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A Comparison Of Wealth In Public School Corporations In Relation To SpecialEducation Costs

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VITA

Jeffrey Scott Baer was born February 9, 1954, in Rensselaer, Indiana to Lester and Barbara Baer. He received his Bachelor of Science degree from Indiana University in 1976, Master of Education degree from Indiana University in 1981, and completed an Educational Specialist degree from Indiana State University in 1991.

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A COMPARISON OF WEALTH IN PUBLIC SCHOOL CORPORATIONS IN RELATION TO SPECIAL EDUCATION COSTS

A Dissertation

Presented to

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by

Jeffrey Scott Baer

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APPROVAL SHEET

The dissertation of Jeffrey Scott Baer, Contribution to the School of Graduate Studies, Indiana State University, Series III, Number 804, under the title *A Comparison of Wealth in Public School Corporations in Relation to Special Education Costs* is approved as partial fulfillment of the requirements for the Doctor of Philosophy Degree.

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ABSTRACT

The study's purpose was to test if there is a significant difference in the amount of general fund monies used to support special education programs among Indiana school corporations identified by wealth. The independent variables were defined as: 1) the percent of households with children living in poverty, 2) assessed valuation per pupil, and, 3) general fund per pupil appropriations. The dependent variable was defined as the amount of general fund monies used to support special education programs.

This study was completed in Indiana including all Indiana public school corporations. The sample of school corporations was selected from the three defined variables for wealth. The 15 school corporations determined to be the highest in wealth were compared to the 15 corporations determined to be the lowest in wealth in each variable category. The sample for each variable category is 10 percent of the population. Corporation size was not a determining factor.

While this variety of wealth categories was considered in relation to general fund monies supporting special education, these measures of wealth did not indicate an increase or decrease in funding expenditures. An investigation of reporting latitudes, multiple levels of

bureaucracy and unreconciled summaries of data continue to widen the gap between perceptions and actual spending disparities. While no significant difference among wealth measures and special education general fund expenditures were indicated in this study, reporting process discrepancies indicate that special education expenditure burdens could reasonably exist in the general fund. The reporting process section interprets the gap existing between perceived disparities between special education and spending in three different categorical domains.

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Chapter 1

THE PROBLEM

The perception among many of our publics, including policy makers and even education professionals, is that school spending has greatly increased in the past 20 years and that school outcomes have not improved to justify these increased expenditures. According to Rothstein and Miles (1995), this view is inaccurate based on inappropriate growth statistics and assumptions regarding the purposes of increased school spending.

The problem is complex in that perception and reality are far from being the same. Although dollars have been increased to local general funds, which are the funds responsible for all school operations including salaries and supplies for regular education and special services, perception assumes that all school spending is directed at improving academic achievement of regular students. In reality, schools actually work toward a variety of program

outcomes such as student nutrition programs, vocational programs, and initiatives and services for a variety of special needs students. To truly understand school wealth and educational productivity, expenditures must be linked to the specific program the spending was designed to enhance. Data from a monthly publication, Indicator of the Month, shows that the wealthiest districts in terms of household income have more revenue per student than the poorest districts (1995, p. 3). This allows districts with greater revenue to translate this difference into better programs (Chambers, 1995, p. 5).

Rothstein and Miles, in their 1995 study "Where's the Money Gone?,"executed a detailed examination of expenditures in nine typical U.S. school districts. They were able to show that the share of expenditures going to regular education dropped from 80 percent to 59 percent of the general fund between the years 1967 and 1991. During this same time period, the share of expenditures going to special education programs climbed from four percent to 17 percent of the general fund. In this same study, they found that of the net new money spent on education in 1991, only 26 percent went to improve regular education while about 38 percent went to special education for the

handicapped and learning disabled. Finally, they stated that per pupil expenditures for regular education grew by only 28 percent during the past quarter century; an average of about one percent per year (p. 1). Benno Schmidt, who resigned the Presidency of Yale University to lead a private school network, is quoted as saying, "We have roughly doubled per pupil spending in public schools since 1965, but the nation's investment in educational improvement has produced very little in return" (Rothstein and Miles, 1995, p. 3). John Chubb and Erik Hanushek (1990) stated that, "since the Soviets launched Sputnik, real expenditures per student have nearly tripled and performance has dropped." The perception of this declining productivity seems to be so well established that few analysts have sought verification.

As stated, an understanding of school wealth and productivity must link expenditures directly to specific program outcomes. Over any period, expenditures may rise solely because of inflation, or they may rise because more goods and services are purchased, or a combination of both. When, for example, Benno Schmidt claims that per pupil spending doubled from 1967 to 1991, consideration must be given to the difference in cost just to buy the same goods

and services a quarter of a century later (Rothstein and Miles, 1995, p. 4).

An understanding of the national study conducted by Rothstein and Miles (1995) is critical to accomplishing a similar study involving Indiana school districts. Their examination of expenditures in nine districts nationwide shows the following:

1. Real per pupil spending, appropriately adjusted for inflation, grew by 61 percent between 1967 and 1991, a growth rate 40 percent less than conventionally reported.
2. The share of all spending received by regular education (what most people think of as a school's normal academic function) declined from 80 percent in 1967 to 59 percent in 1991; nonetheless, per pupil expenditures grew 28 percent over the period; regular education received 26 percent of the net new money spent in 1991.
3. Special education's share of all expenditures rose from four percent in 1967 to 17 percent in 1991; special education received 38 percent of the net new money spent in 1991.

4. About eight percent of net new money went to expansion of the school lunch and breakfast programs. Another seven percent went to attendance, dropout prevention, alternative instruction, and counseling.

5. In both 1967 and 1991, about two-thirds of regular education funds were spent on teachers' compensation.

6. In regular education, higher average teacher salaries were mainly due to teachers' greater experience (age) and credentials (e.g., master's degrees) in 1991 compared to 1967. Real salaries for teachers of similar experience and training did not significantly increase during this period and declined in many cases.

7. Growth in regular education staffing intensity was more marked at the elementary than at the secondary level. Elementary class sizes declined, but about half the reduction in pupil-teacher ratios was caused by more subject specialists and resource teachers, supporting more planning time for regular classroom teachers.

8. The growth of regular education spending was more marked in suburban than in urban districts. In the urban districts studied, per pupil regular education

spending grew hardly at all, and might have declined in real terms if the districts had not cut back on operations, maintenance, and general administration spending. But in some suburban districts, regular education resources grew substantially,(pp. 7-8).

An analysis of corporation revenue and special education costs provide quantitative data as opposed to perception. This analysis concerned itself with corporation wealth and general fund dollars only and not with evaluating or judging the success or failures of program outputs. It is important to realize that when a district is reported to receive a certain dollar amount for special education programs, it does not necessarily mean that this amount covers all of the costs. Also, when it is reported that a district spends a certain dollar amount on regular education, in reality there are many variables that effect this spending (Rothstein and Miles, 1995, p. 9). Chambers (1995, p. 5), in his brief about district revenues and student poverty, claims that changing revenues do translate into differences in services for special education students.

Statement of the Problem

The 1975 Education for All Handicapped Children Act (EHA) and subsequent legislation made special education programs an entitlement - unlike regular education. Once a child is diagnosed as having a disability, he or she is legally entitled to a free and appropriate public education. School districts must devote whatever resources are needed to provide support indicated in each student's individualized education plan. Lack of funds do not release districts from this obligation (Raphael, Singer, and Walker, p. 69).

Indiana school corporations and the various publics associated with education have the perception that a significant percentage of new money, which is the increased number of dollars greater than the previous year's budget amount, goes to support increases in special education costs and services. In Rothstein and Miles study (1995, p. 1), it was reported that from 1967-1991, special education's share of the general fund revenue grew from four percent to 17 percent. They also state that in the year 1991, special education programs received 38 percent of the net new money. These are national statistics that

have application in Indiana, but are not specific to the state of Indiana.

After reviewing the research regarding special education finances, it was beneficial to analyze the percent of programs funded by special education revenue and the percent funded by the general fund. This study was specific to Indiana school corporations and used a comparison of wealth as the independent variable.

Significance of the Study

Thornton states that no issue has been more factional or as seriously debated among superintendents recently than the issue of school funding (1999, p. 2). The perception of increased spending associated with public education and particularly with special education costs as it relates to educational outcomes, has been a powerful one for many years. It is important to consider different measures of wealth and their relationship to this perception. This study used three definitions for wealth to analyze corporation costs for special education programs. By having three definitions of wealth, it was possible for a corporation to be included in the high wealth category for one variable while in the low wealth category for a

different variable. This contributed to a discussion of significance for the statistical data.

Purpose of the Study

The purpose of this study was to test if there is a significant difference in the amount of general fund monies used to support special education programs among Indiana school corporations identified by wealth. The independent variables were defined as: 1) the percent of households with children living in poverty, 2) assessed valuation per pupil, and, 3) general fund per pupil appropriations. The dependent variable was defined as the amount of general fund monies used to support special education programs.

Research Questions

Is there a difference in the percent of general fund monies used for special education programs between those corporations with a high percentage of children in poverty and those with a low percentage of children in poverty? Is there a difference in the percent of general fund monies used for special education programs between those corporations with a high general fund per pupil appropriation amount and those with a low general fund per

pupil appropriation amount? Is there a difference in the percent of general fund monies used for special education programs between those corporations with a high assessed valuation per student and those with a low assessed valuation per student?

Null Hypotheses

Ho1: There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high percentage of children in poverty and those with a low percentage of children in poverty.

Ho2: There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high general fund per pupil appropriation amount and those with a low general fund per pupil appropriation amount.

Ho3: There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high assessed valuation per pupil and those with a low assessed valuation per pupil.

Definition of Terms

The following terms are defined for clarity in the study:

Additional Pupil Count (APC). Revenue provided by the state funding formula based on categorical amounts for pupils identified as severely, moderately or mildly handicapped.

Assessed Valuation. The total dollar value assigned to all real property and improvements thereon, plus personal property subject to taxation.

Children in Poverty. Children living in households with an income level below a determined minimum limit. This will be determined by using the State Department of Education's "Socio Economic Status," which is a calculation using the number of students identified as eligible for free lunches and the CSI test scores for all students in each corporation.

Form 9. Report required by the Indiana Department of Education showing expenditures on revenue for a designated period of time.

General Fund. The fund used to budget and account for all receipts and expenditures for current operation purposes. Expenditures from this fund may be made for

items normally associated with the daily operation of school, such as salaries, supplies, and utilities.

Inputs. Expenditures for all special education programs.

New Money. The increased number of dollars greater than the previous year's budget amount.

Per Pupil Expenditure. The number of dollars available to spend per pupil based on the state budget formula including corporation pupil enrollment and assessed value.

Pre-School Special Education Fund. A state tax assessment of $.01 per $100 of assessed value per school district.

Special Education Programs. All special areas recognized by Article 7 including: multiple handicap, orthopedic impairment, visual handicap, hearing impairment, emotional handicap, learning disability, communication disorder, mild mental handicap, moderate mental handicap, severe mental handicap, dual sensory impairment, autism, and traumatic brain injury.

Special Education Requirements. Any program or program cost dictated by any corporation student individualized education plan.

Wealth. The values determined by the percent of poverty in a corporation, general fund per pupil appropriation, or assessed value per pupil.

99-457. Federal grant fund for pre-school students with disabilities providing a flat dollar amount per child.

101-476. Federal grant funding providing revenue by a flat dollar amount per child for all areas of disabilities.

Delimitations

Delimitations of the study exist in the following manner:

1. The proposed study included school corporations in the State of Indiana.

2. The accuracy of data collected from the Department of Education, Division of School Finance and Division of Special Education.

3. The degree to which tabulation and analysis of data is accurate.

Summary and Organization of the Study

This study is divided into five chapters. Chapter One has provided the study's introduction, a statement of the problem, the significance of the study, the purposes of the

study, research questions, null hypotheses, definition of terms, and delimitations.

Chapter two presents a review of related literature and Chapter Three presents methods and procedures, data collection information, a description of the sample, and the design and methods of analysis. Chapter four presents findings from all statistical data. Chapter five presents a summary of the findings, conclusions and a discussion of the findings' implications.

Chapter 2

REVIEW OF RELATED LITERATURE

For the purpose of this study, this review of literature is divided into two sections. The first section presents an overview of educational funding mechanisms as they relate to wealth and special education. It is important to present what perceptions there are with regard to educational funding as compared to the realities of paying for special education programs. The perception claim of more revenue for little results is so well established that few analysts have sought empirical verification for it (Rothstein and Miles, 1995, p. 3). The second section focuses on the federal, local and state relationships regarding district funding and special education requirements. Studies of funding relationships find that while spending has risen substantially, the increase is both smaller and more complex than what most assume. (Rothstein and Miles, 1995, p. 5). Educational

leaders at all levels cannot give shallow and fleeting references to principles of finance regarding wealth if they are to be effective in helping solve, or in reducing the complex and persistent perceptions associated with school wealth as related to special education costs.

Educational Funding

Over time, citizens have felt various educational crises: In the 1980's, it was A Nation at Risk, in the 1950's, it was the launching of Sputnik. The result is that many believe education is not working and is resulting in an excessive tax burden as well as a drain on the public treasury (Burrup, Brimley, and Garfield, 1996, pp. 1-2).

In Indiana, practically all public school revenues are derived directly or indirectly from some taxing vehicle. Wealth, in this sense, can be defined as some combination of property assessable base and net taxable income (Rohrer and Liddell, 1997, p. 19). Typically, these taxing vehicles represent local support, and include property tax, license excise tax, financial institutions tax, and some special county taxes (Farm Bureau, 1997, pp. 17-21). State revenue can further be defined as generally falling into two major categories: basic support aid and categorical

aid. O'Reilly states basic support aid, the principal component of a state's educational finance system, comprises a majority of state educational aid. Categorical aid is designed to address specific educational needs such as special education (1993, pp. 11-12). Indiana utilizes both sources of aid as a foundation of support.

The property tax represents the largest revenue generator for local governmental units. The Farm Bureau noted:

> This tax is charged against real (land and improvements) and personal property. Inherent in the property tax structure is the need to value property. To value or assess property, a particular parcel must first be located and listed. Locally elected assessors determine property valuations utilizing appraisal guides prescribed by the State Board of Tax Commissioners. County boards of review may change such valuations. Finally, the State Board of Tax Commissioners assesses all public utilities and may adjust other assessments. Such adjustments may be made based on an appeal from a county board of review or may be made at the time of statewide assessments. The most recent statewide assessment was conducted in

> 1995 for property taxes collectable in 1996. By statute, all real property in Indiana is to be assessed at one-third true cash value. The tax is charged against the property itself and not against the owner. The property is taxed by the governmental unit where it is located, and the tax is applied at a uniform rate across all parcels within the governmental unit. No local referendum is required for a tax levy, except an excessive tax levy. (1997, p. 17)

The license excise tax is a local tax collected at the time of license plate registration. The Farm Bureau claims:

> The amount of the tax varies from $12 to $1,200 in 17 classifications according to the age and original value of the vehicle. This tax is charged in addition to the license plate and registration fees. The collections are made locally by representatives of the Bureau of Motor Vehicles. Revenues from this tax are divided in each taxing district, in the proportion of a particular fund tax rate, to the total of all unit rates in the taxing district. The 1996 General Assembly enacted legislation to replace 50 percent of

> license excise tax revenue with lottery funds. (1997, p. 17)

The financial institution tax allows for the taxing of personal property of banks in accordance with Indiana Code 6-5.5-8. Quarterly distributions are made annually by the County Auditor (Farm Bureau, 1997, p. 17).

Special county taxes are also an option for some counties. Once collected, the revenue is redistributed to the school corporations within the counties (Farm Bureau, 1997, p. 18).

Measurement of Indiana's ability to support education is difficult. While local districts mainly confine their taxing effort to the property tax, Indiana has no such limitations. Burrup, Brimley, and Garfield noted that sales taxes, income taxes, and many others are available for state use, thereby complicating the problem of measuring tax effort and ability. Indiana spends 41.3 percent of its state budget on education yielding an average of $4,749 expenditure per pupil (1996, p. 191). The Farm Bureau reports:

> The total basic grant is the final calculation to determine the state dollars generated by the funding formula. Total formula funding is determined as

> target revenue per weighted average daily membership (including the applicable adjustments for equalization, flat grant, minimum guarantee, and variable grant) multiplied by the 1994 (1995 for 1995) weighted average daily membership. State tuition support is total formula funding reduced by the sum of the ensuing year's property tax levy and 1993 (1994 for 1995) excise and financial institutions tax revenues. The amounts determined for the handicapped, vocational, and at-risk grants are added to the tuition support amount to determine the basic grant. (1997, p. 23)

Historically, the federal role in education has been minor. Typically, its role has consisted of research, the dissemination of information, and providing advisory assistance. However, it has provided financial support for education to states leaving decision making and administrative controls with these individual states (Burrup et al., p. 197). Indiana corporations are annually supported through federal assistance, which is typically in the form of Title I (Reading and Math), Title II (Library), Title XI (Math and Science) and IDEA (Individuals with Disabilities Education Act). In practice, a state's

average per-pupil expenditure can be influenced by many factors, such as personal income, school-age population, transportation, utility costs, number of private school students, and number of students with special needs (Burrup et al., p. 205).

Revenue sources may be further refined through the lens of special education. Cohen and Erwin (1994, p. 232) defines special education as a unique setting or culture addressing the strengths, needs, fears, or dreams of individuals, which is nurturing, demanding, and empowering. The West Central Indiana Special Services Cooperative denotes special education as "instruction specifically designed to meet the unique needs of a student with a disability, including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions" (Dictionary for Parents of Children with Disabilities, 1996, p. 32). A legal interpretation from Title 511 (Verstegen, 1994, p. 5) cites special education as specifically defined instruction, provided at no cost to the parent, to meet the unique needs of an identified student.

IDEA is the primary source of federal aid to state and local systems for instructional and support services for

special education from birth through age 21 (Verstegen, p. 8). Since its implementation in 1977, the number of special education students receiving services has grown 40 percent with a corresponding four-fold increase in federal expenditures (Parrish and Verstegen, 1994, p.9). Its origins were from Title VI of the Elementary and Secondary Education Act and expanded under P.L. 94-142 (Parrish & Verstegen, p. 9). To provide for the education of children with disabilities, IDEA authorized three state formula grant programs and several discretionary programs. The fiscal centerpiece of the Act is a state grant-in-aid program, under Part B (Verstegen, 1994, p. 8). This program authorizes participating states to furnish all special education children a free appropriate public education in a least restrictive environment. The discretionary programs are intended to stimulate improvements in educational services for disabled children (Verstegen, p. 8). This coincides with more than 50 percent of the states pursuing special education reform (Parrish, 1995, p.3). Critical linkages between program and funding policy are an apparent component of this reform. As an example:

> The federal funding system is considered to be placement neutral because the amount of funding allocated is the same regardless of how students are served. While many may believe this to be a desirable attribute, this type of system does contain a fiscal incentive. Because the funding level will be the same regardless of the level of service provided, the fiscal incentive is to provide less service at a lower cost. Similarly, identification neutral systems, like those in Massachusetts and Pennsylvania, actually contain fiscal incentives not to label students for special education, as districts will receive the same level of funding regardless of the number of students identified. While this may be the policy objective in some of the states, it is essential to realize the incentive and disincentive structures embodied in alternative funding systems. (Parrish, 1995, p. 2)

Hartman offers 14 different criteria for effective state special education funding formulas. The funding formulas contain the following variables.

1. Understandable - Its underlying policy objectives are understandable by all concerned parties (legislators, legislative staff, state department

personnel, local administrators, and advocates). The concepts underlying the formula and the procedures to implement it are straightforward and avoid unnecessary complexity.

2. Equitable - Student equity: Dollars are distributed to ensure comparable program quality regardless of district assignment. Wealth equity: Availability of overall funding is not correlated with local wealth. District-to-district fairness: All districts receive comparable resources for comparable students.
3. Adequate - Funding is sufficient for all districts to provide appropriate programs for special education students.
4. Predictable - LEAs (Local Education Agencies) know allocations in time to plan for local services. The system produces predictable demands for state funding. SEA (State Education Agency) and LEAs can count on stable funding across years.
5. Flexible - Local agencies are given latitude to deal with unique local conditions in an appropriate and cost-effective manner. Changes that affect programs and costs can be incorporated into the funding system with minimum disruption. Local agencies are

given maximum latitude in use of resources in exchange for outcome accountability.

6. Identification Neutral - The number of students identified as eligible for special education is not the only, or primary, basis for determining the amount of special education funding to be received. Students do not have to be labeled disabled (or any other label) in order to receive services.
7. Reasonable Reporting Burden - Cost to maintain the funding system is minimized at both local and state levels. Data requirements, record keeping, and reporting are kept at a reasonable level.
8. Fiscal Accountability - Conventional accounting procedures are followed to assure that special education funds are spent in an authorized manner. Procedures are included to contain excessive or inappropriate special education costs.
9. Cost-Based - Funding received by districts for the provision of special education programs is linked to the costs they face in providing these programs.
10. Placement Neutral - District funding for special education is not based on type of educational placement. District funding for special education

is not based on disability label.

11. Cost Control - Patterns of growth in special education costs statewide are stabilized over time. Patterns of growth in special education identification rates statewide are stabilized over time.
12. Outcome Accountability - State monitoring of local agencies is based on various measures of student outcomes. A statewide system for demonstrating satisfactory progress for all students in all schools is developed. Schools showing positive results for students are given maximum program and fiscal latitude to continue producing them.
13. Connection to General Education Funding - The special education formula should have a clear conceptual link to the general education finance system. Integration of funding will be likely to lead to integration of services.
14. Political Acceptability - Implementation avoids any major short-term loss of funds. Implementation involves no major disruption of existing services. (Hartman, 1992, p. 47)

In addition to effective practices for special education funding formulas, Parrish described five fiscal policies the states can adopt to foster less restrictive placements and more integrated educational services.

> First, fiscal incentives favoring segregated and separate placements must be removed. Second, states must make decisions about the extent to which they wish to encourage private special education placements. Third, the private schooling issue provides an example of the importance of developing funding systems in which dollars follow students as they move to less restrictive placements. Fourth, states reporting the most success in fostering more integrated service systems point to the need to support direct training for these types of program interventions. Fifth, states should fund and encourage intervention systems for all students. (pp.5-6, 1995)

Funding Relationships

No issue has been more divisive in school administration in recent years than the issue of school funding; especially with regards to special education. As

Steller (1988) reports however, a paucity of research exists regarding funding relationships.

Revenue for special education falls into two major categories: basic support aid and categorical aid (O'Reilly, 1993, pp. 19-23). The foundations of basic support include educational need and the ability to pay. Categorical aid addresses broader categories such as special education or vocational education. Indiana funds are now primarily distributed through categorical aid formulas.

Available data from the United States Department of Education revealed that of the $19.2 billion expended during 1987-88 for special education, state governments provided about 56 percent of the resources with local governments contributing 36 percent, and less than eight percent coming from federal sources. During this same year, Indiana received 15 percent of its special education funds from the federal government, 53 percent from state funds, and 32 percent from local revenue (O'Reilly, 1993, p. 25).

Mechanisms to distribute resources for special education in Indiana rely on an interagency formula, the

Basic Grant, providing funds for students with disabilities served in local district programs.

The Basic Grant has been calculated using data collected and estimated by staff for the State Board of Tax Commissioners (SBTC) and the Division of School Finance and Education Information. New fiscal year payments use fall reporting data and December 1st (date which actual student count occurs) special education program counts. Program reviews conducted by the Division of Special Education are revised to reflect the December 1st count.

The financial institution tax (FIT) and the excise tax amounts represent data from the SBTC. Excise tax is estimated using 104 percent of actual collections. The FIT amount represents the guaranteed distribution for each school corporation. Excise and FIT revenue used in the formula is revised when each county auditor files the final Certification of Tax Distributions with the STBC. Data is usually available for the new fiscal year by the April distribution of funds.

The Basic Grant calculation also requires the use of the previous year's assessed value. An average

> assessed value change over the previous six years is used in the absence of a reported assessed value from the SBTC. Updates are made as the SBTC provides them. (Bond, 1998, p. 1)

Indiana's special education funding formula was updated in 1995. The new formula provided 16 percent additional special education funding for 1996 and 10 percent in 1997 based upon a modified duplicated December 1st child count. This replaced the previous weighted duplicated services count (Binder, 1995, p. 1).

> Based upon the Department of Education recommendation, the Indiana General Assembly has taken action, which restructures the current State special education funding system. Under the new system, a modified unduplicated count of students receiving special education shall be used as the basis for generating State special education funds. This replaced the weighted duplicated services count used presently as the primary funding generator.
>
> This system shall involve a December 1st unduplicated count of all eligible special education students who are identified as severely or mildly/moderately disabled. The count of students

with communication disorders shall be duplicated if a student is served in another special education program. The Special Education Department believes that the advantages of this funding system are as follows:

1. discourages over labeling of special education students by not recognizing co-existing disabling conditions for the purpose of counting and generating additional state funding;
2. provides a greater proportionate amount of state funds for the high cost of students with severe disabilities; and
3. does not penalize urban districts which may have declining enrollments coupled with a high percentage of students with severe disabilities. (Indiana Division of Special Education, Abstract, 1995, p. 1)

The primary vehicle for the federal funding of special education programs, Public Law 94-142, states the federal government will bear up to 40 percent of the average per pupil expenditures in order to support the cost of special education programs and services (Duenas, 1993, pp. 30-31).

Gough (1992, p. 544) noted that federal aid has never exceeded 15 percent. Critics have claimed that this may be due to the fact that special education is a bloated bureaucracy, squandering limited public resources on individuals who have little possibility of becoming contributing members of society (Opuda, 1995, p. 3).

Whereas local revenue is collected through property taxation and this revenue is used in the general fund, which supports special education, it is intuitive that local revenue supports special education. The amount of local revenue collected and budgeted for special education would be largely dependent upon the number of eligible pupils, the districts' assessed valuation, and the fixed levy amount.

Summary

This review of literature is divided into two sections. The first section presented an overview of educational funding mechanisms as they relate to wealth and special education. It is recognized that an important perception exists with regard to educational funding as compared to the realities of paying for special education programs. The second section focused on the relationships

as they exist between federal, state and local funding sources. This issue is a divisive one for school administration, especially with regard to special education.

Chapter 3

METHODS AND PROCEDURES

The purpose of the study was to test if there is a significant difference in the amount of general fund monies used to support special education programs among Indiana school corporations identified by wealth. This required the collection of data from the Department of Education, Division of Finance and Division of Special Education. Data was collected from school corporations identified by wealth, which was determined by using three variables: the percent of households with children living in poverty, general fund per pupil appropriation, or, assessed value per pupil. Each question focused on information to compare high wealth corporations and low wealth corporations. High wealth and low wealth was defined as the top and bottom 15 school corporations in each variable category. The questions also determined the amount of general fund monies used to fund all required special education programs. The

following questions defined the focus of the research to be conducted:

Q1. Is there a difference in the percent of general fund monies used for special education programs between those corporations with a high percentage of children in poverty and those with a low percentage of children in poverty?

Q2. Is there a difference in the percent of general fund monies used for special education programs between those corporations with a high general fund per pupil appropriation amount and those with a low general fund per pupil appropriation amount?

Q3. Is there a difference in the percent of general fund monies used for special education programs between those corporations with a high assessed valuation per student and those with a low assessed valuation per student?

Data Collection

Data for this study was collected directly from the State Department of Education, Division of School Finance and Division of Special Education. From the Division of School Finance, data for revenue and expenditures for all

identified corporations were collected using the Form 9 and a special report compiled for the governor by the division. The Form 9 is a biennial report completed by all corporations which reports all revenue and expenditures From the Division of Special Education, data regarding the amount of Federal money that corporations receive as revenue was collected.

Description of Sample

This study was completed in Indiana including all Indiana public school corporations. The sample of school corporations was selected from the three defined variables for wealth. The 15 school corporations determined to be the highest in wealth were compared to the 15 corporations determined to be the lowest in wealth in each variable category. These corporations are listed in Appendixes A, B, and C. The sample for each variable category is 10 percent of the population. Corporation size is not a determining factor in this study.

Design and Data Analysis

The data collected for this study was compared using a one-way analysis of variance. This was accomplished for each of the following null hypotheses:

Ho1. There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high percentage of children in poverty and those with a low percentage of children in poverty.

Ho2. There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high general fund per pupil appropriation amount and those with a low general fund per pupil appropriation amount.

Ho3. There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high assessed valuation per student and those with a low assessed valuation per student.

The data was tabulated and analyzed by the Indiana State University Computer Center.

Each of the three research questions were answered using a one way analysis of variance, at the .05

probability level, which is defined by Ferguson (1989, p. 250) as a method for dividing the variation observed in experimental data into different parts, each part attributable to a known source. Next, the relative magnitude of variation resulting from different sources may be assessed. It is then ascertained whether a particular part of the variation is greater than expectation under each of the null hypotheses.

Summary

In this chapter, the following components were presented and described: the methods and procedures; data collection information; the description of the sample; and the design and methods of analysis. The purpose of the study was to test if there is a significant difference in the amount of general fund monies used to support special education programs between Indiana school corporations identified by wealth.

Chapter 4

ANALYSIS OF DATA

The purpose of this study was to determine if there was a significant difference in the amount of general fund monies used to support special education programs among Indiana school corporations identified by wealth. Wealth was defined as: (1) the percent of households with children living in poverty; (2) assessed valuation per pupil; (3) general fund per pupil appropriation.

The sample involved a selection of school corporations from each variable category. The 15 school corporations determined to be the highest in wealth were compared to the 15 school corporations determined to be the lowest in wealth in each of the three variables. This sampling for each category is 10 percent of the sample population. Corporation size was not a determining factor in this study.

Statistical analysis of the data included descriptive statistics regarding selected items' mean, standard deviation, and sample size. Analysis of variance was used to test the null hypotheses and the significance was identified at the .05 level. The statistical procedures were performed by the Indiana State University Academic Computing and Network Services.

Descriptive Data

Wealth and Special Education Cost Comparison

The research focus of this study included all Indiana public school corporations. School corporations were selected from the three defined variables for wealth. The 15 school corporations determined to be the highest in wealth were compared to the 15 school corporations determined to be the lowest in wealth in each variable category. Useable data was received regarding all 294 school corporations (100%).

Table 4.1 indicates the mean, standard deviation and the number of respondents for high and low wealth. High and low wealth is defined by those corporations with a high percentage of children in poverty and those with a low

percentage of children in poverty. The mean is the arithmetic average of these poverty categories.

Table 4.1

Percentage of General Fund Monies Used for Special Education Programs for the Wealth Variable Children in Poverty

Children in Poverty	N	M	SD
Low Percentage of Children in Poverty	15	.00733	.0196
High Percentage of Children in Poverty	15	.02630	.0326

Table 4.2 indicates the mean, standard deviation and the number of respondents for high and low wealth. High and low wealth is defined by those corporations with a high general fund per pupil appropriation amount and those with a low general fund per pupil appropriation amount.

Table 4.2

Percentage of General Fund Monies Used for Special Education Programs for the Wealth Variable General Fund Per Pupil Appropriation

Per Pupil Appropriation	N	M	SD

Low Per Pupil Appropriation	15	.00402	.00948
High Per Pupil Appropriation	15	.01930	.03230

Table 4.3 indicates the mean, standard deviation and the number of respondents for high and low wealth. High and low wealth is defined by those corporations with a high assessed valuation per pupil and those corporations with a low assessed valuation per pupil.

Table 4.3

Percentage of General Fund Monies Used for Special Education Programs for the Wealth Variable Assessed Valuation Per Pupil

Assessed Valuation Per Pupil	N	M	SD
Low Assessed Valuation Per Pupil	15	.01370	.0225
High Assessed Valuation Per Pupil	15	.00711	.0149

Hypothesis Testing

The following hypotheses were tested in this study:

Ho1: There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high percentage of children in poverty and those with a low percentage of children in poverty.

Ho2: There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high general fund per pupil appropriation amount and those with a low general fund per pupil appropriation amount.

Ho3: There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high assessed valuation per pupil and those with a low assessed valuation per pupil.

Null Hypothesis One

The first null hypothesis was, "there is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high percentage of children in poverty and those with a low percentage of children in poverty." The data was analyzed using a one-way analysis of variance.

For the one-way analysis of variance, the amount of general fund monies used to support special education programs served as the dependent variable and the percent of households with children living in poverty served as the independent variable. The one-way analysis of variance was not significant at the .05 probability level (see Table 4.4 for results). Therefore, the null hypothesis was not rejected for the independent variable.

Table 4.4

Analysis of Variance: Percent of General Fund Monies Used for Special Education and High and Low Percentage Of Children in Poverty

Source	DF	Sum of Squares	Mean Square	F Ratio	F Prob.
Between Groups	1	.00269	.002690	3.71	.064
Within Groups	28	.00203	.000725		
Total	29	.00230			

*p<.05

Null Hypothesis Two

The second null hypothesis was, "there is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high general fund per pupil appropriation amount and those with a low general fund per pupil appropriation amount." The data was analyzed using a one-way analysis of variance. For the one-way analysis of variance, the amount of general fund monies used to support special education programs served as the dependent variable and the assessed valuation per pupil served as the independent variable. The one-way analysis of variance was not significant at the .05 probability level (see Table 4.5 for results). Therefore, the null hypothesis was not rejected for the independent variable.

Table 4.5

Analysis of Variance: Percent of General Fund Monies Used for Special Education and Assessed Valuation Per Pupil

Source	DF	Sum of Squares	Mean Square	F Ratio	F Prob.
Between Groups	1	.001762	.0017620	3.114	.089
Within Groups	28	.015840	.0005657		

Total	29	.017600

*p<.05

Null Hypothesis Three

The third null hypothesis was, "There is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high assessed valuation per pupil and those with a low assessed valuation per pupil." The data was analyzed using a one-way analysis of variance. For the one-way analysis of variance, the amount of general fund monies used to support special education programs served as the dependent variable and general fund per pupil appropriations served as the independent variable. The one-way analysis of variance was not significant at the .05 probability level (see Table 4.6 for results). Therefore, the null hypothesis was not rejected for the independent variable.

Table 4.6

Analysis of Variance: Percent of General Fund Monies Used for Special Education and General Fund Per Pupil Appropriations

Source	DF	Sum of Squares	Mean Square	F Ratio	F Prob.
Between Groups	1	.0003247	.0003247	.891	.353
Within Groups	28	.0102100	.0003645		
Total	29	.0105300			

*p<.05

Summary of Findings

This section provides a summary of the study's findings and is divided into two sections. The first section is a summary of the descriptive data derived from a special education cost comparison and three definitions for wealth. The second section is a testing summary of the three hypotheses.

Summary of Descriptive Data

Useable data was received regarding all 594 school corporations. School corporations were selected from the three defined variables for wealth. The 15 school corporations determined to be the highest in wealth were compared to the 15 school corporations determined to be the

lowest in wealth in each variable category. Data was collected by obtaining information directly from the Indiana Department of Education; Division of Finance and Division of Special Education.

Summary of Hypothesis Testing

Three hypotheses were tested and the following are the summarized results.

1. An analysis of variance test was used to compare the percent of general fund monies used for special education programs and the percent of children in poverty in each corporation. There were no significant difference found at the .05 significance level for any of the correlations. Therefore, the null hypothesis was not rejected for the independent variable.

2. An analysis of variance test was used to compare the percent of general fund monies used for special education programs and general fund per pupil appropriation amount. There was no significant difference found at the .05 significance level for any of the correlations. Therefore, the null hypothesis was not rejected for the independent variable.

3. An analysis of variance test was used to compare

the percent of general fund monies used for special education programs and assessed valuation per pupil. There was no significant difference found at the .05 significance level for any of the correlations. Therefore, the null hypothesis was not rejected for the independent variable.

Chapter 5

SUMMARY OF DISCUSSION AND FINDINGS

Education has always occupied an exalted place in Indiana. Ralph Waldo Emerson often said that humanly speaking, the school and society makes the difference between men. Americans generally would agree adding that the survival of a democratic society depends upon educating the masses. Because of this importance placed on education, schools have long been the focal point of interest and pride in communities throughout Indiana.

In recent years, profound faith in educational institutions has been shaken. Doubt and even outright disapproval of educational policies and practices have assumed widespread and disturbing dimensions. Some hold that inadequate financing is at the root of school deficiencies. Others believe that the financing of most schools has been sufficient to provide a good, or even an

excellent education for all children and that educational shortcomings should not be attributed to the amount of money made available.

Yet, one must view public school finance from a multidimensional perspective. Inquiry reveals an incontrovertible fact; schools serve highly disproportionate concentrations of students in need and the costs associated are equally as disproportionate. This means that the doors to equal educational opportunity are only partly opened (Garvue, 1969, p. 5). Further, programs for special needs students are funded by a diverse and often confusing mixture of methods across the 50 states (Verstegen, 1990, p. 133).

Public education has survived and some believe that as the most affluent society in the world, a great deal more money is available (Garvue, p. 5). To neglect students in need may bring lifelong hardships for individuals themselves and added welfare, health and criminal justice costs for all of society (Park, 1983, p. 412). Garvue noted, society, too, makes the difference between men, as it also makes the difference between a commitment to finance or not to finance adequately our system of public education (1969, p. 5).

This chapter is organized into four sections. The first section provides the study's summary and rationale. The second section presents a discussion of findings with a summary of the hypothesis testing. A specific discussion of the reporting process differences to the Indiana Department of Education is also included. Section three contains recommendations and section four is a chapter summary.

The purpose of this study was to test if there was a significant difference in the amount of general fund monies used to support special education programs among Indiana school corporations identified by wealth. The independent variables were threefold: (a) the percent of households with children living in poverty; (b) the assessed valuation per pupil; and (c) the general fund per pupil appropriations.

The design of this study involved a population of 294 school corporations in the state of Indiana. Data was collected directly from the State Department of Education, Division of School Finance and Division of Special Education. From the Division of School Finance, data for revenue and expenditures for all corporations were collected using the Form 9 and a separate report compiled

by the Division. From the Division of Special Education, data regarding the amount of federal money that each corporation received as revenue was collected.

Statistical analysis of the data included descriptive statistics regarding selected items' mean and standard deviation. Analysis of variance was used to test the null hypotheses. The statistical procedures were all performed by the Indiana State University Academic Computing and Network Services. Chapter Five presents and describes a summary of discussion and findings, a summary of descriptive data, a summary of hypotheses testing, a section describing reporting process differences and recommendations.

Discussion of Findings

The purpose of this study was to test if there is a significant difference in the amount of general fund monies used to support special education programs among Indiana school corporations identified by wealth. This section is divided into three parts. The first part is a summary of the descriptive data indicating each variable category for wealth and the percentage of general fund monies used for special education programs. The second section is a

summary of the testing of the three hypotheses and the conclusions drawn from this testing. The third section specifically discusses the reporting process differences and the impact this had on the findings.

Summary of Descriptive Data

Data was received from 294 school corporations in the State of Indiana. From this group, school corporations were selected based on the three defined variables for wealth. The 15 school corporations determined to be the highest in wealth were compared to the 15 school corporations determined to be the lowest in wealth in each variable category. Data was collected by obtaining information directly from the Indiana Department of Education; Division of Finance and Division of Special Education. The following is a summary of the descriptive data findings and the conclusions.

1. When the three low wealth categories were compared, assessed valuation per pupil generated the greatest mean and per pupil general fund appropriation yielded the lowest mean. These districts indicate assessed valuation is a strong wealth measure and utilizes a greater amount of general fund money to support special education

programs, while the per pupil general fund appropriation generated a weak wealth measure and uses a lower amount of general fund money to support special education programs.

2. When the three high wealth categories were compared, percent of children in poverty generated the greatest mean and assessed valuation per pupil yielded the lowest mean. For high wealth, these districts indicate that percent of children in poverty is a strong measure of wealth and utilized the most general fund money for special education programs and assessed valuation per pupil is a weaker measure of wealth and utilizes less general fund monies for special education programs.

3. Of the three wealth categories, the high mean for assessed valuation per pupil was much smaller than the low mean of assessed valuation per pupil. Accordingly, when assessed valuation is used as a wealth measure, low wealth districts report higher percentages of general fund monies used than high wealth districts.

4. As differences between high and low means within wealth categories were investigated, the variable children in poverty indicated the greatest difference. Of the wealth categories, districts continue to have the greatest

reporting latitude with regard to poverty data. Correspondingly, greater discrepancies exist.

Summary of Hypotheses Testing

Three hypotheses were tested. The following summarizes the results and presents conclusions.

1. The first hypothesis stated that there is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high percentage of children in poverty and those with a low percentage of children in poverty. This one-way analysis of variance was performed using the percent of households with children living in poverty as the independent variable. The depended variable was defined as the amount of general fund monies used to support special education programs.

Because there was not a significant difference among the percent of households with children living in poverty and the amount of general fund monies used to support special education programs, children in poverty may not have a significant impact on general fund monies supporting special education programs. This would contribute to increased levels of children in poverty without creating an

increased burden on general fund expenditures for special education programs.

2. The second hypothesis stated that there is no significant difference in the percent of general fund monies used for special education programs between those corporations with a high general fund per pupil appropriation amount and those with a low general fund per pupil appropriation amount. This one-way analysis of variance was performed using the general fund per pupil appropriation amount as the independent variable. The dependent variable was defined as the amount of general fund monies used to support special education programs.

Because there was not a significant difference among the general fund per pupil appropriation amounts and the amount of general fund monies used to support special education programs, per pupil appropriation amount may not have a significant impact on general fund monies supporting special education programs. This would contribute to a decrease in per pupil appropriation amounts without creating an increased burden on general fund expenditures for special education programs.

3. The third hypothesis stated that there is no

significant difference in the percent of general fund monies used for special education programs between those corporations with a high assessed valuation per pupil and those with a low assessed valuation per pupil. This one-way analysis of variance was performed using assessed valuation per pupil as the independent variable. The dependent variable was defined as the amount of general fund monies used to support special education programs.

Because there was not a significant difference among the assessed valuation per pupil and the amount of general fund monies used to support special education programs, assessed valuation per pupil may not have a significant impact on general fund monies supporting special education programs. This would contribute to a decrease in assessed valuation per pupil without creating an increased burden on general fund expenditures for special education programs.

Reporting Process Differences

Perceptions of increased special education spending at the district level continues to swell. Roger Thornton, Executive Director of the Indiana Association of Public School Superintendents, recently noted that the issue of school funding has never been more divisive. The most

serious debate includes special students, which often increase per pupil expenditures and absorb dollars intended for regular education(1999, p. 1).

Yet, this study would suggest that different and distinct measures of wealth do not indicate an increase local burdens regarding general fund expenditures for special education. This section will attempt to interpret the gap between this study's findings and perceived disparities between special education and spending in three different categorical domains.

1. Current school finance procedures allow great latitude in revenue and expenditure tracking. Within any given reporting window, the month-to-date or year-to-date summaries are only a portion of a local district's fiscal budget, whose relationship to the total annual budget may be misleading. For example, a strong annual budget may allow a district to prepay many of it's annual costs relating to special education in a preceding year, negating a special education impact on general fund reports of wealth.

2. Levels of bureaucracy, which exist in reporting wealth data regarding special education further compound consistency in state level data collection. After the

results of this study were concluded, further investigation of data reporting at the district level revealed a variety of reporting sources. While some districts had educational administrative leaders directly responsible for reporting, many other districts had deputies, treasurers, secretaries and other non-certified personnel responsible for these same reporting procedures. The levels of bureaucracy greatly decrease the investment of the person reporting the data and the compounding of local reporting differences.

3. A closer investigation of revenues and expenditures provided by the Indiana Department of Education revealed unreconciled summaries of data. These large discrepancies exist in state level data reporting because non-traditional sources of special education funding are not required as part of the reporting procedure. Increasing costs in every educational facet, including special education, compel districts to search for alternative ways to offset growing expenditures. For example, districts providing data for this study had additional wealth considerations which were not calculated due to a variety of grant opportunities and other non-traditional funding sources. Offset expenditures included large print textbooks, non-certified personnel, and

specific instructional supplies related to a variety of handicapping conditions.

Recommendations

Recommendations for public school finance and special education are derived from this research, and future study recommendations result from questions raised throughout the research process.

Public School Finance and Special Education Recommendations

The following recommendations are proposed from the study's findings.

1. If the special education impact of general fund wealth in Indiana public schools are to be accurately reported, multiple-year data averages should be considered.

2. Indiana state-level reporting data regarding school finance and special education must have an accountability system in place with follow-up procedures to assure, irregardless of the reporting agent, that data is accurate and complete.

3. Non-traditional sources of funding for special

education must be considered as part of the total wealth picture in local districts if data collection is to be considered accurate.

4. Stakeholders of school finance and special education should reevaluate their perceptions with broader definitions of wealth and data of a longitudinal nature.

5. School finance and special education publics must continue to raise their level of knowledge in these areas.

Research Recommendations

The following recommendations for future research are proposed.

1. A qualitative research design should be conducted to understand perceptions of public school finance experts and special education professionals.

2. A study should be conducted which examines multi-variate data, longitudinal data, and expenditures from funds other than the general fund.

3. A study should be conducted in which data is collected at the district level.

4. A study should be conducted with sampling defined by demographic population. This could include a study of rural vs. urban vs. suburban corporations.

Summary

While a variety of wealth categories were considered in this study in relation to general fund monies supporting special education, these measures of wealth do not indicate an increase or decrease in funding expenditures. An investigation of reporting latitudes, multiple levels of bureaucracy and unreconciled summaries of data continue to widen the gap between perceptions and actual spending disparities. While no significant difference among wealth measures and special education general fund expenditures were indicated in this study, reporting process discrepancies indicate that special education expenditure burdens could reasonably exist in the general fund.

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APPENDIXES

APPENDIX A

INDIANA SCHOOL CORPORATIONS BASED ON PERCENT OF STUDENTS IN POVERTY LISTED FROM LOW TO HIGH:

1. Carmel Clay Schools
2. MSD Southwest Allen County
3. Hamilton Southeastern Schools
4. Eagle-Union Community School Corporation
5. School town of Munster
6. Northwest Allen County Schools
7. New Harmony Town and Township Consolidated Schools
8. East Porter County School Corporation
9. Southern Hancock Community School Corporation
10. Brownsburg Community School Corporation
11. Cowan Community School Corporation
12. Danville Community School Corporation
13. Lake Central School Corporation
14. Mt. Vernon Community School Corporation
15. Center Grove Community School Corporation

280. Kokomo-Center Township Consolidated School Corporation
281. Western Wayne Schools
282. Richmond Community School Corporation
283. Marion Community Schools
284. Crawford County Community School Corporation
285. Anderson Community School Corporation
286. School City of Hammond
287. South Bend Community School Corporation
288. Muncie Community Schools
289. Scott County School District 1
290. Lake Ridge Schools
291. River Forest Community School Corporation
292. Gary Community School Corporation
293. Indianapolis Public Schools
294. School City of East Chicago

APPENDIX B
INDIANA SCHOOL CORPORATIONS BASED ON GENERAL FUND

APPROPRIATION PER STUDENT LISTED FROM HIGH TO LOW:

1. Cass Township School Corporation
2. North Judson-San Pierre Schools
3. Dewey Township School Corporation
4. School City of East Chicago
5. Whiting School City
6. Prairie Township School Corporation
7. Maconaqua School Corporation
8. MSD Mt. Vernon
9. Gary Community School Corporation
10. West Lafayette Community School Corporation
11. Marion Community School Corporation
12. South Newton School Corporation
13. River Forest Community School Corporation
14. MSD Warren Township
15. New Harmony Town and Township Consolidated Schools

280. Brown County Community School Corporation
281. Triton School Corporation
282. Pioneer Regional School Corporation
283. Westfield-Washington School Corporation
284. Spencer-Owen Community School Corporation
285. Monroe Central School Corporation
286. North Miami Community School Corporation
287. Northern Wells Community School Corporation
288. Danville Community School Corporation
289. New Prairie United School Corporation
290. Shelby Eastern School Corporation
291. East Noble School Corporation
292. Northwest Hendricks School Corporation
293. Rossville Consolidated School Corporation
294. Brownstown Central Community School Corporation