

# 2008 Brown Center Report on American Education: How Well Are Students Learning?

Urban School Achievement

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February 25, 2009

## Background and Research Question

- Updated study from 2001 Brown Center Report (analyzed 2000 data).
- NAEP Trial Urban District Assessment and Council of Great City Schools Report have indicated rising achievement in urban schools.
- Has achievement increased in urban schools and closed the gap with rural and suburban counterparts?

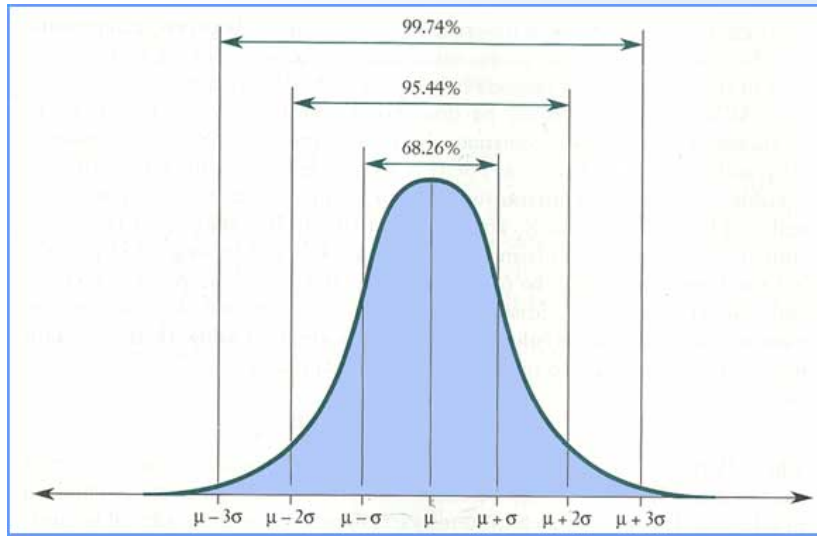
## Methodology

- Replicated earlier analysis using 2007 data. Tracked test scores and demographic statistics (2000-2007) from thirty-seven of nation's top fifty cities.
- District test scores are standardized (converted into z-scores) to compare big city schools with districts statewide.

## What is a z-score ?

- A z-score transforms a group of data according to the z-distribution (or normal distribution curve).
- Z-scores tell the distance of any particular test score from the state average.
- Z-scores help compare districts that are taking—from state to state—different tests with different scales.

## Z distribution



## Z-score to percentile conversion

Z-score	Percentile Rank
2.00	98
1.65	95
1.00	84
0.70	76
0.00	50
-0.70	24
-1.00	16
-1.65	5
-2.00	2

## All cities, Change in z-score (2000-2007) Table 1

Achievement in big city school districts (2000-2007)

Table 3-1

City	State	School District	2007				2000			
			Change in Z Score	Average Z Score	% Free Lunch	% Black + Hispanic	Average Z Score	% Free Lunch	% Black + Hispanic	
New Orleans	LA	New Orleans Public Schools	3.03	1.05	0.29	0.93	-1.98	0.70	0.92	
Dallas	TX	Dallas Independent School District	1.89	-1.29	0.83	0.93	-3.18	0.65	0.86	
Minneapolis	MN	Minneapolis Public Schools	1.59	-1.81	0.67	0.57	-3.40	0.54	0.45	
Austin	TX	Austin Independent School District	1.42	-0.10	0.46	0.69	-1.52	0.42	0.59	
Long Beach	CA	Long Beach Unified Public School District	1.42	0.54	0.69	0.68	-0.88	0.64	0.58	
Miami	FL	Miami-Dade County Public Schools	1.40	-0.37	0.61	0.89	-1.77	0.53	0.84	
San Antonio	TX	San Antonio Independent School District	1.27	-0.96	0.19	0.97	-2.23	0.80	0.94	
New York City	NY	New York City Public Schools	1.09	-1.31	0.78	0.76	-2.40	0.58	0.74	
Philadelphia	PA	School District of Philadelphia	1.06	-2.32	0.71	0.81	-3.38	0.42	0.75	
Chicago	IL	Chicago Public Schools	0.98	-1.31	0.74	0.86	-2.29	0.56	0.86	
Charlotte	NC	Charlotte-Mecklenburg Schools	0.96	0.27	0.46	0.58	-0.69	0.29	0.43	
Milwaukee	WI	Milwaukee Public Schools	0.83	-3.57	0.72	0.78	-4.40	0.66	0.72	
Virginia Beach	VA	Virginia Beach City Public Schools	0.85	0.95	0.26	0.33	0.26	0.17	0.29	
Fresno	CA	Fresno Unified School District	0.82	-0.54	0.82	0.68	-1.16	0.62	0.53	
El Paso	TX	El Paso Independent School District	0.49	-0.54	0.70	0.86	-1.03	0.59	0.80	
Jacksonville	FL	Duval County Public Schools	0.41	0.00	0.42	0.51	-0.41	0.38	0.42	
Houston	TX	Houston Independent School District	0.38	-0.64	0.80	0.88	-1.02	0.60	0.80	
Colorado Springs	CO	Colorado Springs Public Schools	0.34	0.48	0.40	0.31	0.12	0.23	0.23	
Fort Worth	TX	Fort Worth Independent Schools	0.34	-1.19	0.70	0.82	-1.53	0.53	0.70	
Atlanta	GA	Atlanta Public Schools	0.29	-0.88	0.78	0.90	-0.87	0.74	0.92	
Oakland	CA	Oakland Unified School District	0.28	-1.03	0.68	0.76	-1.31	0.60	0.73	
Los Angeles	CA	Los Angeles Unified School District	0.27	-1.04	0.80	0.88	-1.31	0.73	0.82	
San Francisco	CA	San Francisco Unified School District	0.25	0.50	0.01	0.35	0.25	0.65	0.38	
Seattle	WA	Seattle Public Schools	0.15	0.39	0.39	0.34	0.24	0.19	0.21	
Boston	MA	Boston Public Schools	0.15	-0.60	0.73	0.76	-1.55	0.46	0.73	
Pittsburgh	PA	Pittsburgh Public Schools	0.12	-1.68	0.60	0.61	-1.80	0.42	0.56	
Sacramento	CA	Sacramento Unified School District	0.10	-0.37	0.64	0.52	-0.47	0.59	0.43	
Indianapolis	IN	Indianapolis Public Schools	0.08	-2.56	0.81	0.71	-2.64	0.64	0.59	
Baltimore	MD	Baltimore City Public School System	0.04	-0.69	0.71	0.81	-2.73	0.65	0.85	
Mesa	AZ	Mesa Unified School District	-0.08	0.92	0.53	0.38	1.00	0.19	0.19	
Denver	CO	Denver Public Schools	-0.11	-1.81	0.68	0.76	-1.70	0.51	0.68	
Phoenix	AZ	Phoenix Valley Unified School District	-0.22	1.22	0.24	0.23	1.44	0.16	0.10	
Tucson	AZ	Tucson Unified School District	-0.22	-0.14	0.56	0.60	0.08	0.34	0.47	
San Diego	CA	San Diego Unified School District	-0.28	-0.53	0.60	0.58	-0.25	0.64	0.50	
San Jose	CA	San Jose Unified School District	-0.48	-0.48	0.41	0.54	0.00	0.43	0.51	
Las Vegas	NV	Clark County School District	-0.67	-1.06	0.46	0.51	-0.39	0.27	0.33	
Detroit	MI	Detroit Public Schools	-1.12	-2.54	0.78	0.98	-1.42	0.64	0.93	
Mesa			0.49	-0.77	0.57	0.68	-1.26	0.51	0.61	

## Top Ten Cities, Change in z-score (2000-2007) Table 3-1

City	State	School District	2007				2000		
			Change in Z Score	Average Z Score	% Free Lunch	% Black + Hispanic	Average Z Score	% Free Lunch	% Black + Hispanic
New Orleans	LA	New Orleans Public Schools	3.03	1.05	0.29	0.93	-1.98	0.70	0.92
Dallas	TX	Dallas Independent School District	1.89	-1.29	0.83	0.93	-3.18	0.65	0.86
Minneapolis	MN	Minneapolis Public Schools	1.59	-1.81	0.67	0.57	-3.40	0.54	0.45
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Miami	FL	Miami-Dade County Public Schools	1.40	-0.37	0.61	0.89	-1.77	0.53	0.84
San Antonio	TX	San Antonio Independent School District	1.27	-0.96	0.19	0.97	-2.23	0.80	0.94
New York City	NY	New York City Public Schools	1.09	-1.31	0.78	0.76	-2.40	0.58	0.74
Philadelphia	PA	School District of Philadelphia	1.06	-2.32	0.71	0.81	-3.38	0.42	0.75
Chicago	IL	Chicago Public Schools	0.98	-1.31	0.74	0.86	-2.29	0.56	0.86

## Bottom Ten Cities, Change in z-score (2000-2007) Table 3-1

City	State	School District	2007				2000		
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Indianapolis	IN	Indianapolis Public Schools	0.08	-2.56	0.81	0.71	-2.64	0.64	0.59
Baltimore	MD	Baltimore City Public School System	0.04	-2.69	0.71	0.91	-2.73	0.65	0.85
Mesa	AZ	Mesa Unified School District	-0.08	0.92	0.53	0.38	1.00	0.19	0.19
Denver	CO	Denver Public Schools	-0.11	-1.81	0.65	0.76	-1.70	0.51	0.68
Phoenix	AZ	Paradise Valley Unified School District	-0.22	1.22	0.24	0.23	1.44	0.16	0.10
Tucson	AZ	Tucson Unified School District	-0.22	-0.14	0.56	0.60	0.08	0.34	0.47
San Diego	CA	San Diego Unified School District	-0.28	-0.53	0.60	0.58	-0.25	0.64	0.50
San Jose	CA	San Jose Unified School District	-0.48	-0.48	0.41	0.54	0.00	0.43	0.51
Las Vegas	NV	Clark County School District	-0.67	-1.06	0.46	0.51	-0.39	0.27	0.33
Detroit	MI	Detroit Public Schools	-1.12	-2.54	0.75	0.98	-1.42	0.64	0.93

## State Analysis: Poor Urban School Districts (2000-2007)

Achievement in poor urban school districts, 2000-2007 (by state)

Table 3-2

	N	CHANGE IN Z SCORE	2007				2000			
			Average Z Score	Standard Error	% Free Lunch	% Black + Hispanic	Average Z Score	Standard Error	% Free Lunch	% Black + Hispanic
Minnesota	2	1.53	-1.78	0.03	0.69	0.49	-3.31	0.08	0.52	0.36
Wisconsin	1	0.84	-3.57	—	0.72	0.78	-4.41	—	0.66	0.72
Louisiana	6	0.55	0.02	0.27	0.70	0.67	-0.53	0.37	0.55	0.62
Virginia	9	0.50	-0.74	0.14	0.53	0.70	-1.24	0.25	0.50	0.64
Illinois	4	0.34	-1.55	0.32	0.70	0.82	-1.89	0.17	0.51	0.76
Pennsylvania	8	0.27	-1.78	0.43	0.67	0.59	-2.05	0.44	0.48	0.50
Florida	6	0.17	-0.26	0.10	0.56	0.50	-0.43	0.30	0.45	0.43
California	60	0.15	-0.55	0.07	0.63	0.62	-0.70	0.07	0.61	0.49
Massachusetts	3	0.11	-2.27	0.25	0.79	0.81	-2.38	0.22	0.52	0.75
Maryland	1	0.04	-2.69	—	0.71	0.91	-2.73	—	0.65	0.85
Texas	43	0.03	-0.57	0.11	0.55	0.82	-0.60	0.13	0.59	0.74
Georgia	7	-0.03	-0.75	0.14	0.67	0.76	-0.72	0.11	0.56	0.69
Colorado	2	-0.06	-1.16	0.64	0.65	0.69	-1.10	0.60	0.46	0.60
New York	12	-0.06	-1.94	0.20	0.69	0.61	-1.88	0.20	0.53	0.49
Arizona	10	-0.07	-0.72	0.10	0.72	0.87	-0.65	0.20	0.52	0.73
Indiana	6	-0.23	-2.80	0.31	0.70	0.62	-2.27	0.38	0.53	0.56
Washington	2	-0.27	-1.25	0.52	0.59	0.53	-0.98	0.40	0.44	0.41
North Carolina	1	-0.83	-0.57	—	0.53	0.61	0.26	—	0.40	0.57

## Key Findings

- Scores up in 29 of the 37 cities.
- Scores down in 8 cities.
- Mean growth of 0.49. Equal to a move from 10th to 21st percentile.
- 5 cities scored  $< -2.00$ —below 3rd percentile: Baltimore, Detroit, Indianapolis, Milwaukee, Philadelphia.

## Discussion of Results

- The special case of New Orleans (without New Orleans mean change is 0.44)
- Policies
  - NCLB-style accountability
  - School choice
  - Class size
  - Mayoral control
- Ambiguity of policy effects—multiple policy interventions, at many levels of governance, with details unknown.

## Recommendation

- National Inventory of School Policies—  
model: Schools and Staffing Survey
- State, District, School
- Collect information on policies and  
practices—e.g., textbooks, tracking and  
ability grouping, grading.
- Help identify causes of (and contexts  
affecting) success and failure.

Now taking Questions and Answers

Thank you for participating. Pdf files of the report and press release are available to download at:

[http://www.brookings.edu/reports/2009/0225\\_education\\_loveless.aspx](http://www.brookings.edu/reports/2009/0225_education_loveless.aspx) .

Any further questions can be directed to Lydia Pelliccia, [lpelliccia@lipmanhearne.com](mailto:lpelliccia@lipmanhearne.com).