hypothesis and accept research hypothesis one. (See Appendix 1 for full analysis results.)

Table 1

Results of Hypothesis Set 1

F	*Significance F*	*t Stat*	*P Value*
16.51280218	0.000056763	92.10029074	0

Hypothesis Set 2

Null Hypothesis 2: There is no change in the averaged WKCE standardized test scores of eighth grade students from low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

Research Hypothesis 2: There is less change in the averaged WKCE standardized test scores of eighth grade students for low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

$$H_0 = \quad \bar{X}_{\text{Change for Low}} \geq \bar{X}_{\text{Change for High}}$$

$$H_r = \quad \bar{X}_{\text{Change for Low}} < \bar{X}_{\text{Change for High}}$$

The decision rule for the researcher was to reject Null Hypothesis 2 if t > 1.94. The analysis of the data from the t test analysis resulted in a t score of .1378 with a p-value of .447. The t score was not greater than 1.94 and the p-value was higher than the 5% significance level used, therefore the t test analysis demonstrated that there wasn't enough evidence to prove high income school districts test scores increased more over the 5 year period than the low income school districts. Thus the researcher accepted Null Hypothesis 2.

Hypothesis Set 3

Null Hypothesis 3: There is no difference in school funding and the Mathematics WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

Research Hypothesis 3: There is a difference in school funding and the Mathematics WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

$$H_0 = \quad \bar{X}_{\text{Low Math}} = \bar{X}_{\text{High Math}}$$

$$H_r = \quad \bar{X}_{\text{Low Math}} \neq \bar{X}_{\text{High Math}}$$

Similar to the first hypothesis, the decision rule used by the researcher was to reject Null Hypothesis 3 if t > 1.96 or t < -1.96. Data from the t test analysis resulted in a t score of 96.975842 with a p-value of 0%. The high t score and zero p-value demonstrated that the evidence was highly significant and displayed that high income school districts have a greater percent of advanced and proficient Mathematics scores than lower income school districts.

Table 2

Results of Hypothesis Set 3

F	*Significance F*	*t Stat*	*P Value*
11.60326651	0.000715744	96.975842	0

Hypothesis Set 4

Null Hypothesis 4: There is no difference in school funding and the Reading WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

Research Hypothesis 4: There is a difference in school funding and the Reading WKCE standardized test scores of eighth grade students in low income school districts compared to higher income school districts over the 5 year period 2009 to 2014.

$H_0 = \bar{X}_{\text{Low Reading}} = \bar{X}_{\text{High Reading}}$

$H_r = \bar{X}_{\text{Low Reading}} \neq \bar{X}_{\text{High Reading}}$

Table 3

Results of Hypothesis Set 4

F	*Significance F*	*t Stat*	*P Value*
2.5350943	0.112022693	96.9758921	0

The decision rule for the researcher was to reject Null Hypothesis 4 if t > 1.96 or t < -1.96. Data from the t test analysis resulted a t score of 96.975892 and a p-value of 0%. The high t score and zero p-value demonstrated that the evidence was highly significant and displayed that high income school districts have a greater percent of advanced and proficient Reading scores than lower income school districts.

The regression data presented a low Coefficient of determination of .00544 or 0.544% of Reading scores can be explained by district income levels. The F significance level was 11.202%, which was higher than the 5% significance level. The overall results provided enough evidence for the researcher to reject Null Hypothesis 4 and accept Research Hypothesis 4.

Hypothesis Set 5

Null Hypothesis 5: There is no difference in the averaged WKCE standardized test scores of eighth grade students in school districts with a high percentage of special education students compared to school districts with a low percentage of special education students over the 3 year period 2011 to 2014.

Research Hypothesis 5: There is a difference in school funding and the averaged WKCE standardized eighth grade students in school districts with a high percentage of special education students compared to school districts with a low percentage of special education students over the 3 year period 2011 to 2014.

$$H_0 = \bar{X}_{\text{Low SPED}} = \bar{X}_{\text{High SPED}}$$

$$H_r = \bar{X}_{\text{Low SPED}} \neq \bar{X}_{\text{High SPED}}$$

Table 4

Results of Hypothesis Set 5

F	*Significance F*	*t Stat*	*P Value*
33.34765	0.00000002	-71.84	3.70765E-284

The decision rule used by the researcher was to reject Null Hypothesis 5 if t > 1.96 or t < -1.96. Data from the t test resulted a t score of -71.84 with a p-value of slightly more than 0%. The t score and nearly zero p-value demonstrated that the

evidence was highly significant and displayed that school districts with a larger number of special education students have a lower percent of advanced and proficient test scores. Thus the investigator rejected Null Hypothesis 5 and accepted Research Hypothesis 5 at a p-value of nearly zero.

Chapter Summary

One hundred Wisconsin School District Performance Reports were collected and analyzed, focusing on the Total Revenue per Member and the percent of advanced and proficient WKCE average test scores. Data was used to conduct t tests, correlations, and regression analysis. The results found that Null Hypotheses 1, 3, 4, and 5 could be rejected and Null Hypothesis 2 could be accepted. The results signified that there is a difference between low income and high income school district test scores as a result of varied income levels in public school districts.

Chapter 5

Discussion, Recommendations, Conclusions

Background

The fifty lowest income public school districts and fifty highest income public school districts in Wisconsin were compared in this research, focused on the Total Revenue per Member and the percentage of Wisconsin Knowledge and Concepts Examination (WKCE) advanced and proficient test scores. This study investigated whether low income school districts with less funding have a lower percentage of advanced and proficient WKCE scores compared to higher income school districts. The analysis of one hundred public school district budgets and financial reports during 2009 to 2014, along with each school district's WKCE scores, demonstrated that school districts with less funding had lower WKCE scores compared to school districts with more funding. Data was collected and used to conduct t tests, correlations, and regression reports. The results found that Null Hypotheses 1, 3, 4, and 5 could be rejected and Null Hypothesis 2 could be accepted. The results and acceptance of four out of five hypotheses signified that there is a difference between low income and high income school district test scores as a result of varied income levels in public school districts in the state studied. The acceptance of Research Hypothesis 5 also signified that public school districts with a higher percentage of special education students had lower WKCE test scores that school districts with a low percentage of special education students.

Discussion

Is there a difference in the amount of funding per student in a low income public school districts versus a higher income public school districts? The researcher found that there was a significant difference between low income school district funding and high income district funding. The average range of total revenue per member, from 2009 to 2014, was as high as $23,230. The difference between the lowest income school district and the Wisconsin state average in 2013 was -$2,090, whereas the difference between the highest school district was +$21,140.

How are the funds being allocated in the corresponding school districts? Funds for the cost of education per student had an average range of $13,723, including a large difference of $20,904 in 2014. It is clear that high income school districts spend more money on education costs than low income school districts and the disparity is high. The information collected for this study eluded to a problem in the allocation of school spending, rather than school funding, and how it effects student success. For example, the public school district with the highest Total Revenue per Member and Current Education Cost per Member spent almost $3,000 more on Administration and Operation Costs in 2014 than any other education related expenditure, which was $14,159 more than the school district with the lowest revenue and costs.

What are the percentage of advanced and proficient WKCE scores in low income public school districts compared to the higher income school districts? The low income school districts maintained an average percentage of 83.6% - 66.9% on their advanced

and proficient WKCE average test scores, with a range of 16.7%. The high income school districts had percentages between 82% and 62.1%, with a range of advanced and proficient WKCE average test scores at 19.9%. The researcher noticed the larger range could be from the number of Full Academic Year (FAY) students. The low income districts had an average of 208 students, while the high income districts only had an average of 28 students. With less students testing, any variance of the number of advanced and proficient test scores will greatly affect the overall percentages. While reviewing the raw data, the researcher did not notice a significant difference in the test score percentages between school districts. High income school districts had examples of percentages less than 10%, while low income school districts had percentages at 100%. Further analysis of t test scores and regression analysis data resulted in an overwhelming discovery. The correlation between test scores and funding resulted in significant evidence indicating that low income school districts have lower test scores than high income school districts.

Has the funding per student increased or decreased over the last 5 years? Funding for all school districts has varied over the last five years. For the lowest income school district, funding has decreased $518 from 2009 to 2014. Yet, highest income school district funding did not decrease from 2009 – 2014 as expected, instead it had a significant increase of $4,905. This result was surprising as literature cited laws that require states to provide low income school districts with additional funding in order to make up some of the difference between them and wealthier areas. Data from this

study suggests that Wisconsin is not successfully providing equal funding for all students in the state.

Is the percentage of change in the percentage of advanced and proficient WKCE scores the same for low income school districts and higher income school districts? Research Hypothesis 2 investigated whether the percentage of advanced and proficient test score increased more within high income school districts compared to low income school districts. If the Research Hypothesis 2 was accepted, it would show evidence of a growth in the disparity of education between the low income school district and high income school districts. The results of this study did not provide enough evidence to suggest there is a difference in growth.

How does the percentage of special education students affect school funding and standardized test scores? Research Hypothesis 5 addressed whether the percentage of special education students within the school district had any effect on test scores. The evidence from the analysis was highly significant and displayed that school districts with a larger number of special education students have a lower percent of advanced and proficient WKCE test scores.

Do school districts with a low percentage of special education students have lower costs per pupil and higher WKCE test scores? The researcher found that school districts with a high total revenue per member and education cost per member had a slightly higher percentage of special education students. For 2011 through 2014, the high income school districts averaged 15.4% of special education students, whereas the

low income school districts averaged 12.6%. Due to the higher costs associated with educating students with IEPs, the funding would need to be higher and could cause the school district to be above the Wisconsin Total Revenue per Member average. Therefore, the research results align with the literature review cited for this study.

Limitations

During data collection, the researcher noticed a significant difference in the number of students at the high income school districts versus the low income school districts. Average of Full Academic Year (FAY) students at the high income districts was 28 and at low income districts was 208. One less advanced or proficient test score in the high income district would have a greater impact on the averages than for low income school districts. There was a larger range of scores for the high income districts.

The lower number of students can also effect the total revenue per member amount. This amount is calculated by dividing the total revenue by the total number of students. With fewer students, revenue funds and education costs per student are significantly higher. For example, the Ratio of Students to Staff for the 3rd ranked district was 4.4 in 2013, while the 419th ranked district ratio was 10.3.

Recommendations for Future Research

This study focused on approximately 25% of Wisconsin school districts. Future research could be extended nationally. A national study would demonstrate whether the findings of this study are mirrored throughout the country. Each state has different programs and regulations for their schools. With a national study, the researcher could gather information to determine which states have a higher success rate in providing an equal education.

A deeper analysis of school program spending and property values could be included in future research. By exploring the specific spending on staff salaries, curriculum, behavior programs, and special education department, the researcher could better identify which areas of spending are increasing test scores. Property values can increase the total revenue per member, but the researcher also noticed the percentage of state or federal funding varied among the school districts. Future research could shed light on the cause, for example, of one school getting over 60% of their funding from the state when a different school district receives less than 10%. One school district in this study received over 40% of their funding from the federal government, which contradicts research literature that stated education is the responsibility of the state. Also, further research could be done to recognize the cause of the difference in special education scores. If students are legitimately receiving services in accordance with their Individualized Education Plan (IEP), what other factors are resulting in low tests scores?

Percentages of advanced and proficient WKCE test scores were collected and averaged for 8th grade students only. Future research could find a more accurate method to portray test scores, perhaps focusing actual test scores for all grade levels. Approximately 10% of the high income school districts were high school districts and did not have scores for 8th grade students.

Conclusions

Overall, this study was a successful in demonstrating significant evidence indicating that low income public school districts have lower standardized test scores than high income school districts. To take the research to the next level, an investigator could analyze itemized budget reports pin-point district spending and how it effects test scores. Also, actual WKCE test scores, rather than percentages of advanced and proficient test scores, could give more detailed results.

In the education field, there has been the shocking saying, “Give me a student’s address and I will tell you his/her chance of graduating high school”. According to the results of this study, a student’s address does indeed reflect the level of education provided to that student. If this is common knowledge in education, how are states getting away with this type of discrimination? Data collected for the research demonstrated different percentages of state funding for school. A pattern was unclear as to why one school district would get over 60% of it’s funding from the state and another school district would get less than 7%. The variance could be proof that

Wisconsin is attempting to provide an equal education to all students, but it has not been successful to date.

Chapter Summary

Four of the five research hypotheses were accepted. The researcher found there is a significant difference in the percentage of advanced and proficient WKCE test scores for low income school districts versus high income school districts. Not enough evidence was found to accept the research hypothesis that suggested high income school districts would demonstrate a larger growth rate in WKCE test scores than low income school districts. Although the increasing disparity between low income and high income school districts was not proved, this research successfully provided evidence of an unequal education in Wisconsin school districts.

More information on school spending and percentage of funding from property tax could change the perspective and results of this study. Widening the study to include school districts throughout the country could also provide more insight on the cause and investigate any trends.

References:

Baker, B., Sciarra, D., & Farrie, D. (June 2012). *Is School Funding Fair?: A National Report.* Newark, N.J.: Education Law Center. Retrieved January 30, 2016, from www.schoolfundingfairness.org/National_Report_Card_2012.pdf

Biddle, B. J., & Berliner, D. C. (2002, May). A Research Synthesis / Unequal School Funding in the United States. *Educational Leadership, 59*(8), pp. 48-59.

Carey, K. (2002). *Education Funding and Low-Income Children: A Review of Current Research.* Center on Budget and Policy Priorities. Retrieved September 22, 2015, from http://www.cbpp.org/archoeves/11-7-02sfp3.htm

Carter, P. L., & Welner, K. G. (2013, September). *Closing the Opportunity Gap: What Every American Must Do to Give Every Child an Even Chance.* New York, NY: Oxford University Press.

Chaikind, S., & Danielson, L. C. (1993, Winter). What Do We Know About The Costs of Special Education? A Selected Review. *Journal of Special Education, 26*(4), p. 344. 27p. 10 Charts.

Children Living In Low-Income Neighborhoods Less Likely To Graduate High School: Study. (2015, September 22). Retrieved from Huffington Post: http://www.huffingtonpost.com/2011/10/04/children-low-income-neighborhoods-high-school_n_994580.html

Cornman, S. Q. (2015, January). *Revenues and Expenditures for Public Elementary and Secondary School Districts: School Year 2011-12 (Fiscal Year 2012).* Retrieved January 23, 2016, from National Center for Education Statistics, U.S. Department of Education: http://nces.ed.gov/pubsearch

Crampton, F. E. (2015, Fall). Wisconsin. *Journal of Education Finance, 41*(2), 282-284.

Education and Socioeconomic Status Factsheet. (2015, September 22). Retrieved from American Psychology Association: http://www.apa.org/pi/ses/resources/publications/factsheet-education.aspx

Gates, R. G. (2005). *Fiscal Equity For At-Risk Students.* Blacksburg, Virginia.

Gensler, R. (2006, January). Effects on No Child Left Behind Act of Special Education Regarding Standardized Testing. *Law and Disorder Undergraduate Journal*(1), 10 - 15. Retrieved from http://hdl.handle.net/2022/193

Grubb, W., & Allen, R. (2010, October 21). Rethinking school funding, resources, incentives, and outcomes. *J Educ Change (2011), 12*, 121-130. doi:10.1007/s10833-010-9146-6

Hanushek, E. A. (2016, Spring). *What Matters for Student Achievement.* Retrieved from Education Next: http://educationnext.org/what-matters-for-student-achievement/

Mackenzie, J. (2006). *Public School Funding and Performance.* Christina School District (DE) Board of Education. Newark, DE: FREC/CANR, University of Delaware. Retrieved October 19, 2015

Norman, J. (2002). *Funding Our Future: An Adequacy Model for Wisconsin School Finance.* Institution for Wisconsin's Future, Milwaukee. Retrieved January 30, 2016, from http://files.eric.ed.gov/fulltext/ED471308.pdf

Odden, A., Picus, L. O., Archibald, S., Goetz, M., Turner Mangan, M., & Aportela, A. (2007). *Moving From Good to Great in Wisconsin: Funding School Adequately and Doubling Student Performance.* Consortium for Policy Research in Education, University of Wisconsin - Madison, Wisconsin Center for Education Research.

Owings, W. A., & Kaplan, L. S. (2010). The Alpha and Omega Syndrome: Is Intra-District Funding the Next Ripeness Factor? *Journal of Education Finance, 36*(2), 162-185. doi:10.1353/jef.2010.0002

(2015-2017). *School Finance Reform Overview.*

School Financial Services. (2016). Retrieved from Wisconsin Department of Public Instruction: http://dpi.wi.gov/sfs

School Funding Cases in Wisconsin. (2016, January 30). Retrieved from National Education Access Network: http://schoolfunding.info/2012/05/school-funding-cases-in-wisconsin/

Verstegen, D. A. (2015, April 6). On Doing an Analysis of Equity and Closing the Opportunity Gap. *Education Policy Analysis Archives, 23*(41), 1-18. Retrieved October 12, 2015, from http://epaa.asu.edu/ojs/

Wisconsin School District Performance Report. (2015, October - December). Retrieved from Wisconsin Department of Public Education: http://dpi.wi.gov/

Appendix A

Results of t test for Hypothesis Set 1

t-Test: Two-Sample Assuming Equal Variances

	Educational Cost	*Scores*
Mean	11530.20601	0.750942489
Variance	7302666.633	0.015605513
Observations	466	466
Pooled Variance	3651333.324	
Hypothesized Mean Difference	0	
df	930	
t Stat	92.10029074	
P(T<=t) one-tail	0	
t Critical one-tail	1.646493732	
P(T<=t) two-tail	0	
t Critical two-tail	1.96251808	

Results in Regression Analysis for Hypothesis Set 1

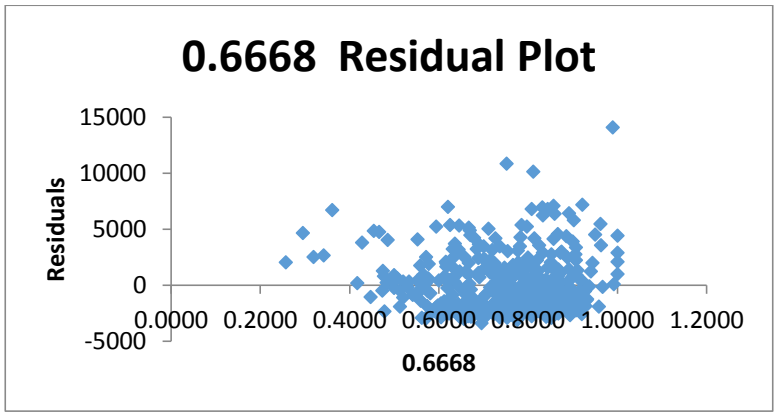
SUMMARY OUTPUT

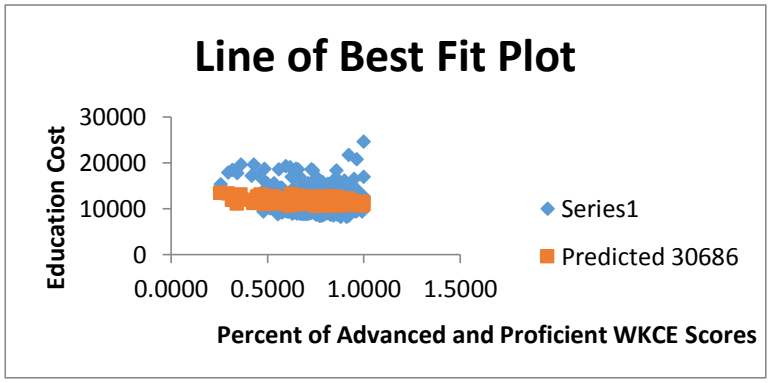
Regression Statistics	
Multiple R	0.185571076
R Square	0.034436624
Adjusted R Square	0.032351174
Standard Error	2512.917854
Observations	465

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	104274319	104274319	16.51280218	5.6763E-05
Residual	463	2923732094	6314756.142		
Total	464	3028006413			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	
Intercept	14337.71205	710.6497049	20.1754985	2.04285E-65	
	0.6668	-3792.587403	933.3084744	-4.063594736	





Results of t test for Hypothesis Set 2

t-Test: Two-Sample Assuming Equal Variances

	Change in Percent of Advanced or Proficient Scores	
	Low Income	*High Income*
Mean	-4.1	-4.895
Variance	58.4826	74.5287
Observations	4	4
Pooled Variance	66.50565	
Hypothesized Mean Difference	0	
df	6	
t Stat	0.137864629	
P(T<=t) one-tail	0.447428865	
t Critical one-tail	1.943180281	
P(T<=t) two-tail	0.89485773	
t Critical two-tail	2.446911851	

Results of t test for Hypothesis Set 3

t-Test: Two-Sample Assuming Equal Variances

	Education Cost	*Math Scores*
Mean	11489.01075	0.691649462
Variance	6525875.89	0.045962922
Observations	465	465
Pooled Variance	3262937.968	
Hypothesized Mean Difference	0	
df	928	
t Stat	96.97584222	
P(T<=t) one-tail	0	
t Critical one-tail	1.64649727	
P(T<=t) two-tail	0	
t Critical two-tail	1.962523592	

Results in Regression Analysis for Hypothesis Set 3

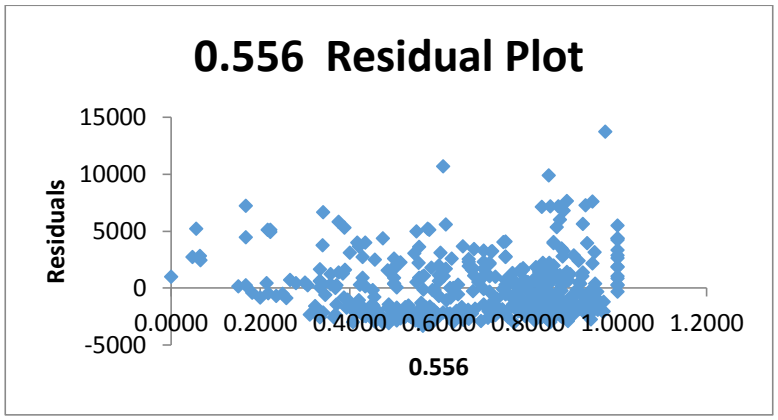
SUMMARY OUTPUT

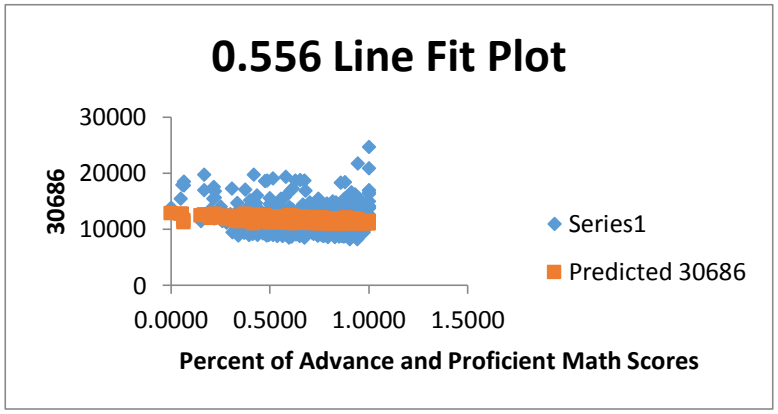
Regression Statistics	
Multiple R	0.15635968
R Square	0.024448349
Adjusted R Square	0.022341326
Standard Error	2525.881859
Observations	465

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	74029758.93	74029758.93	11.60326651	0.000715744
Residual	463	2953976654	6380079.166		
Total	464	3028006413			

		Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept		12777.63532	396.0195	32.26516703	1.566E-120
	0.556	-1863.118	546.9532759	-3.40635678	0.000715744





Results of t test for Hypothesis Set 4

t-Test: Two-Sample Assuming Equal Variances

	Education Cost	*Reading Scores*
Mean	11489.01075	0.68571828
Variance	6525875.89	0.067770151
Observations	465	465
Pooled Variance	3262937.979	
Hypothesized Mean Difference	0	
df	928	
t Stat	96.97589212	
P(T<=t) one-tail	0	
t Critical one-tail	1.64649727	
P(T<=t) two-tail	0	
t Critical two-tail	1.962523592	

Results in Regression Analysis for Hypothesis Set 4

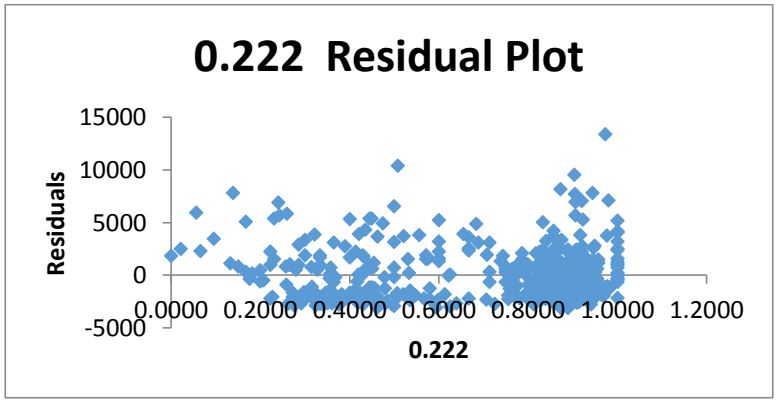
SUMMARY OUTPUT

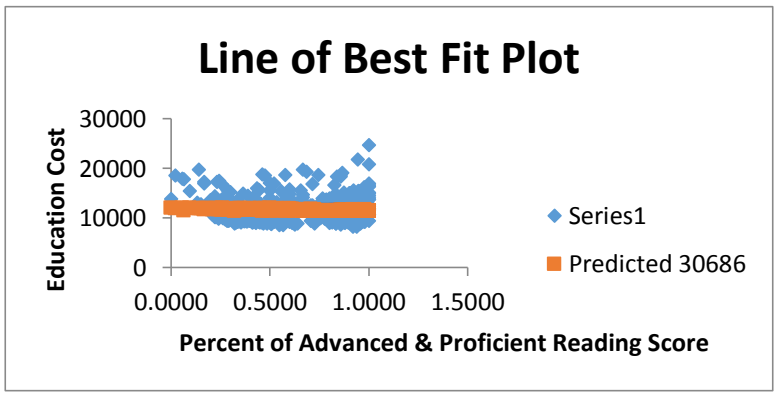
Regression Statistics	
Multiple R	0.073793965
R Square	0.005445549
Adjusted R Square	0.003297484
Standard Error	2550.364076
Observations	465

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	16489158.31	16489158.31	2.535094323	0.112022693
Residual	463	3011517255	6504356.921		
Total	464	3028006413			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	11985.56506	333.5401186	35.93440306	5.1068E-136
0.222	-724.1374805	454.803675	-1.592197954	0.112022693





Results of t test for Hypothesis Set 5

t-Test: Two-Sample Assuming Equal Variances

	% of SPED	*Scores*
Mean	0.140631607	0.705965
Variance	0.00138547	0.015953878
Observations	280	280
Pooled Variance	0.008669674	
Hypothesized Mean Difference	0	
df	558	
t Stat	-71.84015726	
P(T<=t) one-tail	1.8538E-284	
t Critical one-tail	1.647588963	
P(T<=t) two-tail	3.71E-284	
t Critical two-tail	1.964224446	

Results in Regression Analysis for Hypothesis Set 5

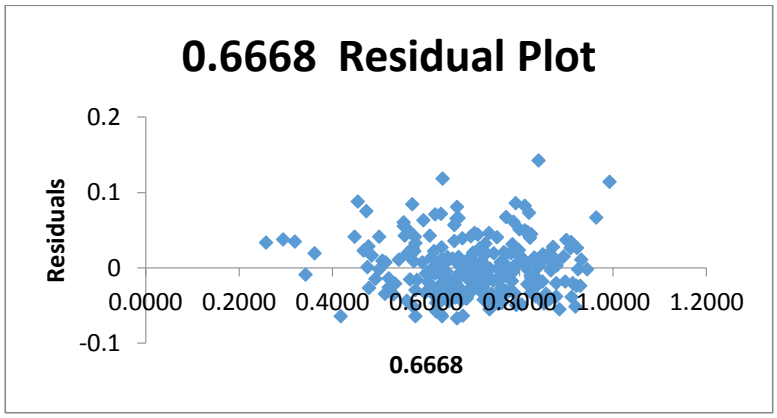
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.327799587
R Square	0.107452569
Adjusted R Square	0.104230376
Standard Error	0.035272997
Observations	279

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.041490627	0.041490627	33.347653	2.06559E-08
Residual	277	0.344639062	0.001244184		
Total	278	0.386129689			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.208742903	0.011994687	17.40294685	2.415E-46
0.6668	-0.09656392	0.01672177	-5.774742649	2.066E-08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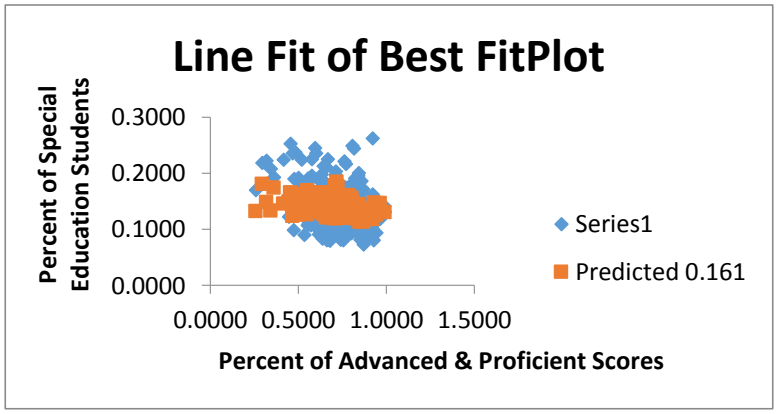
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Percent of Special Education Students
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Percent of Advanced & Proficient Scores
Series1
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