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Why Funding the Elements Contained in the Evidence-Based Model Makes Sense from Both Educational and Economic Standpoints

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The Evidence-Based Model Makes Sense for Illinois

- The Evidence-Based Model ("EBM") is significantly different from all prior efforts at school funding reform, because it ties education funding to what the evidence indicates is needed to generate improvement in student achievement—something none of the education funding reforms previously proposed in Illinois did.
- The EBM:
 - identifies the level of funding the research indicates is needed to deliver an adequate education to every student.
 - is sensitive to each child's educational needs, ensuring distribution of education funding is equitable, and accounts for the cost of educating children who are low income or English learners.
- Contrast that to the state's current Foundation Level funding method, which does not account for the costs of educating children and instead sets a per pupil funding amount based on what the state can afford.
- The EBM on the other hand determines per pupil expenditures by identifying how much research-based "best practices" cost, given a state's overall and regional labor market and other cost factors.

Research-Based Practices

- Examples of the research-based practices that are funded under the EBM include (but are not limited to):
 - Reducing class size for K-3 to no more than 15 students per classroom;
 - Retaining instructional coaches/facilitators/mentors;
 - Tutoring;
 - Specialized instructional resources for ELL;
 - Technology;
 - Professional development;
 - Full day kindergarten;
 - Parent outreach;
 - Wraparound services;
 - After-school and extended day programs; and
 - Guidance counselors, nurses and school psychiatrists.

- After identifying the cost of evidenced-based programs that correlate to enhanced student achievement, the EBM adjusts those costs to account for total student population, as well as socio-economic demographics and special needs populations of each district.
- Hence, funding levels vary based on what the research indicates is sufficient to pay for the educational practices needed to enhance the academic achievement of the student population being served by each district.
- This means schools with larger ELL and/or low-income student populations, for instance, automatically receive additional funding needed to implement the evidencebased practices that meet the educational needs of those students.

The Evidence-Based Model is Both Accountable and Efficient

- By tying funding to educational practices the evidence demonstrates work, the EBM ensures schools have precisely the resources needed to educate the children they serve— AND NOT A PENNY MORE.
- This benefits both the students who attend the schools that receive the new, evidenced-based investments, as well as the taxpayers who fund them.
- The EBM also creates the basis for developing a much more accurate, useful, and informative system of accountability for K-12 education, by providing data that allow an objective analysis of both the overall resource capacity of each district, as well as whether its educational policy decisions comport with evidence-based best practices.

Why Funding the EBM Makes Economic and Fiscal Sense for Illinois

- Overall, correlations between educational attainment and unemployment rates/wages have never been greater
- Adequate K-12 investments is one of the few public policy options that bear a statistically meaningful relationship to boosting state economic growth over time
 - Over last 30 years, states that invested the most in building K-12 capacity had statistically meaningful advantage in GDP growth (Bensi, Black & Dowd)
 - Examples like Massachusetts, which realized "dramatic" economic gains after making enhanced investment in better schools. Source: Hanushek, Ruhose & Woesmana
 - Indeed, the high-investing states also had larger increases in worker wages and GDP growth over the same time period. Source: Michelle T. Bensi, David C. Black, and Michael R. Dowd. "The Education/Growth Relationship: Evidence from Reach State Panel Data." *Contemporary Economic Policy* 22, no. 2 (April 22, 2004): 297.

- The Federal Reserve of Cleveland found that differences in personal income between states could be explained in large part by differences in educational attainment.
 - Specifically, it found states that had a greater percentage of their population attaining high school degrees than other states, also had a 1.5 percent higher per capita personal income.
 - Overall, the states with the greatest high school and college graduation rates have the highest per capita personal incomes.

Education Wage Gaps Over Time

Education wage gaps	1979	1995	2007	2011
College/high school	23.5%	42.5%	46.4%	46.9%
Advanced degree/high school	32.4%	62.3%	66.6%	69.6%

Source: The State of Working in America

*NOTE: The gaps doubled over the 1979-2011 sequence!

The Bottom Line:

CTBA analysis of Census data on per pupil spending in all 50 states and Washington, D.C., confirms that those states that did the best job investing in K-12 education have higher median and mean wages and income than other states, with per pupil spending being strongly correlated with:

- median income (.668),
- mean hourly wage (.635),
- median hourly wage (.668), and
- annual mean wage (.634).

Potential Growth in Wages if Illinois made the K-12 Investments Needed to Increase High School and College Graduation Rates

	Estimated Increase	Estimated
	in Annual Wages	Increase in
		Graduates
Increasing Illinois HS Graduation	\$111,597,343	13,397
Rate from 82%to 90%		
Increasing Illinois College Graduation	\$219,047,378	10,436
Rate from 30.6% to 38.2%		
Increasing Both	\$438,059,482	

Source: CTBA analysis, Berger and Fisher, "A Well-Educated Workforce is Key to State Prosperity"; Ryan and Siebens, "Educational Attainment in the United States: 2009"; U.S. Census "General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data: Illinois"

- If Illinois were to increase high school and college graduation rates as aforesaid, the state's higher educated workforce would earn an aggregate of \$26.6 billion more over their lifetimes.
- This would increase tax revenue in Illinois by \$118 million annually.
- If Illinois boosted K-12 student achievement on math to the level of Minnesota (tops in the nation), the state's GDP would be some 400 percent greater by 2095. Hanushek, Ruhose & Woesmana, "It Pays to Improve School Quality," Education Next, Summer 2016/Vol. 16, No. 3.

- The federal Equity and Excellence Commission found that eliminating the achievement gap between white students on the one hand and African-American and Hispanic students on the other, would add "some \$50 trillion (in present value terms) to our economy" over the next 80 years.
 - Simply achieving a 90 percent graduation rate for students of color would add as much as \$6.6 billion in annual earnings to the U.S. economy.
- Given that Illinois accounts for around 4.4 percent of the nation's GDP, a similar improvement in graduation rates for students of color in Illinois could be expected to add \$264 million more annually to our state's economy.

Source: U.S. Department of Education, For Each and Every Child—A Strategy for Education Equity and Excellence, (Washington, D.C.: 2013), 13.

Potential Annual Increase in Wages and Savings if High School Dropout Rate is Reduced

	Increase in Wages	Savings (due to Graduation from High School)
Reduce the Dropout Rate by One Percentage Point	\$3,516,723	\$13,949,668

Source: CTBA analysis, Lochner and Moretti "The Effect of Education on Crime: Evidence From Prison Inmates, Arrests, and Self-Reports"

Benefits and Costs of Evidence-Based K-12 Education Programs

Program	Total Benefits	Total Costs	Benefits – Costs	Benefit Return Per \$ of Cost
School-wide Positive Behavior Programs	\$31,741	(\$221)	\$31,521	\$143.98
Tutoring: By peers	\$15,876	(\$)	\$15,765	\$143.20
Professional Development: Use of Data to Guide Instruction	\$13,546	(\$107)	\$13,439	\$126.97
Summer Programs: Book Program	\$11,191	(\$212)	\$10,979	\$52.94
ELL Literacy Instruction	\$7,638	(\$291)	\$7,347	\$26.37
Professional Development: Literacy Collaborative	\$18,566	(\$730)	\$17,836	\$25.44
Case Management in Schools (Wrap Around Services)	\$5,252	(\$248)	\$5,005	\$21.21
Class Size: Kindergarten; Reduce Average Class Size by One	\$1,633	(\$204)	\$1,430	\$8.02
Tutoring: Certified Teachers, Small-Group	\$11,211	(\$1,406)	\$9,804	\$7.98
Summer Programs: Academically Focused	\$5,345	(\$1,132)	\$4,213	\$4.73
Tutoring: With Adults, One-on-One	\$9,956	(\$2,290)	\$7,667	\$4.36
Class Size: I st Grade; Reduce Average Class Size by One	\$737	(\$204)	\$534	\$3.62
Class Size: 2 nd Grade; Reduce Average Class Size by One	\$476	(\$204)	\$272	\$2.34
Class Size: 3 rd Grade; Reduce Average Class Size by One	\$344	(\$204)	\$ 4	\$1.69

Source: Washington State Institute for Public Policy

Annual State Taxes Paid Each Year by a College-Educated Illinois Resident Compared to One with Only a High School Degree

Income and Sales Taxes, Difference	25-34	35-44	45-54	55-64	Lifetime
Associate's degree	\$296	\$547	\$480	\$432	\$17,557
Bachelor's degree	\$926	\$1,999	\$2,095	\$2,640	\$76,599