Grounding Research in Reality

Fiscal Equity and K-12 Funding in Illinois

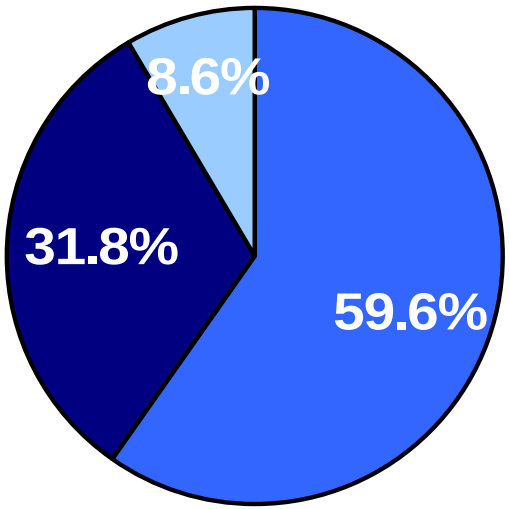
A presentation at the
Focus on Illinois Education Research Symposium
Urbana-Champaign, IL
by
Christopher M. Mullin & Kathleen S. Brown
on
June 10, 2009

Overview

- Project Impetus
  - The Education Trust's Funding Gap (January 2008)
  - D. Verstegen and L. Driscoll's "Educational Opportunity: The Illinois Dilemma" (Winter 2008)

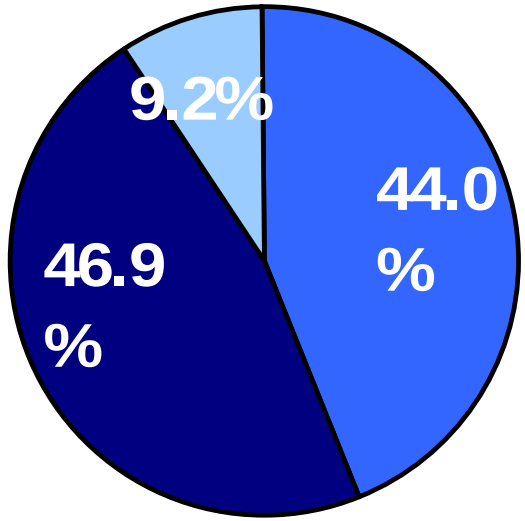
- Contributors in Process
  - *Urban League* lawsuit (August 2008)
  - Center for Tax and Budget Accountability's
    - "Money Matters: How the Illinois School Funding System Creates Significant Educational Inequities that Impact Most Students in the State" (September 2008)

K-12 Funding in Illinois, 2004-2005



Illinois

Local
State
Federal



United States

Source: Table 1.—Revenues and percentage distribution of revenues for public elementary and secondary education, by source and state or jurisdiction: Fiscal year 2005 (U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," fiscal year 2005, Version 1a)

K-12 Funding in Illinois, 2004-2005

- UNRESTRICTED FUNDS
  - Defined:
    - Funds received by district for any legal, educational purpose.
    - "These funds can be viewed as the state's share of the costs of basic education for students in the state" p.69
  - 54.2% of state funds in 2004-2005
  - $3.7B in 2004-2005
  - In distribution, populations of interest can be included.
    - In Illinois, funds distributed via the General State Aid entitlement

- RESTRICTED FUNDS
  - Defined:
    - Funds provided to the district to be used only for their designated purpose.
    - Most federal funds received by a district are targeted for specific populations of interest or other purposes.
  - 45.8% of state funds in 2004-2005
  - $3.1B in 2004-2005
  - Targeted in distribution.

Source: William T. Hartman, School District Budgeting (Englewood Cliffs, NJ: Prentice Hall 1988), 69.

Choosing the Data for Analysis

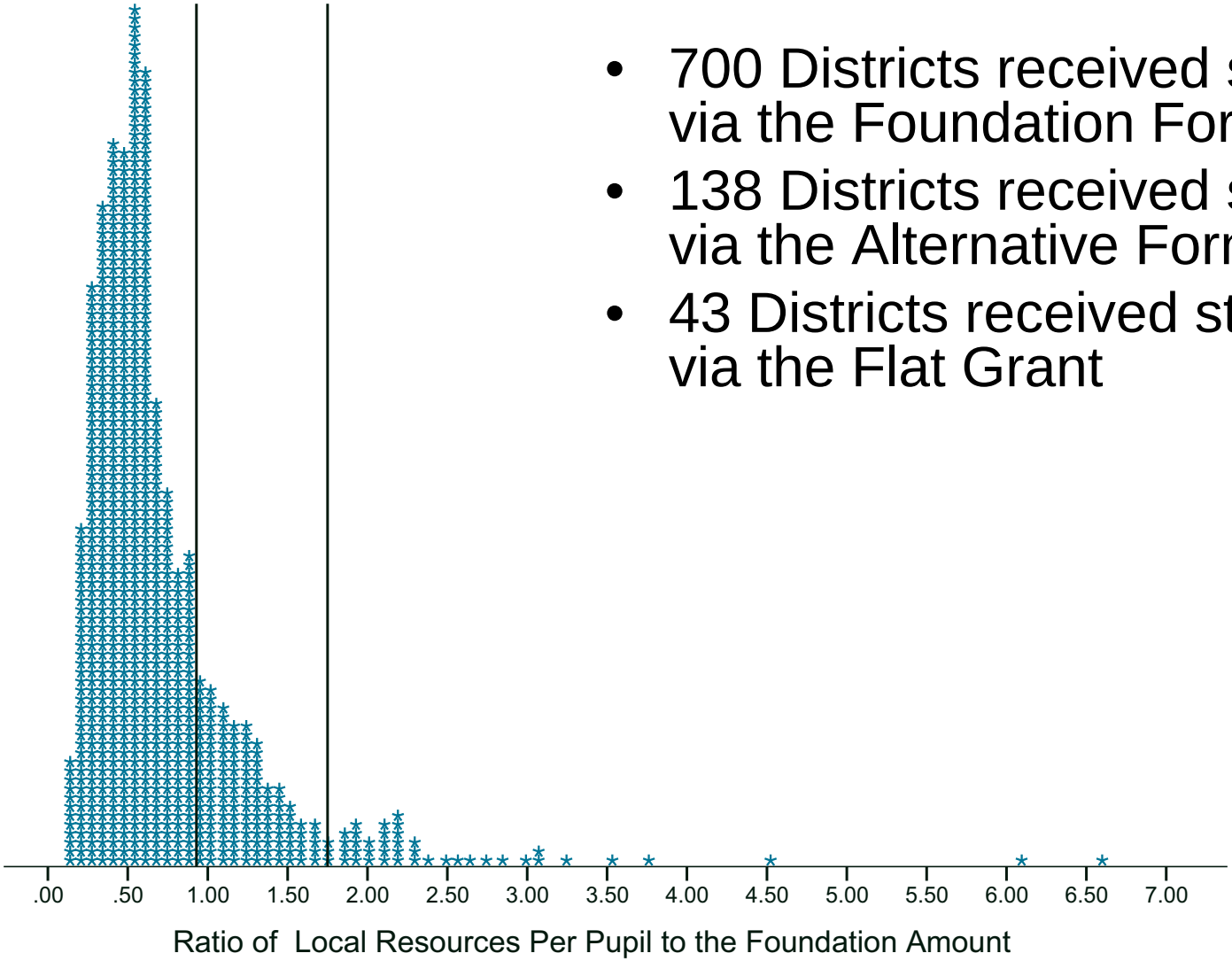
- Total revenues from local, state, and federal sources
  - EdTrust
- Total revenues from local and state sources
  - The Illinois Dilemma
- Total general revenues from local and state sources (i.e. total state and local revenues minus restricted revenues [categorical aids])
  - Grounding Research in Reality
  - Money Matters
- Analysis may also include different levels of expenditures…

Data categories outlined in Allan R. Odden and Lawrence O. Picus, *School Finance: A Policy Perspective, 4th Edition* (New York, NY: McGraw-Hill 2008), 61.

Defining the GSA Entitlement

1. Foundation Formula
   - 0 to 93% of Foundation Amount raised by Local Resources
   - 93 to 175% of Foundation Amount raised by Local Resources
   - 175%+ of Foundation Amount raised by Local Resources
2. Poverty Grant
3. Field Audits
4. Hold Harmless

Distribution of Local Resources in General State Aid entitlement



- 700 Districts received state aid via the Foundation Formula
- 138 Districts received state aid via the Alternative Formula
- 43 Districts received state aid via the Flat Grant

Two Reports

The Education Trust

The Funding Gap

By Carmen G. Arroyo

1,000 $
500 $
- 500 $

WARNING
Watch the Gap

In the increasingly competitive international economy, a good education is the best—and perhaps only—insurance. This is especially true for students who are poor, English-language learners, or members of minority groups. "Get a good education," we say. "It's the best chance you have."

Unfortunately, too many states provide no such assurance—or insurance—for the students who need it most. Despite national imagery full of high-flying concepts like "equal opportunity" and "level playing field," English-learner, low-income, and minority students do not get the extra school supports they need to catch up to their more advantaged peers; they all too frequently receive less than do other students.

This report examines one way in which these students are shortchanged: the inequitable distribution of state and local funding. A hard look at the funding data makes it clear that many of the school districts with the greatest needs often receive the least funding, begging the question of whether we're setting up some students for failure.

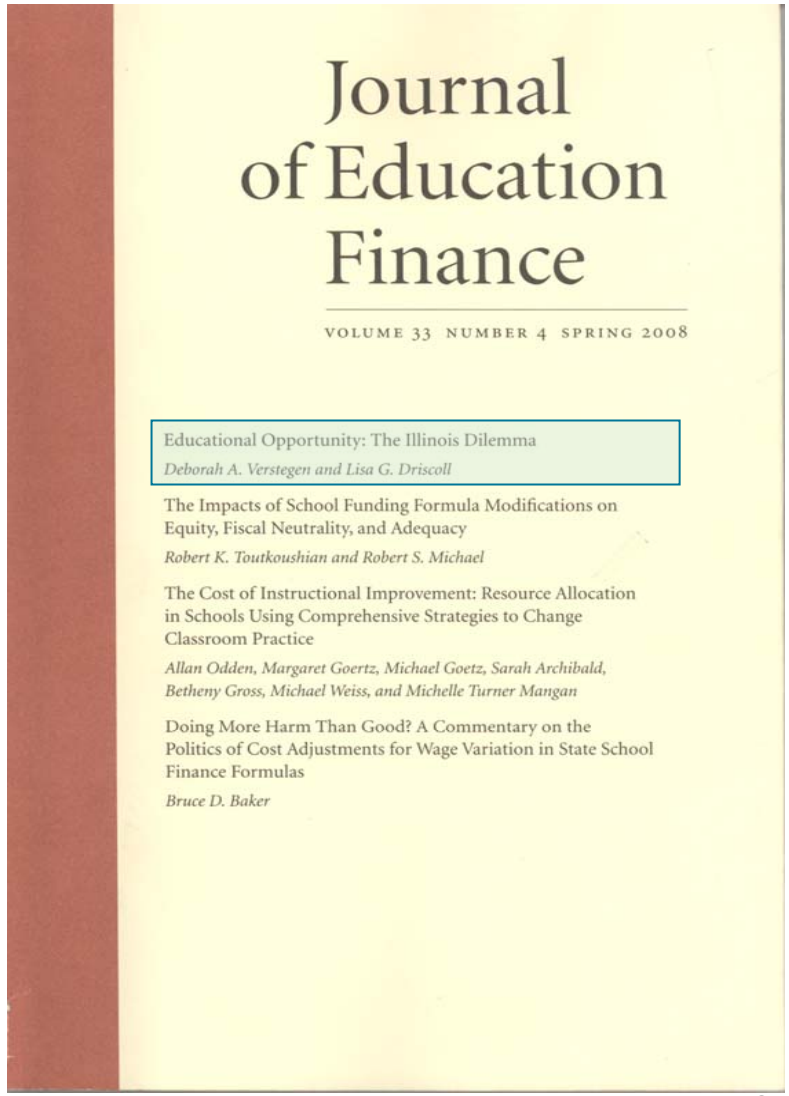
But here's the good news: while some states persist in promoting inequality, others are showing us that, with the right leadership, inequitable funding patterns can be changed. We can unstack the deck. We can ensure that our most vulnerable students get a fair shot at success. Some states have provided extras to their neediest children for years; still others are beginning to acknowledge that their futures hinge on providing quality education to all and have begun to adjust their funding patterns.

In this report, we'll provide both the "good news" and the "bad news." Facts—even the uncomfortable ones—are the best way to help people face up to the need for change. But it also helps to have evidence that change is possible, to see actual models of success.

We hope the data will make people at least pause before they offer platitudes about the "critical importance of closing our achievement gaps." If closing those gaps is as important as people say, then it's time—past time—that we acted like it.

This Year's Report

This is the seventh in a series of annual Education Trust reports analyzing education spending patterns in the states. This year we present changes in funding gaps, state-by-state, from 2000 to 2006. The analysis compares state and local spending in school districts that have the highest numbers of low-income students with those that have the lowest concentration of such students. We do the same for districts with the highest and lowest numbers of minority students. This year we also look at a third category: spending in school districts serving high numbers of English-language learners (ELLs) compared with those serving few or none of these students.



Journal of Education Finance

VOLUME 33 NUMBER 4 SPRING 2008

Educational Opportunity: The Illinois Dilemma
Deborah A. Verstegen and Lisa G. Driscoll

The Impacts of School Funding Formula Modifications on Equity, Fiscal Neutrality, and Adequacy
Robert K. Toutkoushian and Robert S. Michael

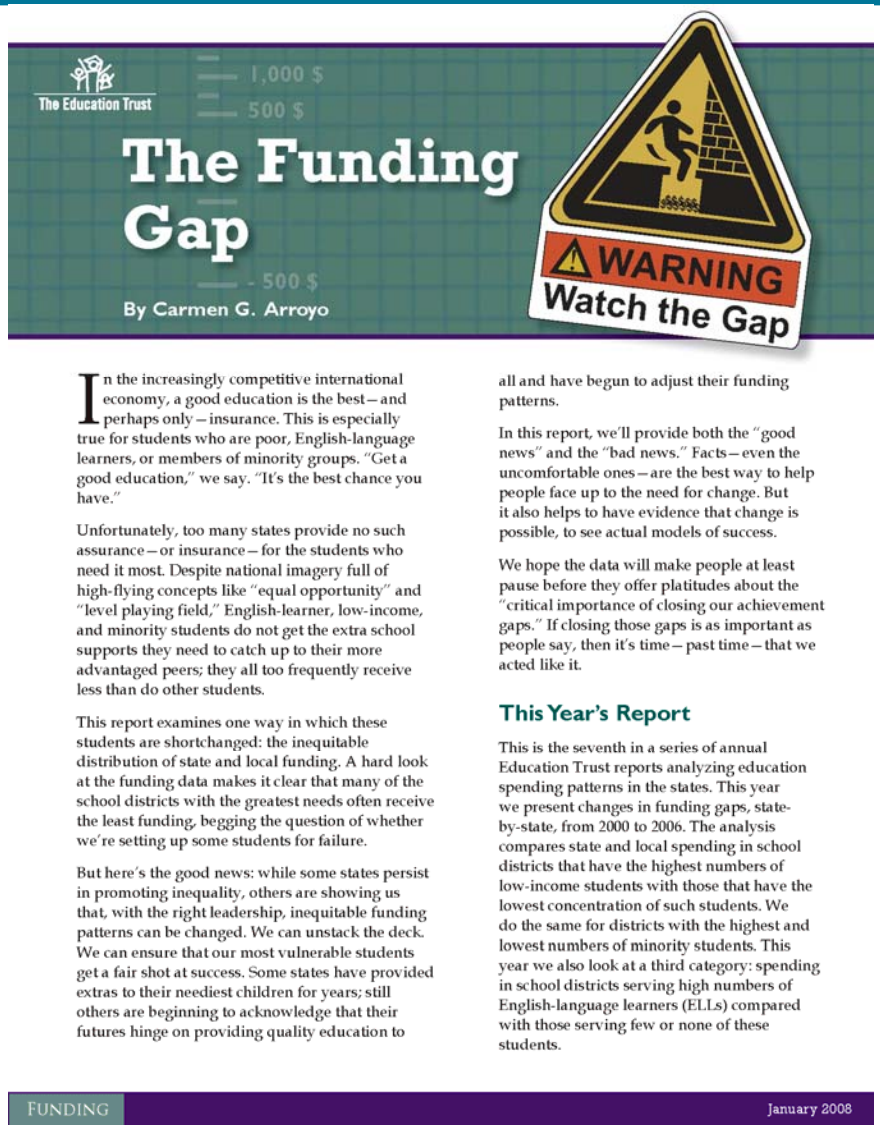
The Cost of Instructional Improvement: Resource Allocation in Schools Using Comprehensive Strategies to Change Classroom Practice
Allan Odden, Margaret Goertz, Michael Goetz, Sarah Archibald, Betheny Gross, Michael Weiss, and Michelle Turner Mangan

Doing More Harm Than Good? A Commentary on the Politics of Cost Adjustments for Wage Variation in State School Finance Formulas
Bruce D. Baker

Purpose of IERC Study

- The purpose of this study was to replicate both The Education Trust's *The Funding Gap* and D. Verstegen and L. Driscoll's *The Illinois Dilemma* studies published in 2008 utilizing the actual allocations to districts resulting from the fiscal policy mechanism (funding formula) in Illinois for the 2004-2005 school year to understand the influence of adjusted values on determinants of fiscal equity as applied in each of the earlier studies.

Measuring the "Gap"



The Education Trust

1,000 $

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The Funding Gap

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This report examines one way in which these students are shortchanged: the inequitable distribution of state and local funding. A hard look at the funding data makes it clear that many of the school districts with the greatest needs often receive the least funding, begging the question of whether we're setting up some students for failure.

But here's the good news: while some states persist in promoting inequality, others are showing us that, with the right leadership, inequitable funding patterns can be changed. We can unstack the deck. We can ensure that our most vulnerable students get a fair shot at success. Some states have provided extras to their neediest children for years; still others are beginning to acknowledge that their futures hinge on providing quality education to all and have begun to adjust their funding patterns.

In this report, we'll provide both the "good news" and the "bad news." Facts—even the uncomfortable ones—are the best way to help people face up to the need for change. But it also helps to have evidence that change is possible, to see actual models of success.

We hope the data will make people at least pause before they offer platitudes about the "critical importance of closing our achievement gaps." If closing those gaps is as important as people say, then it's time—past time—that we acted like it.

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FUNDING January 2008

- Description
  - 50 states
  - Since 2001
  - Standardized Methodology - generally
- Unit of Analysis
  - District
- Data Sources
  - US Census Bureau
    - School district finance data
    - School district poverty data
  - National Center for Education Statistics
    - School district enrollment data
    - School enrollment data
    - Comparable Wage Index

Measuring the "Gap"

Treatment of the Data (Steps)

1. "Calculate adjusted state and local revenue amount"
   - Used Comparable Wage Index from NCES
2. "Calculate adjusted pupil count"
   - The second step included the weighting of student headcounts to adjust for individuals with disabilities, a weight of 1.9 or 90% more than a non-disabled person, and
   - for those in poverty, a weight of 1.4 was applied.
3. "Calculate cost adjusted funding per-pupil"
   - Divide step 1 by step 2
4. "Identify the groups of districts with the highest and lowest percentages of low-income and minority students"
   - The fourth step ranked all districts in a state in descending order by the percentage of low-income students in a district, then drew lines of distinction at the 25th, 50th, and 75th percent levels to create the quartiles.21 The same procedure was applied to minority students for the analysis of this group.
5. "Calculate average per-student revenues in the districts with the highest and lowest percentages of low-income students"
   - The mean difference between the highest and lowest district quartiles of the group of interest was the magnitude of the "gap."

Source: Quotes and information from Carmen G. Arroyo, *The Funding Gap: Technical Appendix* (Washington, DC: The Education Trust 2008), 3-5.

Measuring the “Gap”

Table 1. Results of Poverty “Gap” Analysis Per Pupil for *The Funding Gap*, *2004-2005*

	Poverty Quartiles		Minority Quartiles
Highest	$6,554.25		$6,517.97
Lowest	$8,756.91		$8,334.04
Aid “Gap” Per Pupil	-$2,202.66		-$1,816.07

Note: “***The entire report is based on 2005-2006 school year data from both Census and CCD.” Personal Communication, August 24, 2008.***

Measuring the “Gap”

- Unit of Analysis
  - District
    - Addressed Illinois’ three district types
- Data Sources
  - Illinois State Board of Education
    - Data file from Office of Funding & Disbursements via email request
- Treatment of the Data
  - Same process
  - No adjustments or weights applied

Measuring the “Gap”

Results of Poverty “Gap” Analysis Per Pupil for *The Funding Gap* and the IERC Study, *2004-2005*

Poverty Quartiles	*The Funding Gap*	IERC Study
Highest	$6,554.25	$5,803.12
Mid-High	Not reported	$5,786.19
Mid-Low	Not reported	$5,766.60
Lowest	$8,756.91	$6,372.21
Aid “Gap” Per Pupil	-$2,202.66	-$569.08
Number of Districts	Not reported	872
Pupil Count	Not reported	1,900,603.58
Quartile Cut Points (Pupils)	Not reported	475,150.89

Measuring the “Gap”

Results of Minority “Gap” Analysis Per Pupil for *The Funding Gap* and the IERC Study, *2004-2005*

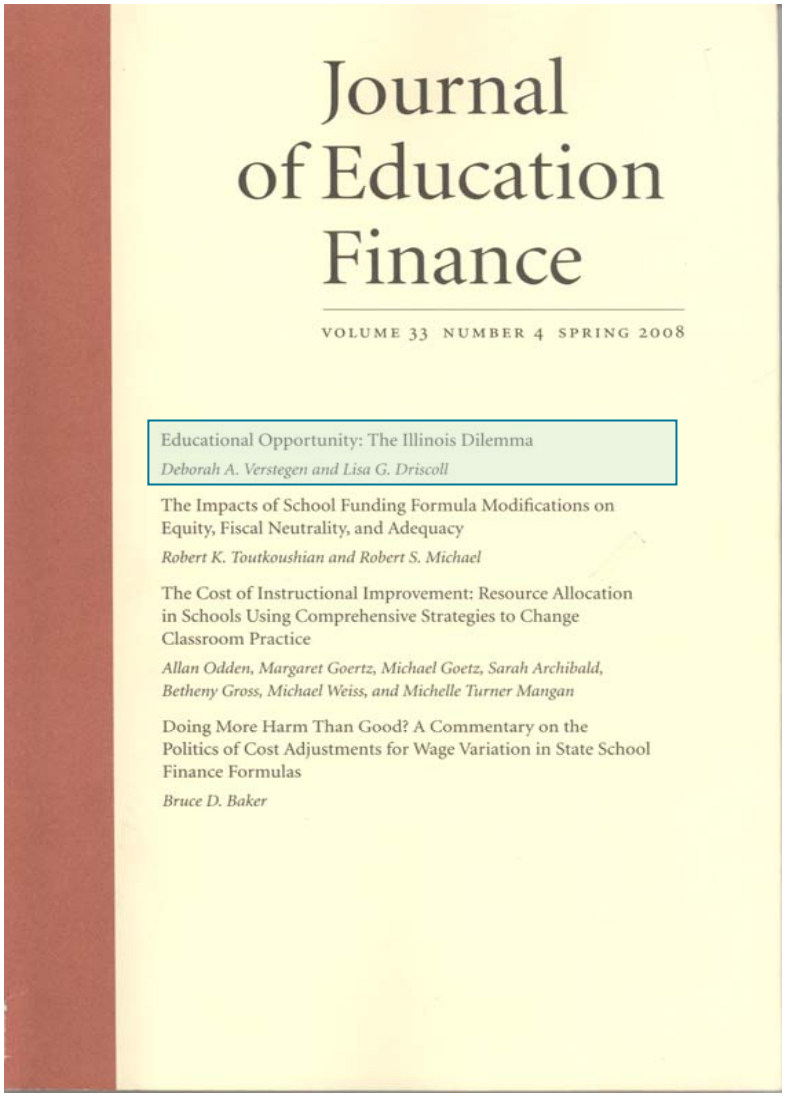
Minority Quartiles	*The Funding Gap*	IERC Study
Highest	$6,517.97	$5,826.50
Mid-High	Not reported	$5,684.87
Mid-Low	Not reported	$6,124.68
Lowest	$8,334.04	$5,671.95
Aid “Gap” Per Pupil	-$1,816.07	$154.54
Number of Districts	Not reported	867
Pupil Count	Not reported	1,873,453.08
Quartile Cut Points (Pupils)	Not reported	486,363.26

Measuring the “Gap”

- Conclusion
  - Different Results

- Implications
  - From these findings, it would suggest that the inequities lie in the **categorical grants** that districts received.

Grounding the Dilemma



- Study specific to Illinois
- Discusses equity, adequacy, and legal aspects of K-12 funding

Grounding the Dilemma

- Unit of Analysis
  - District
    - Addressed Illinois' three district types
- Data Sources
  - Illinois State Board of Education
    - Unclear exactly
    - For example, "[a]ll measures took the size of the school district into account…" (p.334).
- Treatment of the Data
  - Traditional school finance calculations
  - Adjustments and weights applied
    - 1.9 special education
    - 1.5 low-income (free and reduced lunch-unclear)
    - 1.5 English language learners

Grounding the Dilemma

Fiscal Equity Calculation Outcomes from *The Illinois Dilemma*

	Elementary District	High School District	Unit District	All Districts Combined
Range	$16,604	$12,903	$10,885	$16,620
Restricted Range	$5,817	$7,874	$7,436	$5,927
Federal Range Ratio	1.36	1.28	1.66	--
Mean	$6,825	$9,817	$5,335	$6,184
Median	$6,468	$9,412	$4,779	$5,692
Coefficient of Variation (%)	27.69%	26.82%	19.67%	22.39%
Gini Index	0.1521	0.1502	0.0980	0.1168
Verstegen Index	1.2856	1.2648	1.2725	1.2748
McLoone Index	0.8247	0.8212	0.9599	0.9120
Pupil Count	683,201	306,458	1,827,950	2,817,609
Total Number of Districts	378	100	397	875

a. Data obtained from tables 2 and 4 in Deborah A. Verstegen and Lisa G. Driscoll, "Educational Opportunity: The Illinois Dilemma," *Journal of Education Finance* 33(4): 331-351.

Grounding the Dilemma

Table 4. Illinois Bivariate Measures of Fiscal Dispersion by District Type

	Elementary District	High School District	Unit District	All Districts Combined
Correlation (r)	0.7781	0.7631	0.6734	0.7846
Regression (r^2)	0.6054	0.5823	0.4535	0.6156
Slope	0.0126	.0108	0.022	--

Notes:
As it pertained to wealth, this study utilized equalized assessed values for 2002 in accurate reflection of the rates applied via the funding mechanism. *The Illinois Dilemma* study utilized equalized values from 2003, which in practice were utilized in the 2005-2006 allocation.

a. Data obtained from tables 3 and 5 in Deborah A. Verstegen and Lisa G. Driscoll, "Educational Opportunity: The Illinois Dilemma," *Journal of Education Finance* 33(4): 331-351.

Grounding the Dilemma

- Unit of Analysis
  - District
    - Addressed Illinois' three district types
- Data Sources
  - Illinois State Board of Education
    - Data file from Office of Funding & Disbursements via email request
- Treatment of the Data
  - Traditional school finance calculations
  - No adjustments or weights applied

Grounding the Dilemma

Comparison of Fiscal Equity Calculation Outcomes between *The Illinois Dilemma* and the IERC Study, FY2005

	Elementary District		High School District		Unit District		All Districts Combined	
	The Illinois Dilemma[a]	IERC Study	*The Illinois Dilemma*[a]	IERC Study	*The Illinois Dilemma*[a]	IERC Study	*The Illinois Dilemma*[a]	IERC Study
Range	$16,604	$28,067.36	$12,903	$7,627.99	$10,885	$6,568.09	$16,620	$28,578.88
Restricted Range	$5,817	$3,965	$7,874	$4,702	$7,436	$4,057	$5,927	$3,965
Federal Range Ratio	1.36	0.80	1.28	0.94	1.66	0.82	--	0.80
Mean	$6,825	$6,302	$9,817	$5,682	$5,335	$5,325	$6,184	$5,787.31
Median	$6,468	$5,285	$9,412	$5,079	$4,779	$5,100	$5,692	$5,151.69
Coeff. Of Variation (%)	27.69%	46.47%	26.82%	23.80%	19.67%	12.87%	22.39%	35.93%
Gini Index	0.1521	0.5081	0.1502	0.4905	0.0980	0.4353	0.1168	0.4830
Verstegen Index	1.2856	1.4045	1.2648	1.6285	1.2725	1.8180	1.2748	1.5744
McLoone Index	0.8247	0.4774	0.8212	0.4843	0.9599	0.4915	0.9120	0.4882
Pupil Count	683,201	505,350	306,458	228,589	1,827,950	1,171,584	2,817,609	1.905,521
Total Number of Districts	378	379	100	103	397	399	875	881

a. Data obtained from tables 2 and 4 in Deborah A. Verstegen and Lisa G. Driscoll, "Educational Opportunity: The Illinois Dilemma," *Journal of Education Finance* 33(4): 331-351.

Grounding the Dilemma

Illinois Bivariate Measures of Fiscal Dispersion by District Type

	Elementary District		High School District		Unit District		All Districts Combined	
	The Illinois Dilemma[a]	IERC Study	*The Illinois Dilemma*[a]	IERC Study	*The Illinois Dilemma*[a]	IERC Study	*The Illinois Dilemma*[a]	IERC Study
Correlation (r)	0.7781	0.9272	0.7631	0.8485	0.6734	0.5792	0.7846	0.7432
Regression (r^2)	0.6054	0.8597	0.5823	0.7200	0.4535	0.3354	0.6156	0.5524
Slope	0.0126	0.4989	.0108	0.3526	0.022	0.1422	--	0.2728

Notes:
As it pertained to wealth, This Study utilized equalized assessed values for 2002 in accurate reflection of the rates applied via the funding mechanism. *The Illinois Dilemma* study utilized equalized values from 2003, which in practice were utilized in the 2005-2006 allocation.

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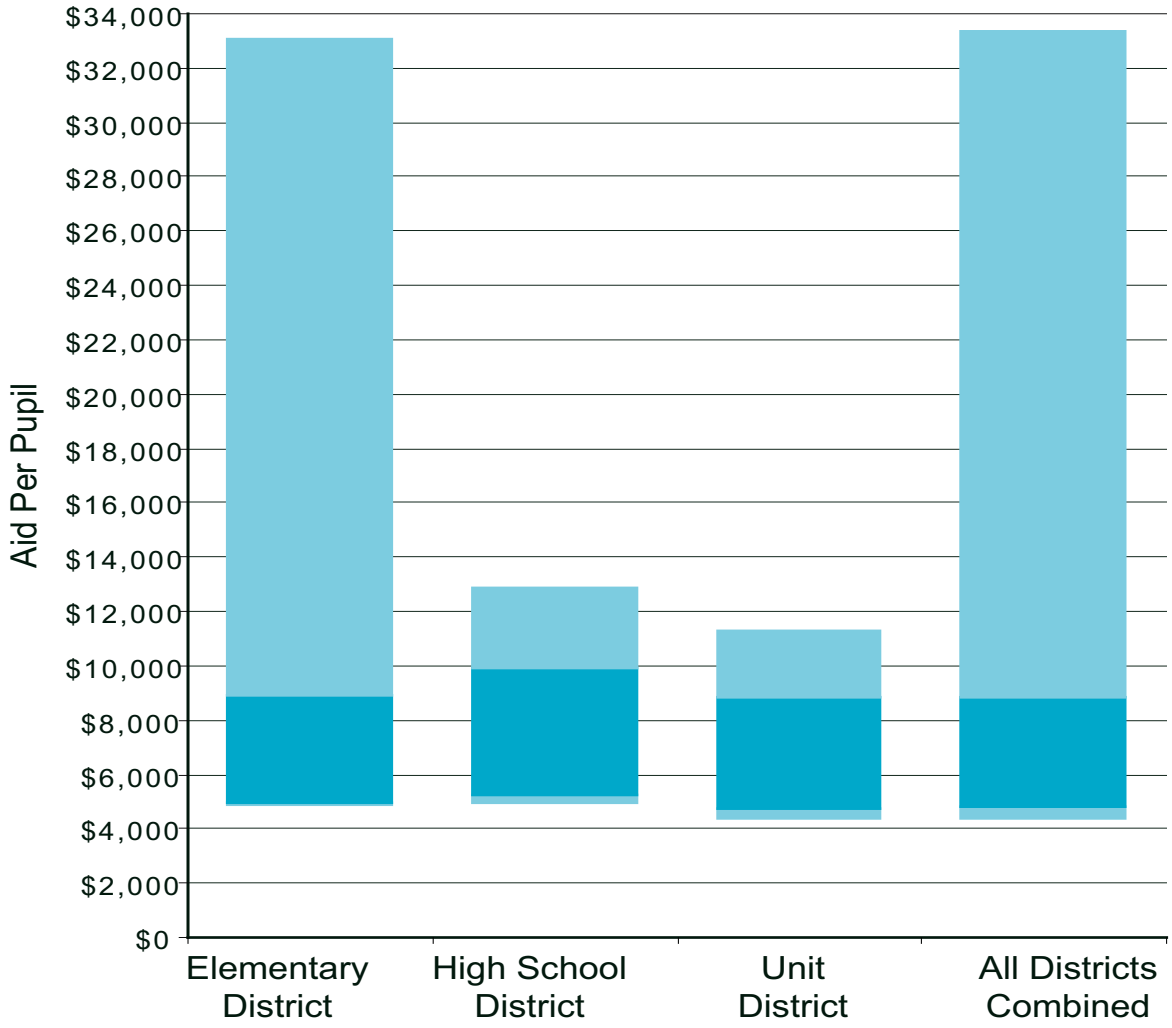
Grounding the Dilemma



	Elementary District	High School District	Unit District	All Districts Combined
Range	$28,067.36	$7,627.99	$6,568.09	$28,578.88
Restricted Range	$3,965.37	$4,702.26	$4,057.18	$3,964.91

Grounding the Dilemma

District Name	County	Average Daily Attendance[a]	Ratio of Local Resources to Foundation Amount[a]	TSLAPP[b]	District Poverty[c] Percent	District Minority[d] Percent
Rondout	Lake	119.40	6.59	$32,982.65	6%	19%
Butler	Dupage	499.12	6.09	$30,484.38	3%	5%
Salt Creek	Dupage	566.64	4.52	$22,689.94	5%	17%
Bannockburn	Lake	205.09	3.76	$18,918.46	11%	3%
Lake Forest	Lake	2039.93	3.53	$17,765.37	2%	2%
Seneca Community Consolidated	Lasalle	572.5	3.24	$16,411.03	9%	4%
Niles Elementary	Cook	545.0	3.08	$15,531.52	9%	12%
Dimmick Community Consolidated	Lasalle	109.54	3.06	$15,454.81	7%	4%
Rosemont Elementary	Cook	265.26	2.99	$15,096.02	14%	18%
Sunset Ridge	Cook	541.3	2.84	$14,356.76	5%	4%
Sum		5517.78				
Average		551.78	3.97	$19,969.09	7.1%	8.8%

a. Data from Illinois State Board of Education data file
b. Authors' calculation from data file obtained from the Illinois State Board of Education
c. Authors' calculation from the United States Census Bureau data, retrieved August 21, 2008 from http://www.census.gov/hhes/www.saipe/district.html.
d. Authors' calculation from data file obtained from the National Center for Education Statistics, Common Core Data. Retrieved August 21, 2008 from http://nces.ed.gov/ccd/pubschuniv.asp.

Grounding the Dilemma

- Examining Elementary Districts

	Elementary District			All Districts Combined		
	The Illinois Dilemma[a]	IERC Study		*The Illinois Dilemma*[a]	IERC Study	
		With 10 Wealthiest	*Without 10 Districts*		With 10 Wealthiest	*Without 10 Districts*
Range	$16,604	$28,067.36	$8,956.55	$16,620	$28,578.88	$9,468.06
Restricted Range	$5,817	$3,965	$5,107	$5,927	$3,965	$3,240
Federal Range Ratio	1.36	1.22	0.9978	n/a	0.78	0.6229
Mean	$6,825	$6,302	$5,273.46	$6,184	$5,787.31	$5,145.05
Median	$6,468	$5,285	$5,931.94	$5,692	$5,151.69	$5,624.49
Coefficient of Variation (%)	27.69%	46.47%	26.69%	22.39%	35.93%	22.29%
Gini Index	0.1521	0.5081	.5007	0.1168	0.4830	.4801
Verstegen Index	1.2856	1.4045	1.5818	1.2748	1.5744	1.67
McLoone Index	0.8247	0.4774	0.4927	0.9120	0.4882	0.4945
Pupil Count	683,201	505,350	499,886	2,817,609	1,905,521	1,900,058
Total Number of Districts	378	379	369	875	881	871

a. Data obtained from tables 2 and 4 in Deborah A. Verstegen and Lisa G. Driscoll, "Educational Opportunity: The Illinois Dilemma," *Journal of Education Finance* 33(4), (2008): 331-351.

Grounding Research in Reality

- Conclusion
  - Inequities existed in elementary districts
  - Observed differences may be due to weighting or data source, no concrete judgment can be made.

Grounding Research in Reality

- Recommendations
  - ***Researchers must acknowledge the efforts states employ to address additional funding for populations of interest.***
  - ***Policymakers must insist on both unadjusted and adjusted figures.***
  - ***A state specific, comprehensive report is needed.***

Current Standing

- EdTrust “Funding Gap”
  - Has been pulled from website
    - *1/7/09 – We recently discovered some data errors in the 2008 edition of The Funding Gap and are working to correct them and then repost the report as quickly as possible. In the meantime, the 2006 edition is our most up-to-date and comprehensive report on state funding gaps. Please check back soon for the updated 2008 report. We apologize for any inconvenience.*
  - 2009 report yet to be released

- Response in Summer 2009 issue of the *Journal of Education Finance*

Grounding Research in Reality

- Thank you

- Christopher M. Mullin, Ph.D.
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- Policy Brief and Full Report
  - PDF versions on website: ierc.siue.edu
  - Paper versions by request.