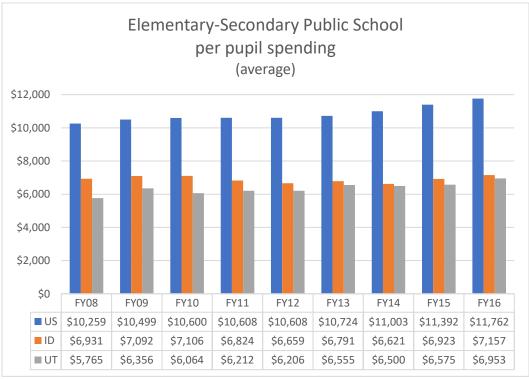
Utah has ranked at the bottom in per-pupil spending for K-12 education since 1988. For 30 years running, Utah has remained at the bottom. That's two generations of children going through a public school system that is chronically underfunded.

How does this bottom ranking affect Utah kids? This blog will examine, using the traditional business model, the inputs, outputs and product produced by Utah's education system. Input is average current spending per pupil in the elementary-secondary public school system. Spending represents the people, raw materials, information and funding needed to achieve the desired output – student achievement. The product represents a well-educated workforce ready to help Utah's economy remain successful and grow; a workforce that attracts and retains businesses and can compete in a global economy.

## **INPUT**

Per-pupil spending is an indicator of Utah's financial investment to educate its children. It is the spending that provides the nuts and bolts of education -- everything from buildings, books, and utilities to teacher salaries. It is specifically based on an average of spending to maintain school administration, instruction salaries and benefits, general administration and other needs.

Every other year Voices for Utah Children releases a <u>"Children's Budget"</u>. The 2017 report examines public investment on behalf of our children. It includes data comparing Utah's education spending with our neighboring state, Idaho. For many years, Utah and Idaho share the distinction of being at the bottom of per pupil spending among the states.



Source: US Census Bureau

Comparing years 2008 through 2016, Utah's per pupil spending increased 21% while Idaho's spending increased 3%.

 $<sup>^1\,</sup>https://www.thespectrum.com/story/news/2017/06/28/bad-news-utahs-k-12-kids-were-worst-nation-again-funding-them/413274001$ 

The following table details estimated distribution of per pupil spending:

Per Pupil Current Spending (2016 Budget Breakout)	UTAH		IDAHO	
Instruction Employee Salary	\$	2,698	\$	2,932
Instruction Employee Benefits		1,300		1,042
Total Salary & Benefits		3,998		3,974
Pupil Support		244		404
Instruction staff support		283		348
General Admin		67		157
School Admin		432		411
Other		1,930		1,864
TOTAL	\$	6,954	\$	7,158

Source: http://www.governing.com/gov-data/education-data/state-education-spending-per-pupil-data.html

## **OUTPUT**

ACT scores, National Assessment of Educational Progress (NAEP) data, National KIDS COUNT data and other metrics offer a snapshot of how inputs impact student achievement - outputs. Keep in mind, there is no standard metric used among the states or even within a state to make precise comparisons.

The 2018 KIDS COUNT Data book documents trends in child well-being based on percentage improvements to selected indicators. It ranks Utah's education profile at 12<sup>th</sup> while Idaho ranks 40<sup>th</sup> among the states. KIDS COUNT uses the following indicators to measure education achievement.

	UT	ID	US	
Indicator (2014-2016)	% of children			
Fourth – graders not proficient in reading	59%	62%	65%	
Eighth-graders not proficient in math	61%	65%	67%	
High school students not graduating on time	15%	20%	16%	

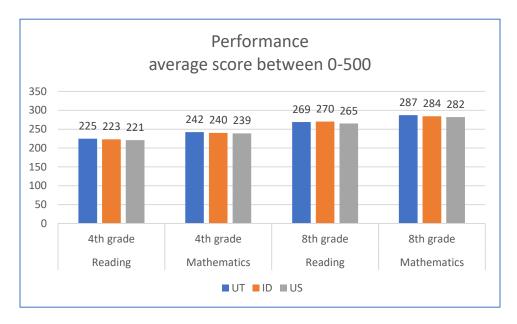
Source: 2018 NATIONAL KIDS COUNT Profile

Note: Learn more at datacenter.kidscount.org/UT and datacenter.kidscount.org/ID

15% of Utah students did not graduate on time, 1% better than the national percentage and 5% better than Idaho. 61% of Utah eighth graders and 65% of Idaho-eighth graders were not proficient in math.

<sup>&</sup>quot;Other" spending includes non-personnel related expenses, such as capital outlays and transfer payments to municipal entities.

NAEP examines academic achievement in subjects such as mathematics and reading by grade level. Looking at the average score, 8<sup>th</sup> grade mathematics, Utah stands at 287, Idaho at 284.



Source: https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=MAT&sj=&sfj=NP&st=MN&year=2017R3

American College Testing (ACT) is a standardized test used for college admission. It measures educational development in four subject areas; English, mathematics, reading and science. It is also a predictor of a student's capacity to complete college level work. The average composite score ranges from 1 to 36. This blog's focus is on mathematics and reading.

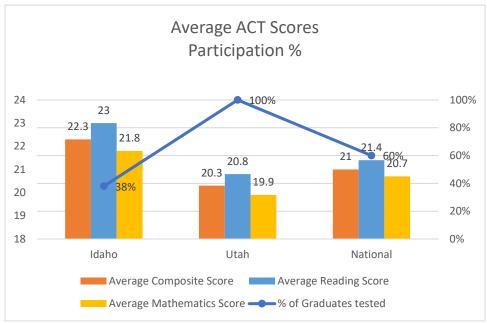
A comparison of ACT scores between Idaho, Utah and the nation is misleading. States with higher participation rates tend to have lower scores. Utah requires all high school students in their junior year take the ACT. ACT assessments are funded at the state level for each school district.

Idaho school districts use a variety of assessment tools to measure student achievement. Students are expected to take the Idaho Standards Achievement Test (Smarter Balanced Assessment<sup>2</sup>) in English Language Acquisition (ELA) and Math. The Preliminary Scholastic Aptitude Test<sup>3</sup> (PSAT) test is an optional test and not required. The SAT<sup>4</sup> (with or without the essay) is administered to its high school juniors. 2017 statistics note that 93% of Idaho students took the SAT compared to just 3% of Utah students.

<sup>&</sup>lt;sup>2</sup> http://www.smarterbalanced.org/about/

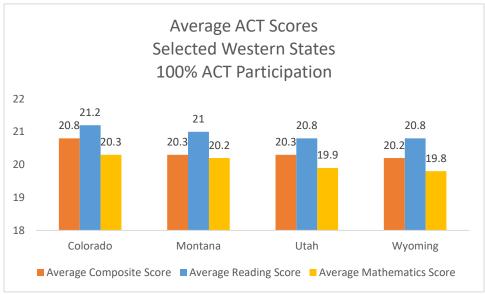
<sup>&</sup>lt;sup>3</sup> https://en.wikipedia.org/wiki/PSAT/NMSQT

<sup>&</sup>lt;sup>4</sup> https://blog.prepscholar.com/average-sat-scores-by-state-most-recent



Source: 2017 ACT Inc

ACT scores among mountain states with 100% participation reveals a more accurate picture of how Utah students compare with other states.



Source: 2017 ACT Inc.

ACT's national benchmark for math and reading is 22. The benchmark estimates educational development and readiness for college. Colorado comes closest to achieving the national benchmark for both reading and math.

## **OTHER FACTORS**

Socio-economic factors play an important part in educational achievement.

	Utah		Idaho	
	Number	Percent	Number	Percent
Child Population less than 18 years of age	921,773		437,173	
Children in poverty	101,001	11.0%	76,000	17.4%
Children whose parents lack secure employment	170,000	18.4%	10,400	2.4%
Children living in a household with a high housing cost burden	220,000	23.9%	99,000	22.6%
Children in single parent families	166,000	18.0%	110,000	25.2%
Children in families where the household head lacks a high school diploma	73,000	7.9%	47,000	10.8%

Source: 2018 NATIONAL KIDS COUNT Data Book: State Trends in Child Well-Being.

It is clear from the data that many Utah and Idaho children are living in families struggling to make ends meet. Proportionally, Idaho has more children living in poverty and in single parent families. Both states have a high percentage of children in households with high housing costs.

In Utah, 18% of children live in families whose parents report they lack secure employment, while 2.4% of Idaho's kids are in the same situation. A family's ability to earn a living wage is further challenged by the head of household not having a high school diploma.

	Utah		Idaho	
	Number	Percent	Number	Percent
2015 Child population	911,516		432,740	
Children who have difficulty speaking English by family nativity - Immigrant Families (2015)	9,000	1.0%	5,000	1.2%
Children who have difficulty speaking English by family nativity - US Born Families (2015)	3,000	0.3%	1,000	0.2%

Source: NATIONAL KIDS COUNT Data Center

Data estimates based on the 50 most populous cities according to the most recent Census counts.

The 2015 number of children in families who have difficulty speaking English are small but may reflect an inability or reluctance to report. The small numbers may not reveal the larger number of children educators actually see in their classrooms.

## CONCLUSION

Education spending and its impact on student achievement is complicated. Per pupil spending as an indicator of student achievement does not tell the whole story of a state's education system. It is far too simplistic to conclude that student outcomes are either great or deplorable based on per pupil spending.

While the Utah Legislature has increased education funding over the last three years, we are only catching up to pre-recession levels. Some argue that increased funding has little to no correlation to student achievement. Statistics can be manipulated to advance the argument one way or another. Utah policy makers should be extremely cautious before they congratulate themselves for educating our children on the cheap.

Measuring "adequate" spending for education is a challenge for all states. Moving from the bottom, up one rung on the spending ladder is nothing to crow about. Based on student achievement and Utah's changing demographics it will be harder for Utah to compete in a global economy. Attracting businesses and incubating innovation requires more than an adequate education. It requires investment in a world-class education for students now and for generations to come.

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Over the next several months we will explore other factors impacting educational achievement; teacher salaries, teacher recruitment and retention, the difference between education spending and funding, and the infrastructure supporting Utah's public school education system.