K-12 In Alaska
Investing in Effective Measures to Ensure Student Success in Life

Prepared by Mark A Foster (MAFA)

Prepared for House/Senate Education Committee Joint Meeting

April 24, 2019

Overview

- How are Alaskan Students Doing on Standardized Tests?
  - NAEP & PEAKS, 4th & 8th Grade Reading/ELA & Math
- What drives the variation in standardized test scores?
  - Poverty & Standardized Test Scores
- How do we measure effective teaching?
  - Growth & Proficiency
- Which schools have students who are performing well above expectations?
- What do local superintendents report as the key factors driving student assessments?
- What does the national/international research say?
- Recommendations for Alaska

Disclosures, Caveats & Limitations

Disclosures

1. Mark A Foster & Associates (MAFA) has been retained by Senator Von Imhof to assist in the compilation and analysis of what drives student success and what education initiatives look most promising to deliver effective, efficient and affordable education services for all Alaskan students
2. Mark Foster was appointed to fill a short term vacancy on the Anchorage School Board, Seat A (October 2018-April 2019).
3. Mark Foster served as the Director, Office of Management & Budget, and CFO for the Anchorage School District from 2012-2016. Mr. Foster was the project manager on the Evidence Based Model for ASD (April 4, 2016).
4. MAFA has consulted for a wide range of private and public sector clients across multiple sectors in Alaska, U.S. and Internationally since 1994.
5. Mark Foster graduated from Lathrop High School in Fairbanks in 1979.

Caveats & Limitations

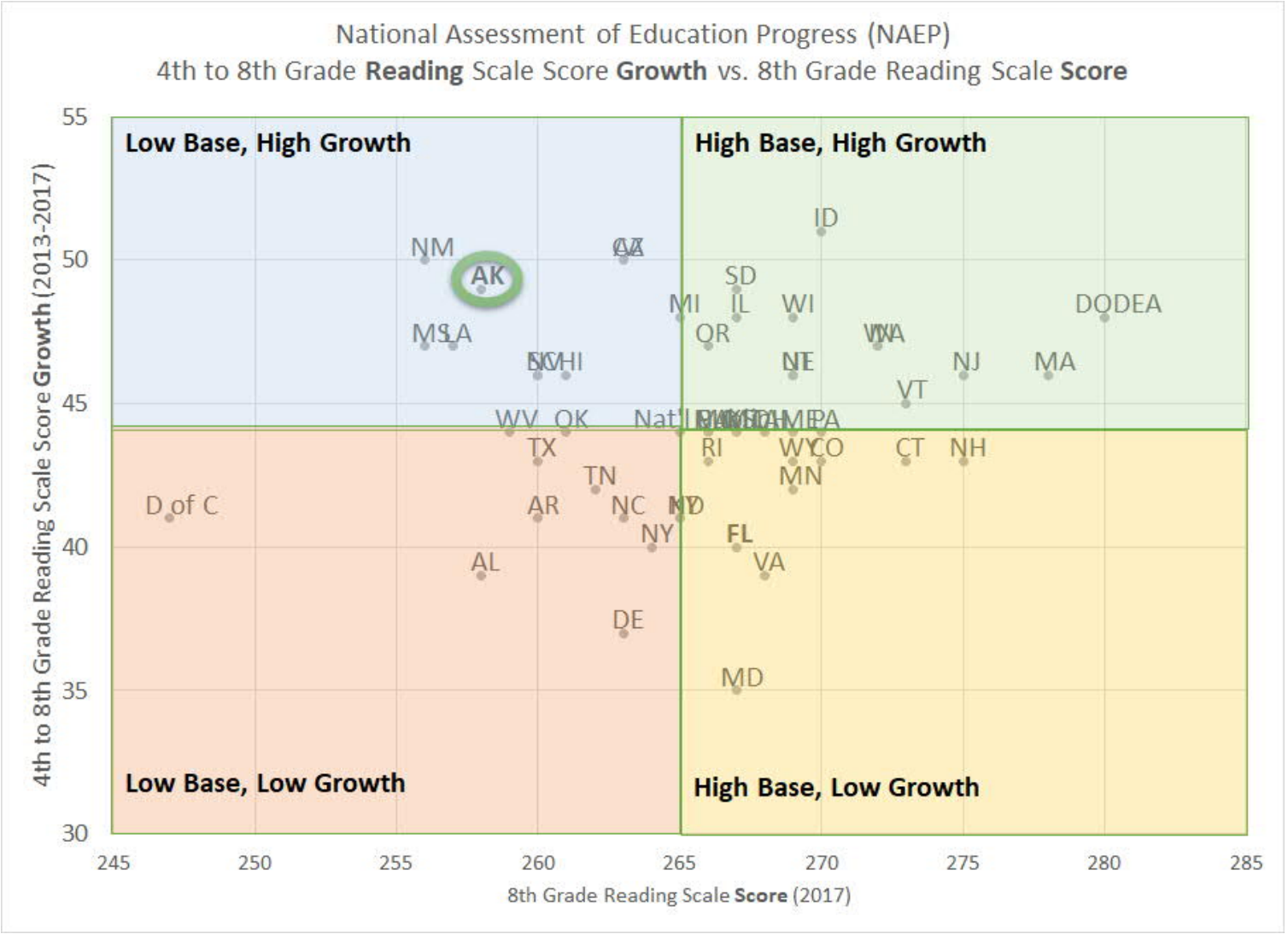
1. NAEP and PEAKS Standards Based Tests provide one summative approach to assessing student academic performance. Variation in student test scores are frequently correlated with poverty and related factors. The Gates Foundation Measuring Effective Teaching Project and subsequent research supports the use of student growth and proficiency as one domain to assess the value that teachers and schools contribute toward student academic success.
2. Standards Based Tests are only modestly correlated with success in life (Raj Chetty)
3. Social skills tend to be better predictors of success in life (Kirabo Jackson, Raj Chetty)

How are Alaskan Students Doing on Student Standards Based Assessments?

	4th Grade	8th Grade
National Assessment of Educational Progress (NAEP)		
Reading	4th to 8th Grade Scale Score Growth & 8th Grade Scale Score	
Math	4th to 8th Grade Scale Score Growth & 8th Grade Scale Score	
Performance Evaluation for Alaska Schools (PEAKS)		
English Language Learners	Percentage Proficient	Percentage Proficient
Math	Percentage Proficient	Percentage Proficient

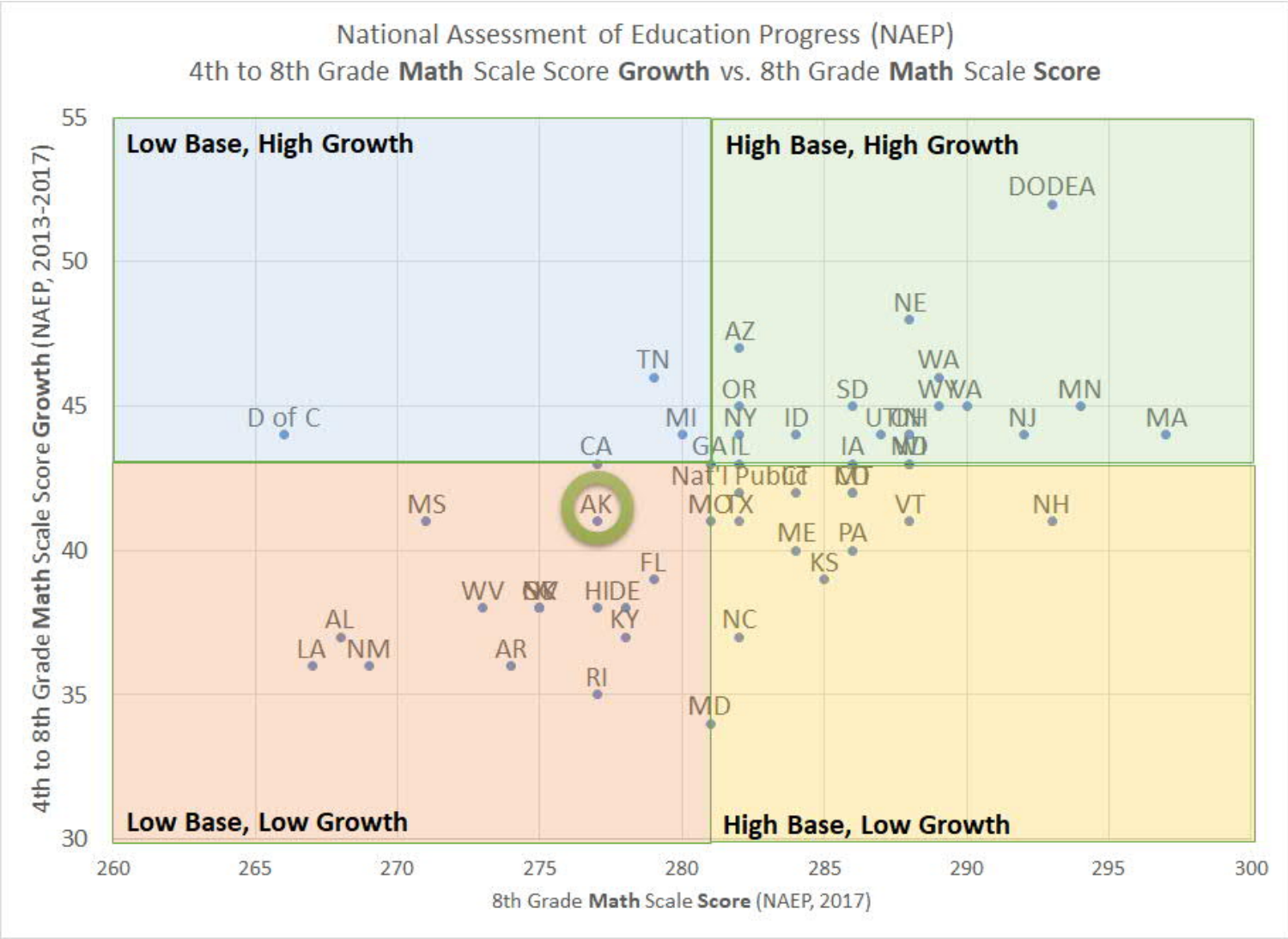
K-12 Progress to Date

AK Student Growth & Achievement: NAEP **Reading**



K-12 Progress to Date

AK Student Growth & Achievement: NAEP **Math**

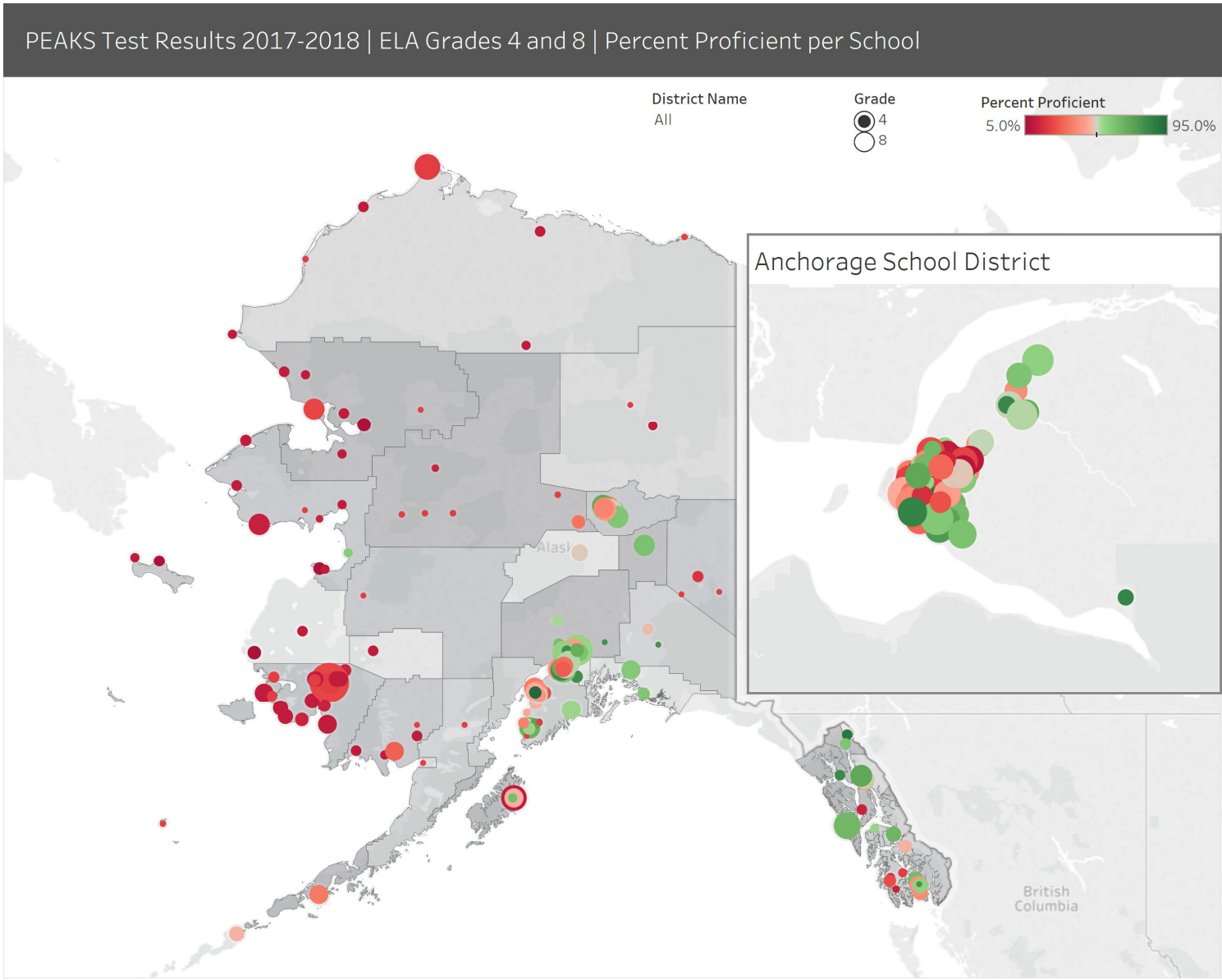


ALASKA PERFORMANCE EVALUATION FOR ALASKAN SCHOOLS (PEAKS)

- 4th Grade English Language Arts
- 8th Grade English Language Arts
- 4th Grade Math
- 8th Grade Math

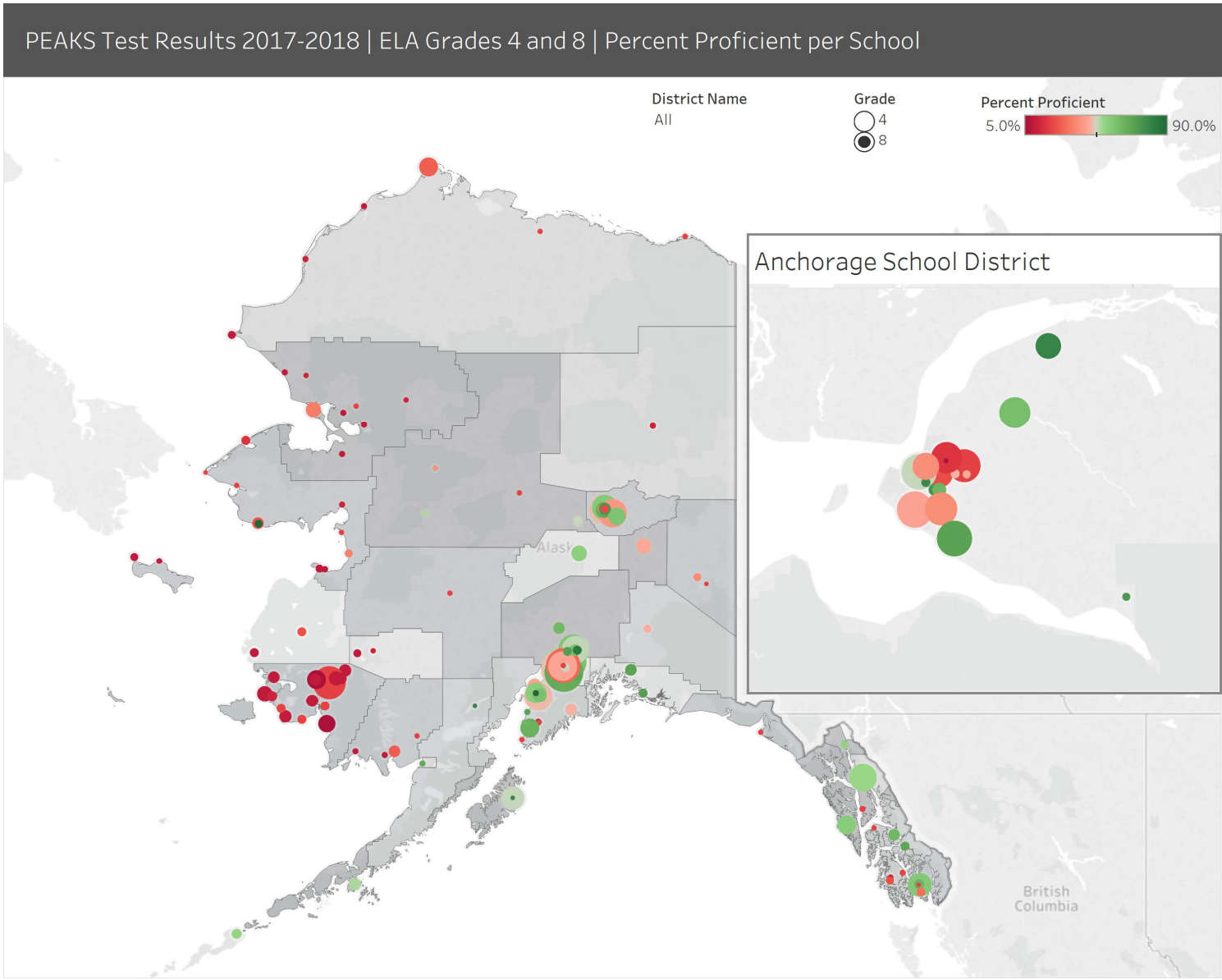
4th Grade English Language Arts

April 24, 2019

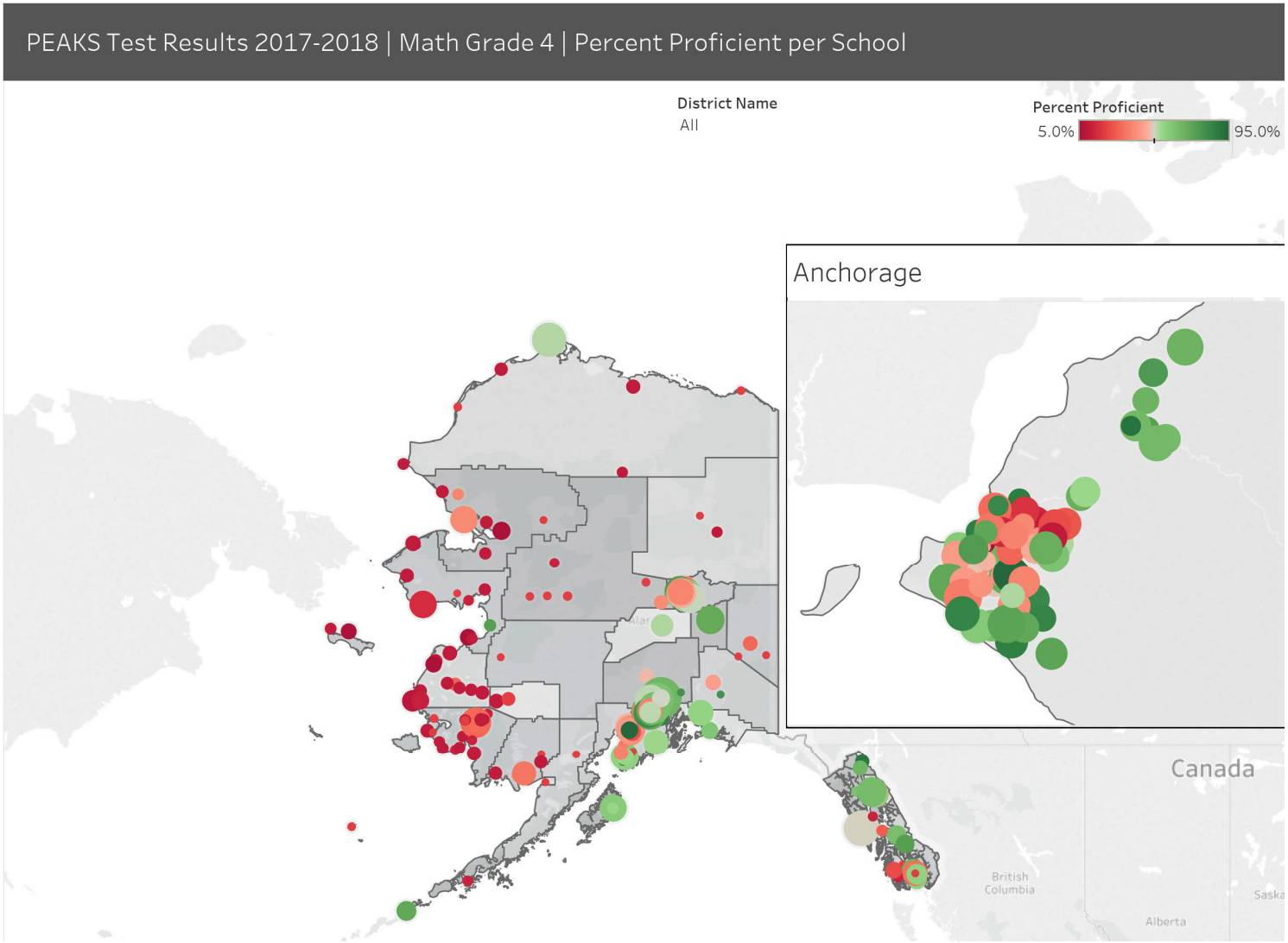


8th Grade English Language Arts

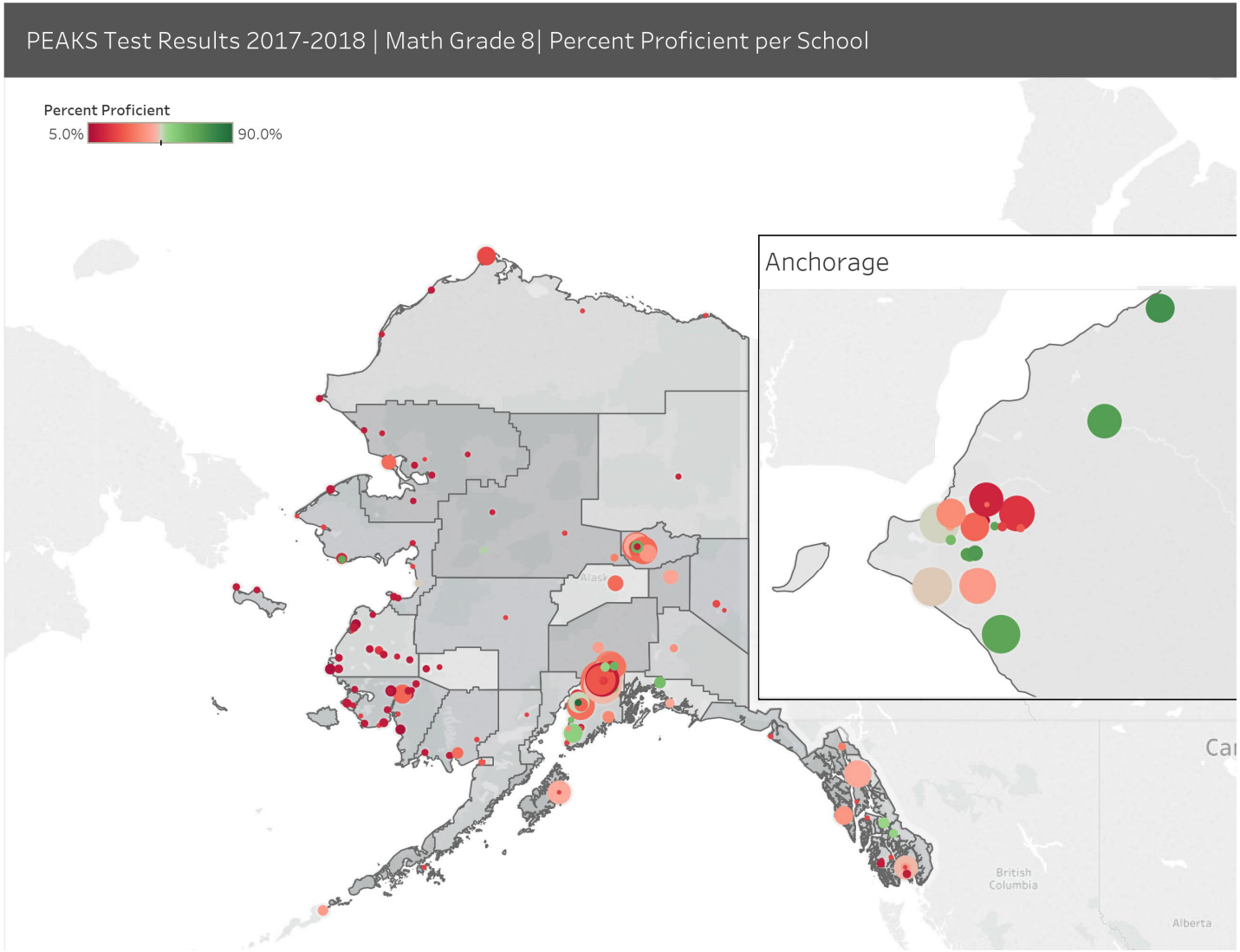
April 24, 2019



4th Grade Math



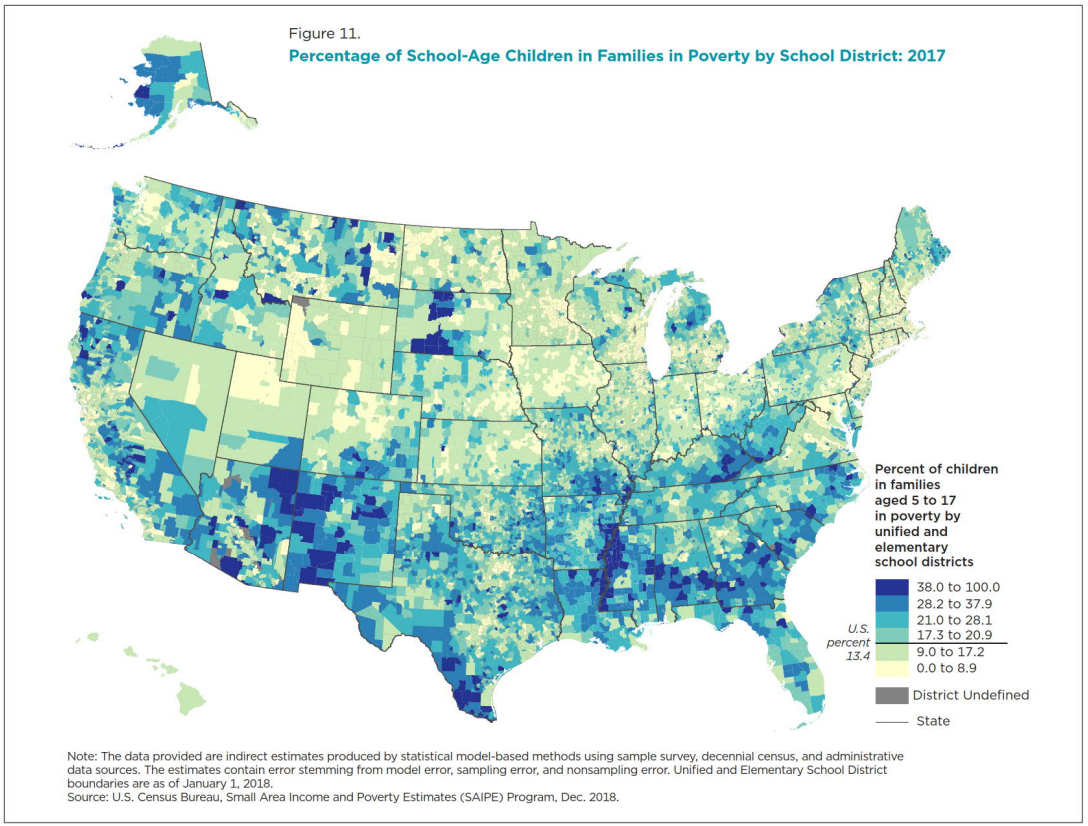
8th Grade Math



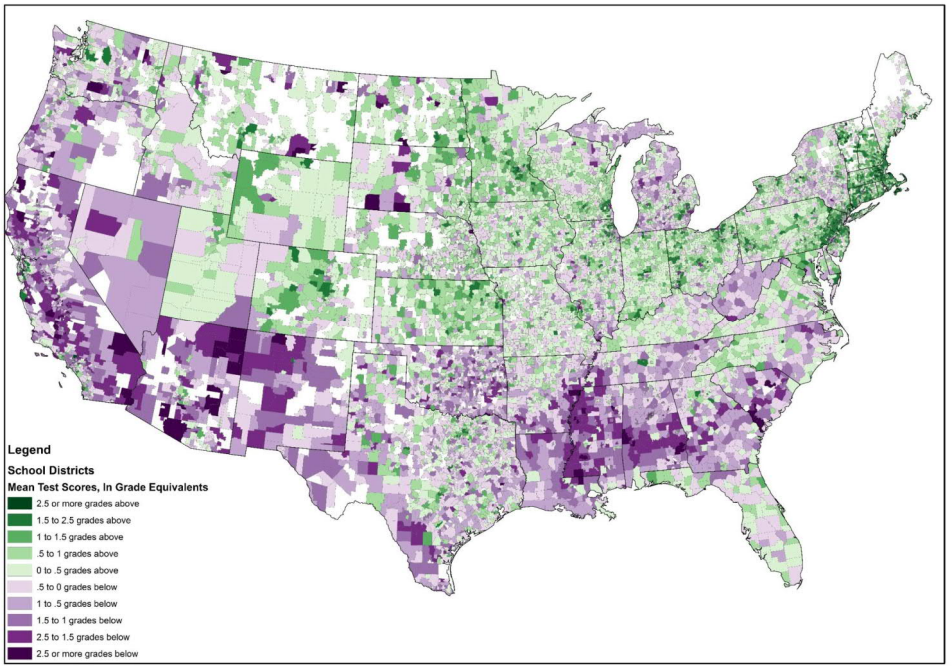
What drives the variation in test scores?

1. Test scores reflect poverty/affluence; frequently around ½ of the variation in test scores reflect the household and neighborhood challenges associated with poverty
2. The Gates Foundation Project, "Measuring Effective Teaching" focuses on actual test scores less the predicted test score (related to social-economic factors) to assess how well teachers are helping all of their students learn and grow, regardless of where they start.

Poverty & Student Achievement Are Highly Interrelated across the U.S.



Average Test Scores, by School District, Grades 3-8, 2009-2013

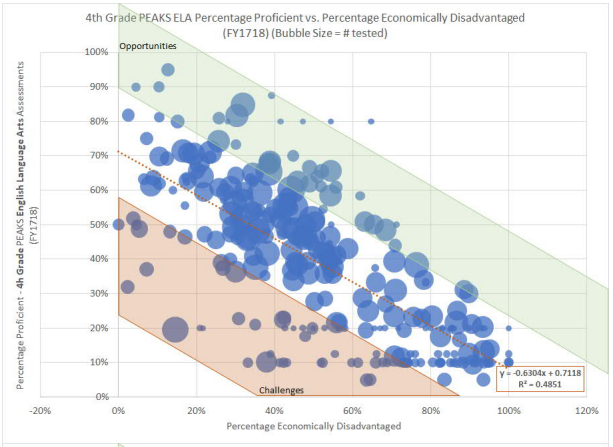


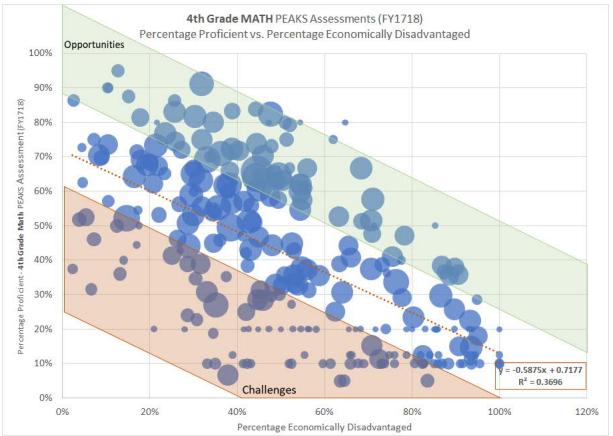
Poverty & Student Achievement Are Highly Correlated Across Alaska

English Language Arts

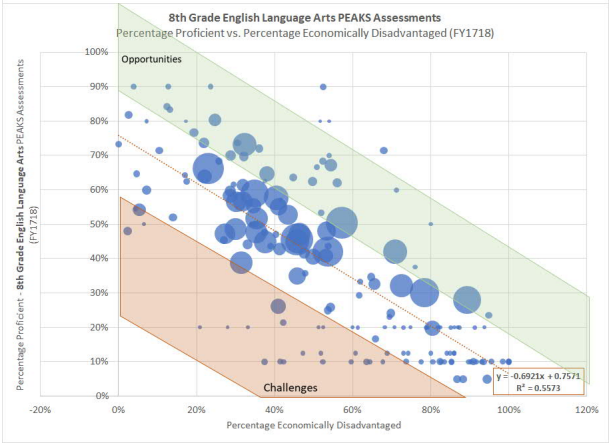
Math

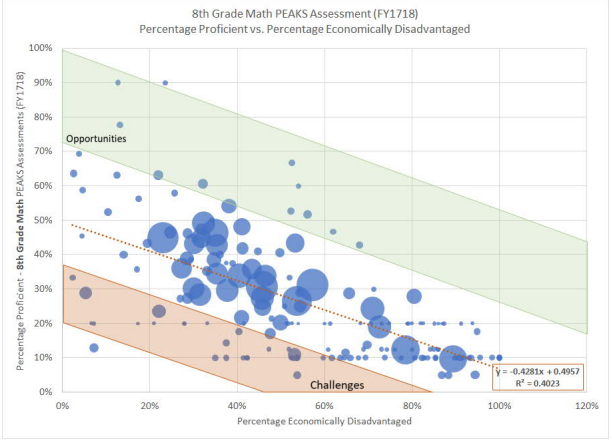
4th Grade



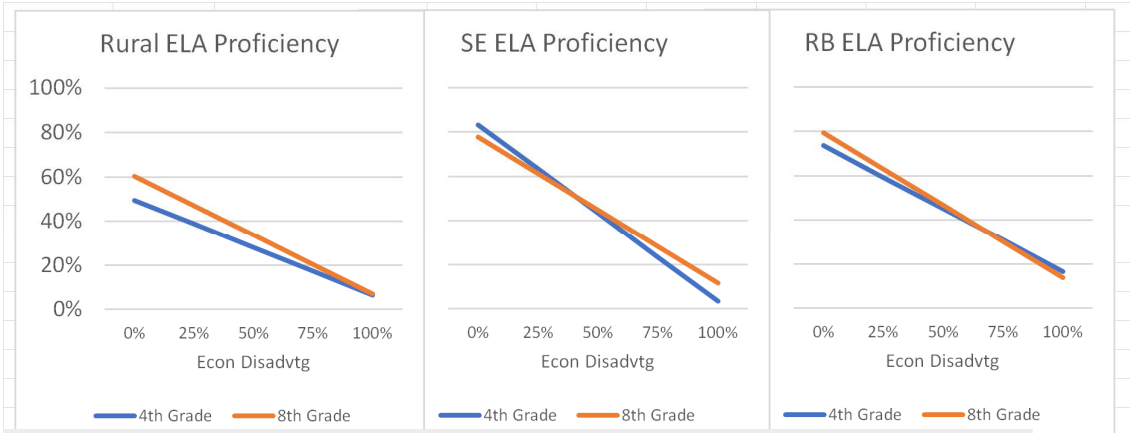


8th Grade

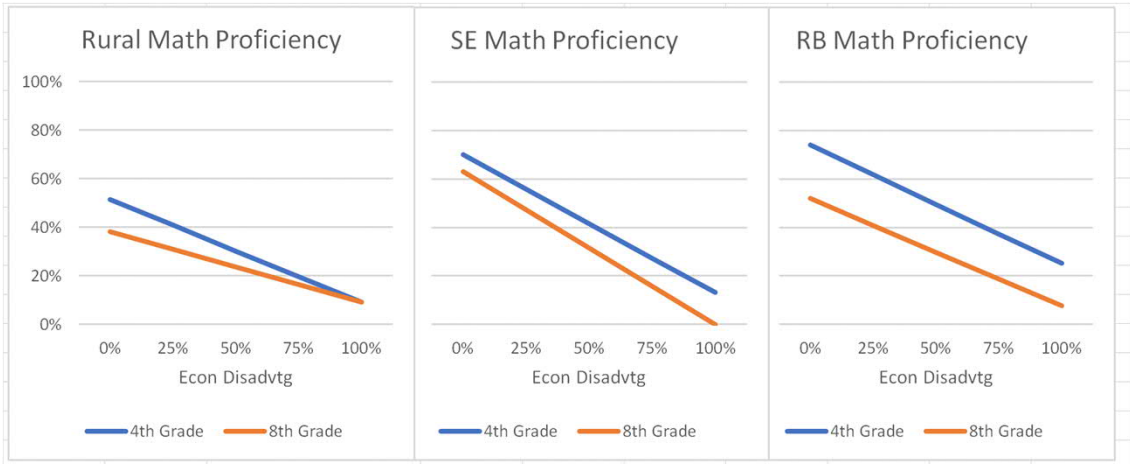




Poverty & Student Achievement are relatively highly correlated within Alaska Regions (Rural, Southeast, Railbelt)



r^2 =	0.34	0.40	0.43	0.36	0.49	0.57



r^2 =	0.29	0.30	0.21	0.47	0.30	0.30

Measuring Effective Teaching In Alaska

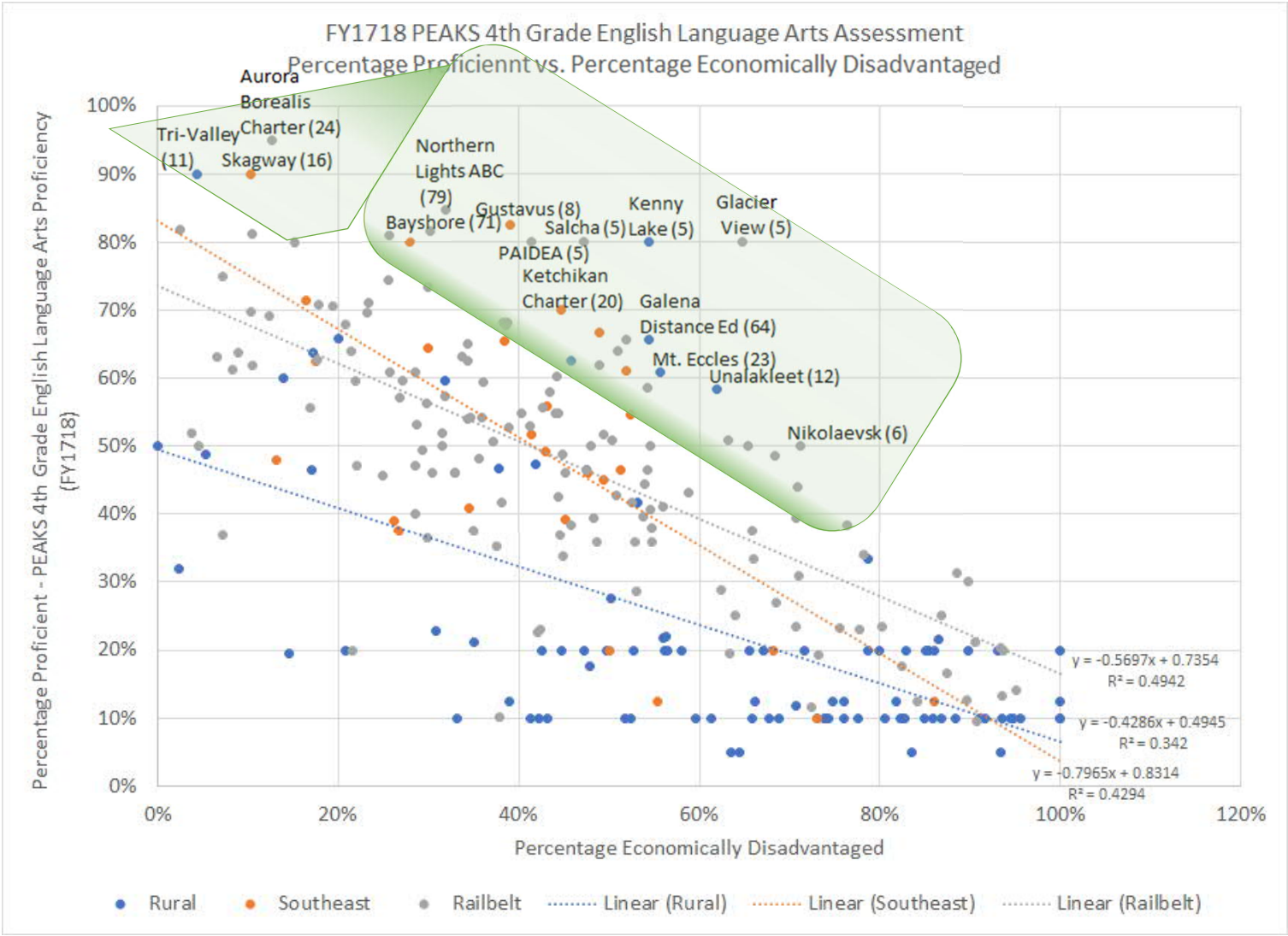
Identify schools with students performing well above expectations in light of the prevalence of poverty

K-12 Progress to Date

Student Assessments

AK PEAKS **English Language Arts 4th Grade**

What can we learn from schools whose students are performing well above expectations relative to the headwinds of poverty, tailwinds of affluence; examples from across Alaska

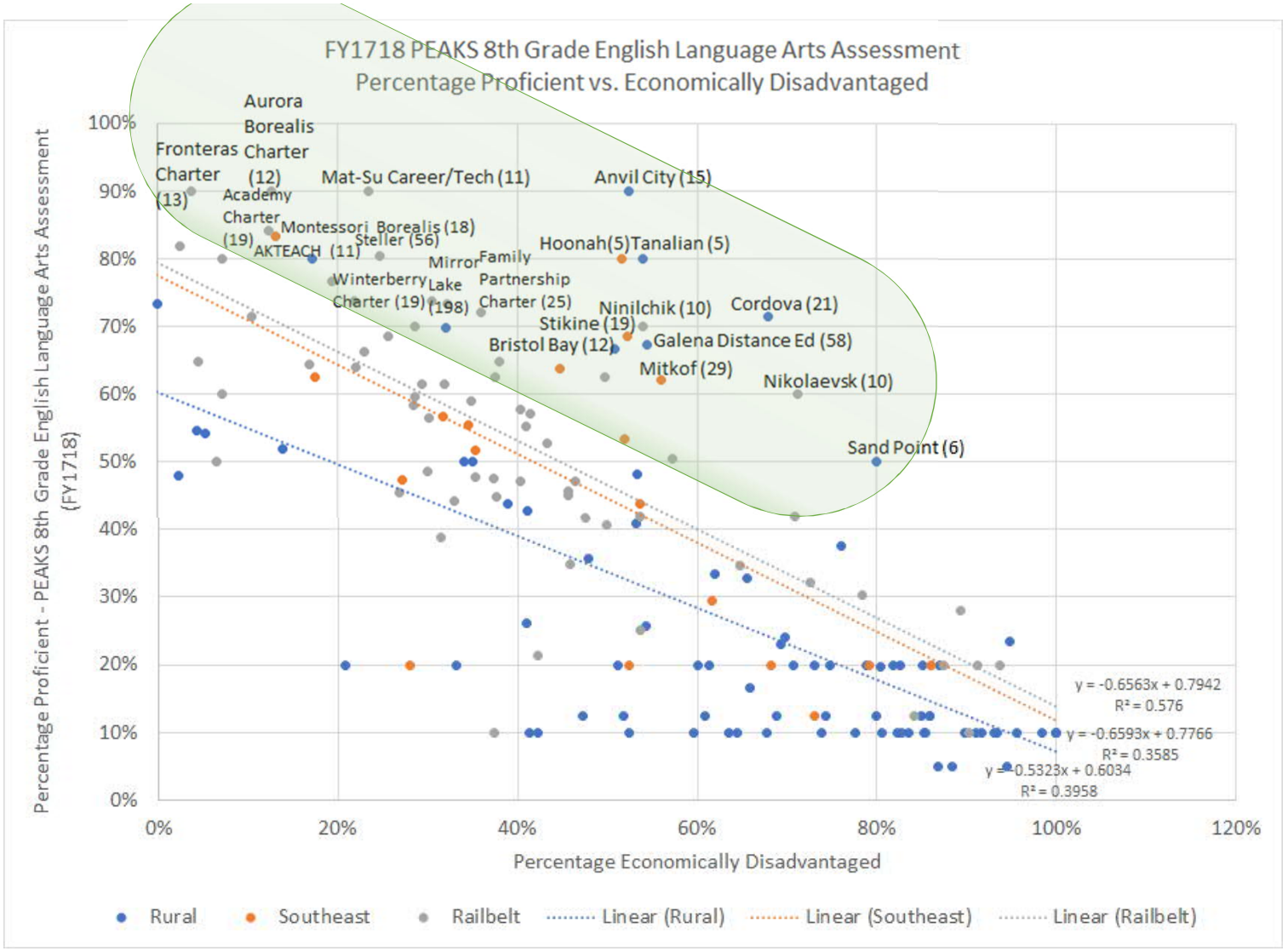


K-12 Progress to Date

Student Assessments

AK PEAKS **English Language Arts 8th Grade**

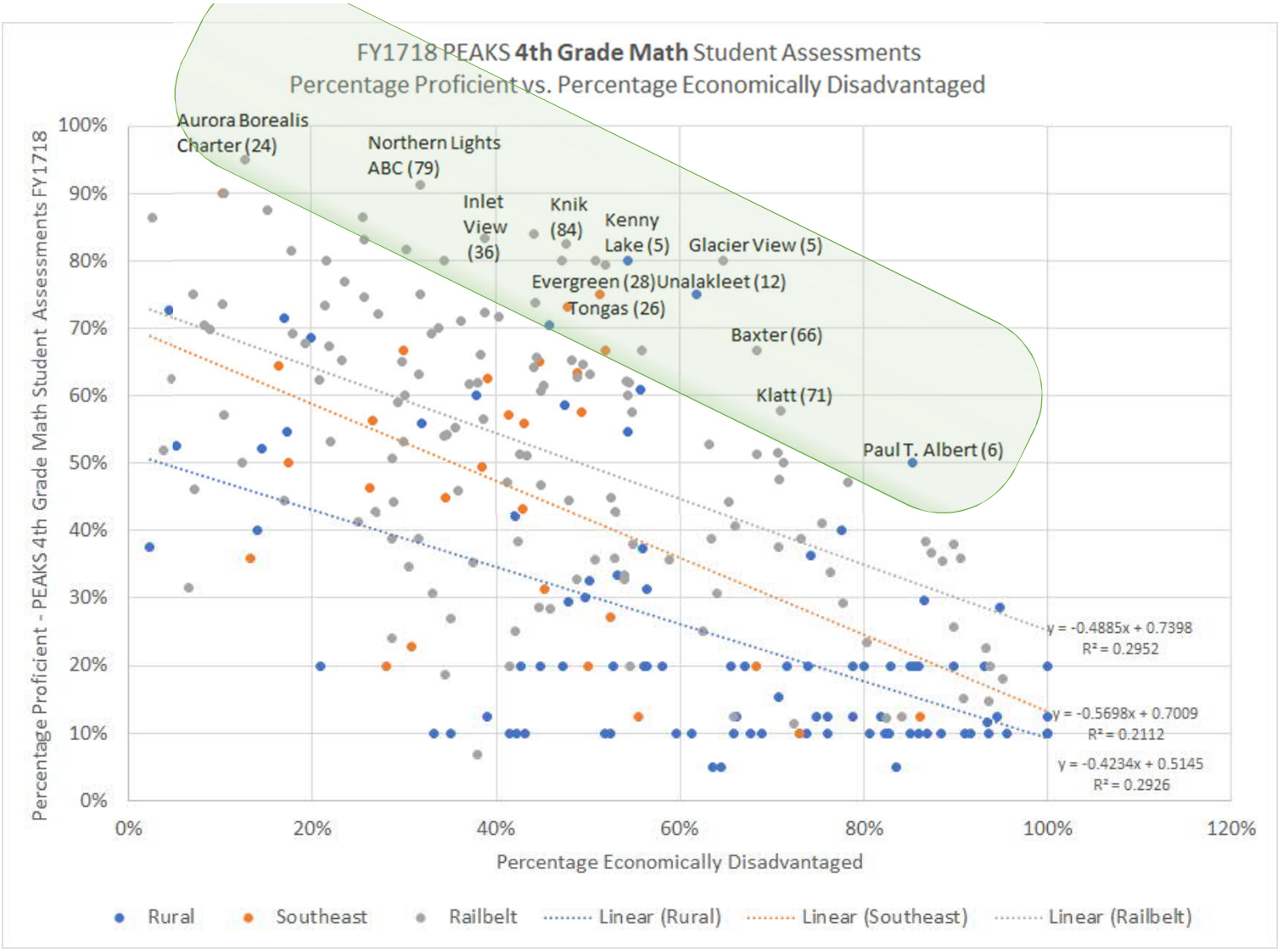
What can we learn from schools whose students are performing well above expectations relative to the headwinds of poverty, tailwinds of affluence; examples from across Alaska



K-12 Progress to Date

Student Assessments– AK PEAKS **Math** **4th Grade**

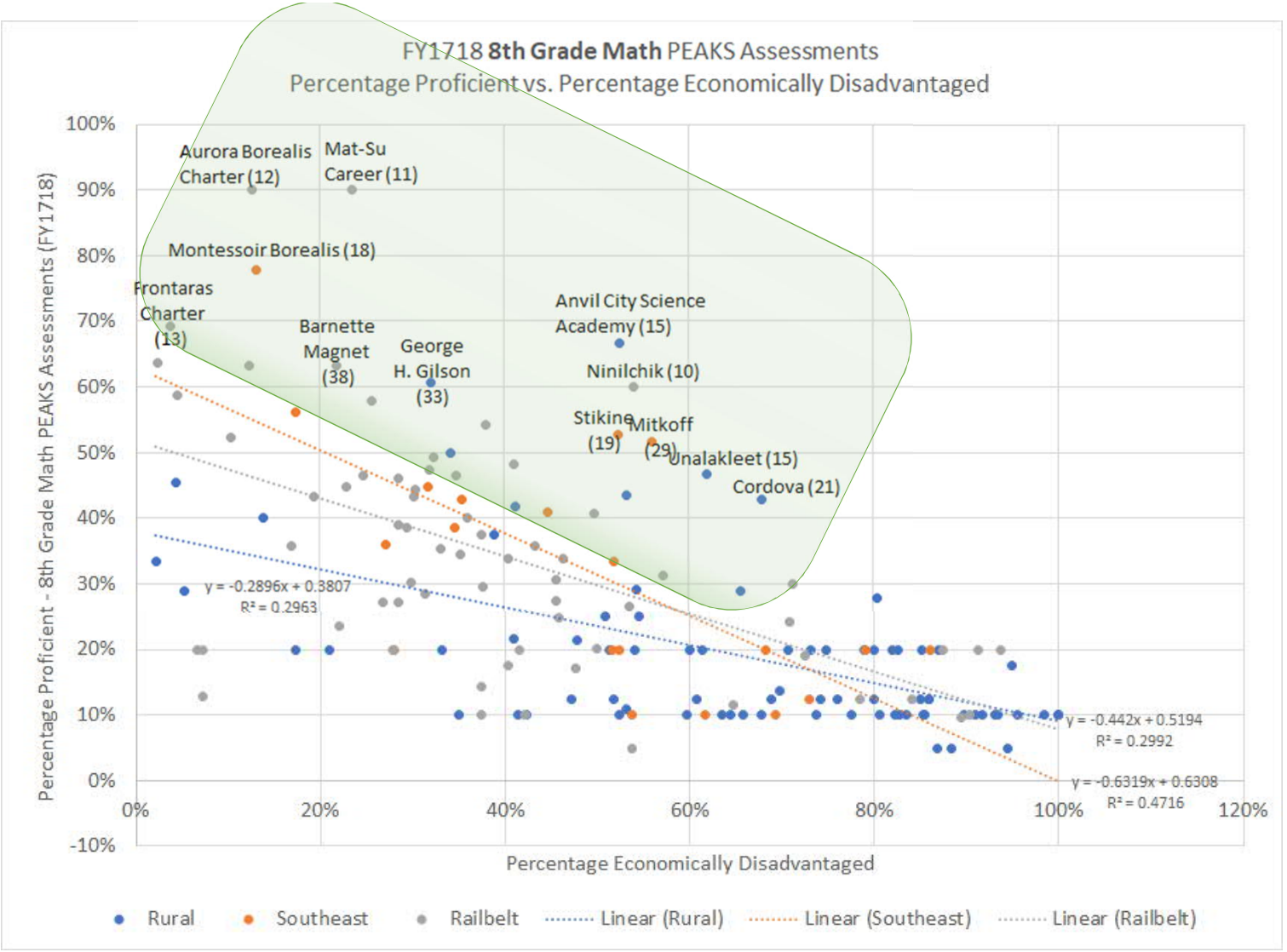
What can we learn from schools whose students are performing well above expectations relative to the headwinds of poverty, tailwinds of affluence; examples from across Alaska



K-12 Progress to Date

Student Assessments– AK PEAKS **Math** 8th Grade

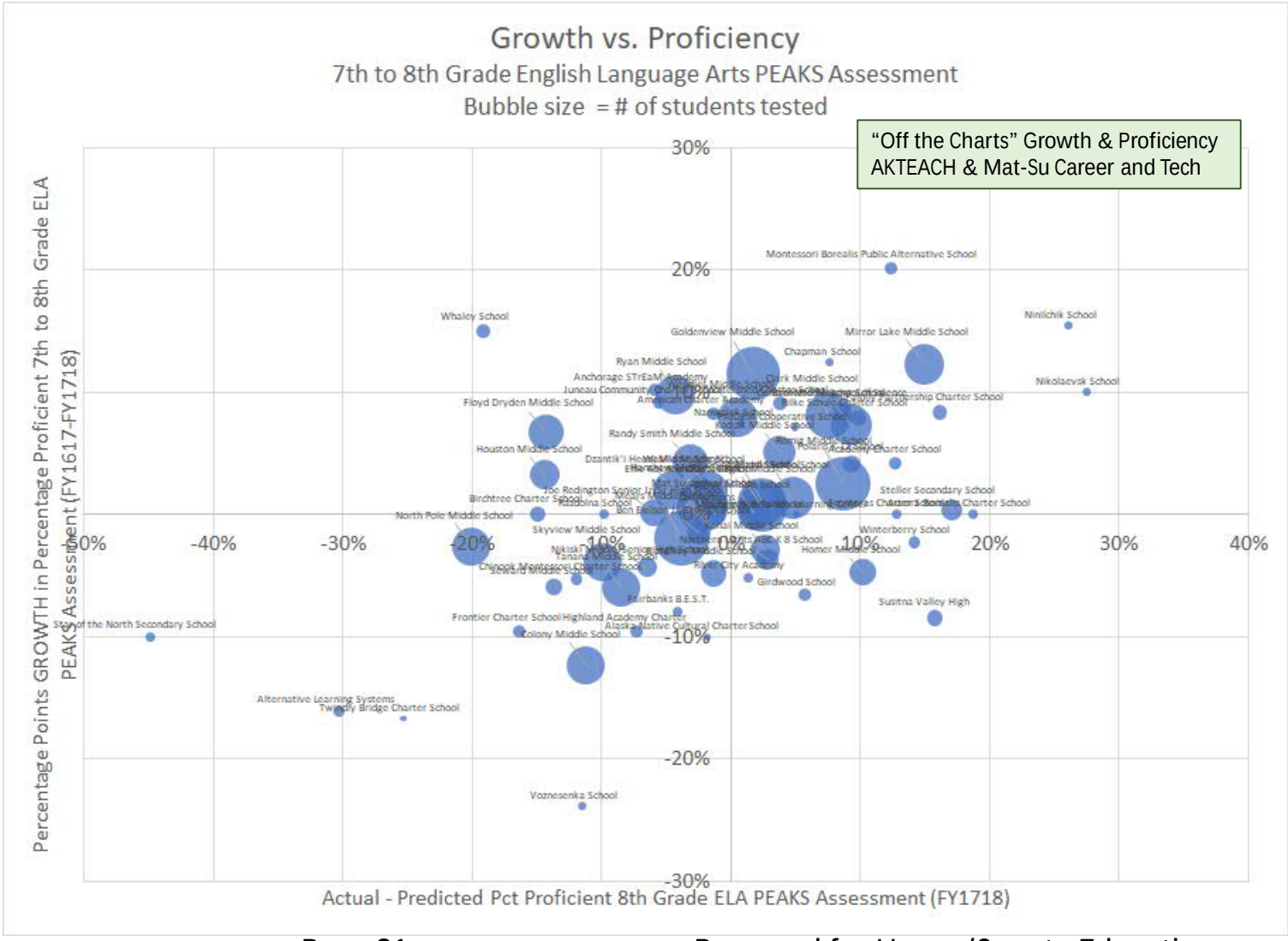
What can we learn from schools whose students are performing well above expectations relative to the headwinds of poverty, tailwinds of affluence; examples from across Alaska



Measuring Effective Teaching

English Language Arts (ELA) Proficiency

(actual – predicted by poverty/affluence)

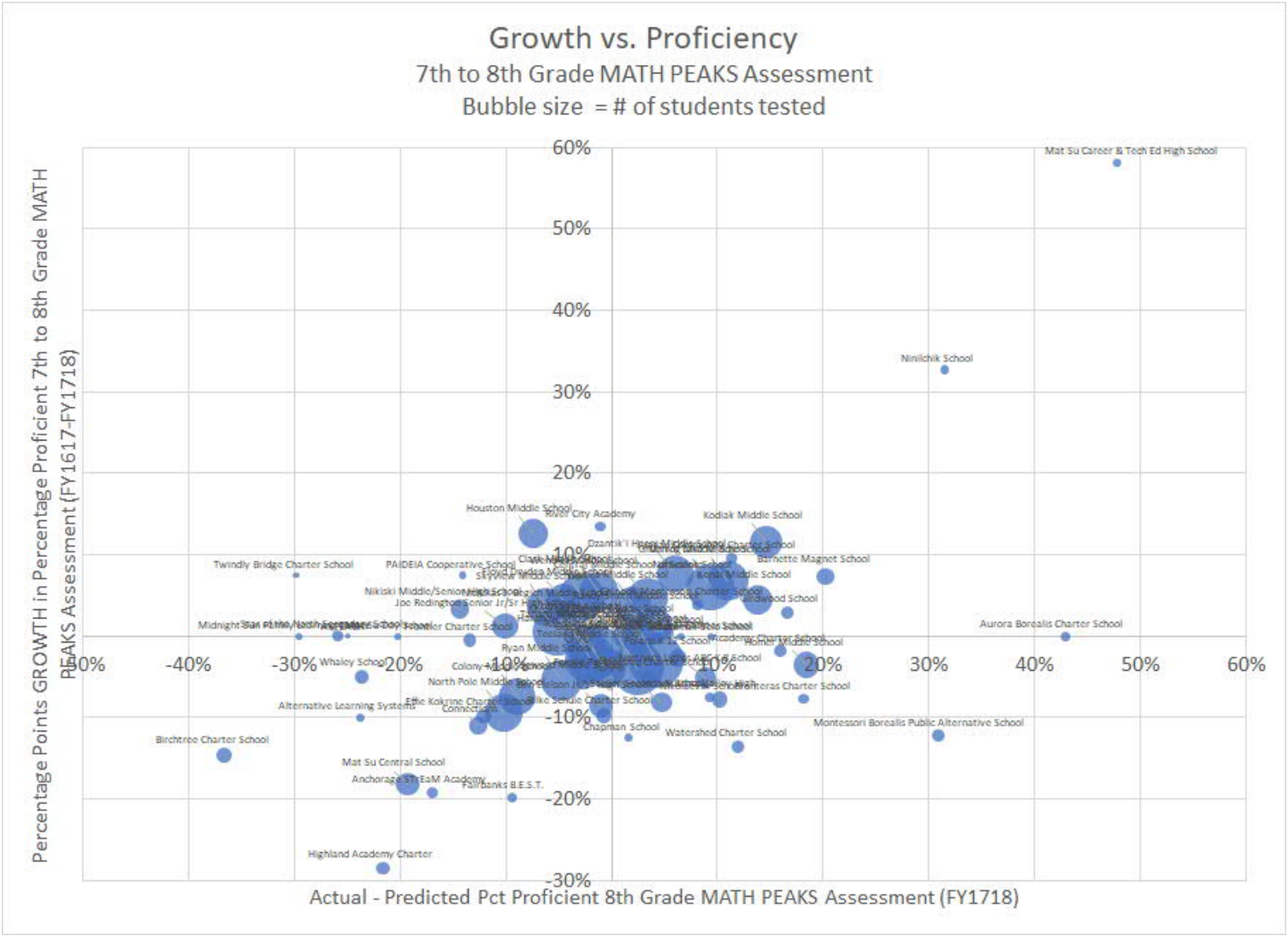


Measuring Effective Teaching

Math

Proficiency

(Actual – Predicted by poverty/affluence)



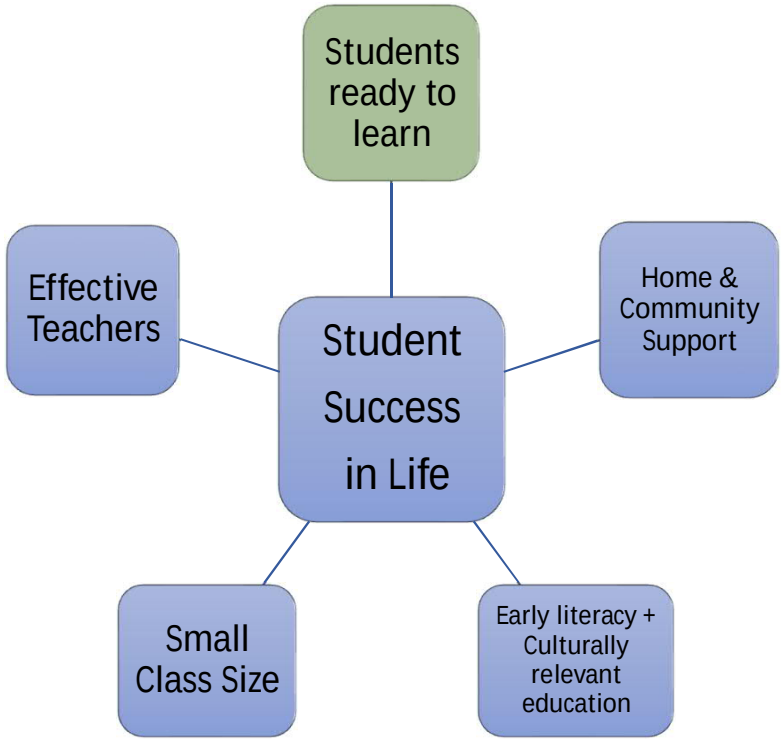
What do Alaska Superintendents identify as key factors driving student academic performance

Survey of school districts with schools who student assessments exceed expected results for their poverty level

What do local subject matter experts tell us when we ask “what is driving your superior results?”

Rural Considerations:

- Rural districts with high teacher turnover rates often graduate fewer than half of their students, and their students have significantly lower reading [and math] proficiency
- Finding ways to engage students, with place based learning and courses that incorporate local culture and industry, is critical in making learning more relevant for students, teachers and the community



Railbelt / Southeast Considerations:

- Highly experienced & effective teachers
- Community of parents that value education
- A generous and supportive municipality
- Kids that respond to our practices; work hard, desire to do well not only as a reflection of their own academic achievement but also a reflection of their school and community
- The more we have, the more we can do for our kids
- Instability in finance and policy are our biggest threat to continued success

What does the national/international research say about factors related to student achievement?

John C Hattie, Meta-Analysis of Education Research, “Visible Learning” (2017)

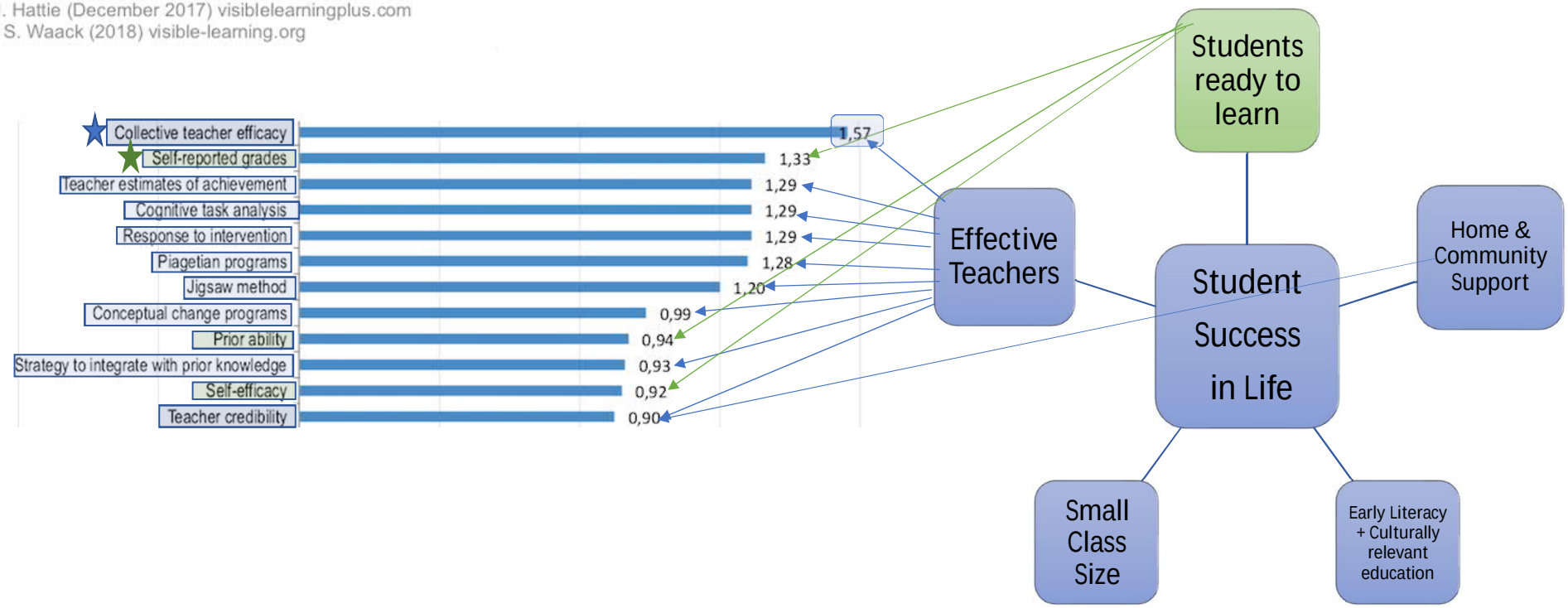
Professor Raj Chetty (He is a professor of economics at Harvard University, specializing in the field of public economics. Some of Chetty's recent papers have studied equality of opportunity in the United States and the long-term impact of teachers on students' performance. During Chetty's first occasion teaching at Harvard University, he was offered tenure at the age of 28 and accepted at 29, becoming one of the youngest tenured faculty in the history of Harvard's economics department. He is a recipient of the John Bates Clark Medal and a 2012 MacArthur Fellow. Currently, he is also an advisory editor of the Journal of Public Economics.

K-12 Investing In Effective Measures to Support Student Success in Life

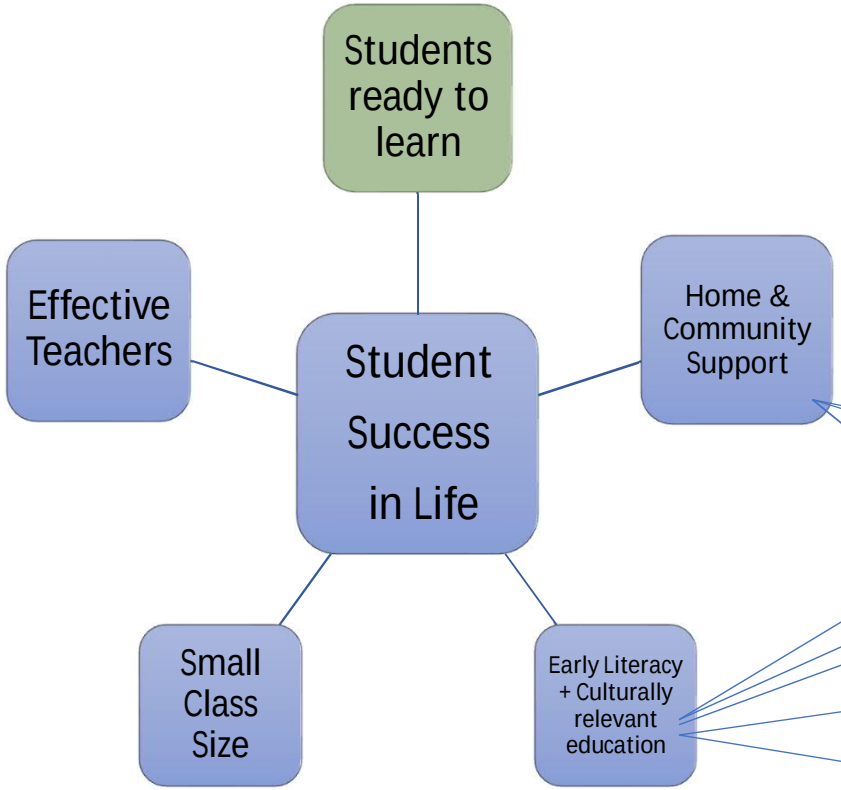
National & International Research (Hattie)

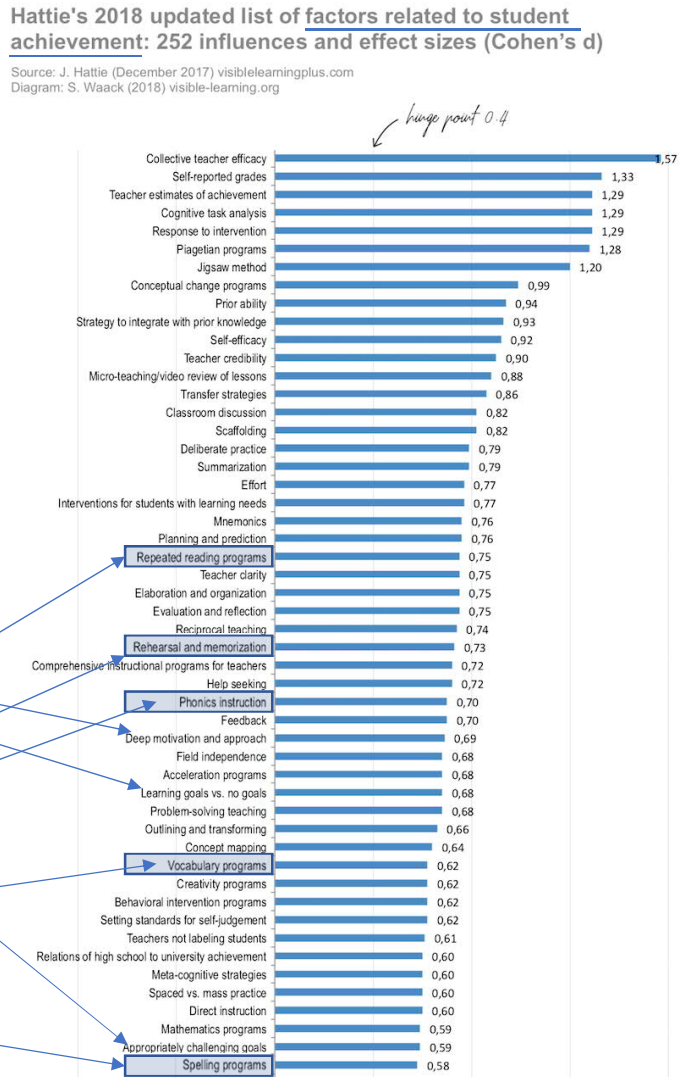
Hattie's 2018 updated list of factors related to student achievement: 252 influences and effect sizes (Cohen's d)

Source: J. Hattie (December 2017) visiblelearningplus.com
Diagram: S. Waack (2018) visible-learning.org



K-12 Investing In Effective Measures to Support Student Success in Life



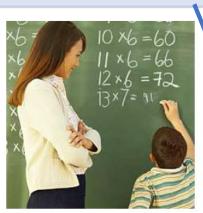


K-12 Investing In Effective Measures to Support Student Success in Life

Rigorous U.S. Research

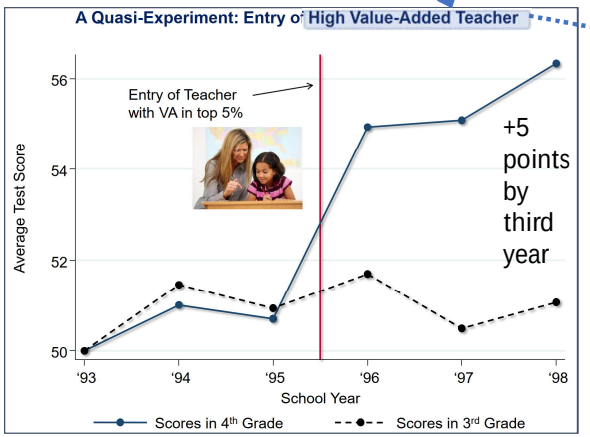
- How should we change schools to produce better outcomes?

Better Teachers?



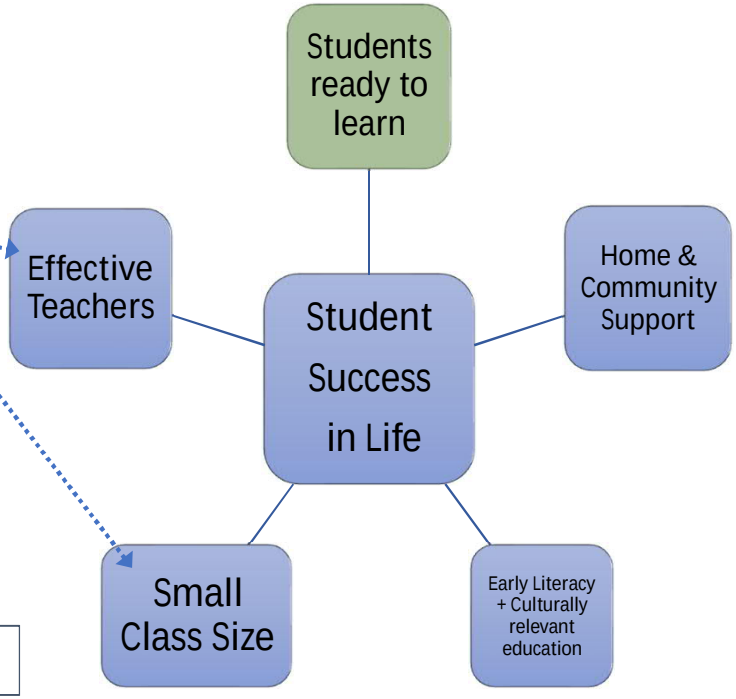
Smaller Classes?

Better Technology?



Lessons on Class Size

- Reducing class sizes in primary school by hiring more teachers can have large returns
  - Present value of lifetime earnings of a child growing up in a family at 25th percentile is about $500,000 on average
  - 4% earnings gain from smaller class = $20,000
  - Dividing a class of 30 students into two would increase total earnings of students by more than $600,000
  - Costs (hiring another teacher and an additional room) likely to be well below $600,000



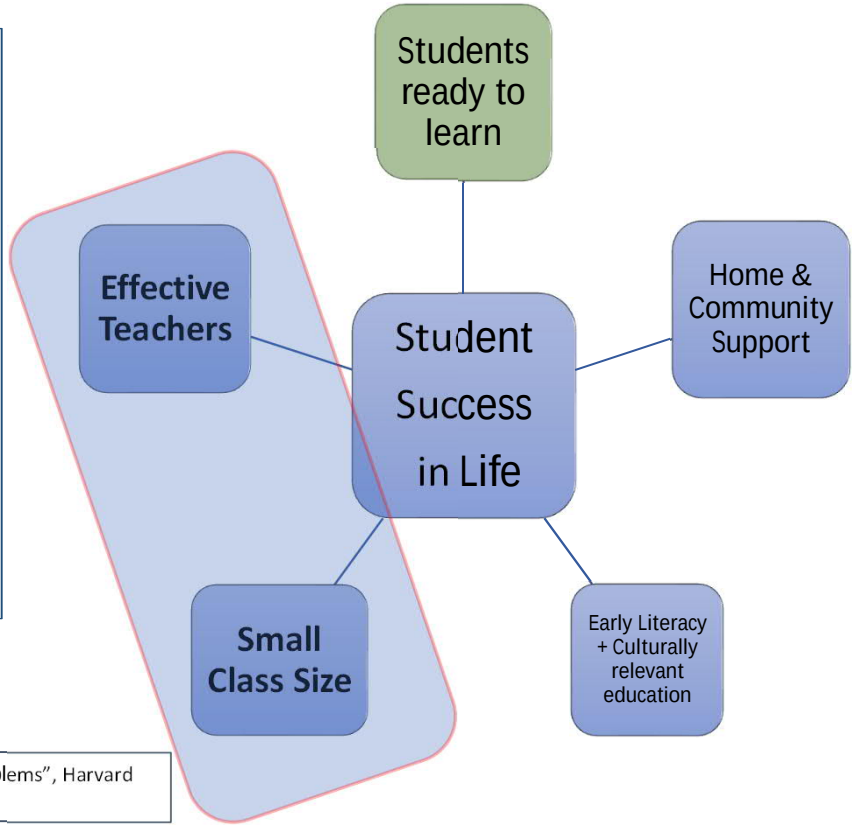
Source: Professor Raj Chetty, Head Section Leader Rebecca Toseland, "Using Big Data to Solve Social & Economic Problems", Harvard University, Opportunity Insights, Lecture Chart Pack #6, Regression discontinuity using class size cutoffs, 2018

K-12 Investing In Effective Measures to Support Student Success in Life

Reducing Class Size + Highly Effective Teachers = Large Long-Term Returns

- New data show that changing public schools in certain specific ways can have large long-term returns
- Reducing class size can be very valuable
  - But critical to hire highly effective new teachers when doing so
- There are large, measurable differences in teacher quality,
  - We should do more to attract and retain top teachers in public schools* (not just using value-added metrics but also other tools)

Highly effective = Growth across skills & knowledge + social skills to prepare students for success in life



Source: Professor Raj Chetty, Head Section Leader Rebecca Toseland, "Using Big Data to Solve Social & Economic Problems", Harvard University, Opportunity Insights, Lecture Chart Pack #6, Regression discontinuity using class size cutoffs, 2018

Appendices

1. Investment levels; Return on Investment Metrics
2. NAEP, PEAKS & MAP; What do tests measure
3. What drives success in life? [Chetty, Jackson]
4. DEED Functional Expenditures Across Alaska Districts

Investment Levels, Return on Investment

Alaska & Other States

- Investment Levels, Cost of Living Adjusted (COLA)
- Return on Investment, Cost of Living Adjusted (COLA)
- Test scores & success in life correlations

Alaska Districts

- Investment percentage by category

Illustrative Anchorage School District Comparisons

- PEAKS mapped to NAEP Scale; Council of Great City Schools Comparisons
- PEAKS growth & proficiency by grade cohort (English Language Arts)

K-12 Investment Levels

Total Current Spending

Adjusted for Cost of Living (State)

Alaska had already fallen to 78 percent of Wyoming in FY16

Table 8. Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State: Fiscal Year 2016

(Dollars.)

RANK	Geographic area	SORT: ADJUSTED FOR STATE AVERAGE COST OF LIVING, C2ER					
					Instruction		
		Total [1]	Salaries and wages	Employee benefits	Total [1]	Salaries and wages	Employee benefits
	United States	11,762	6,866	2,806	7,160	4,603	1,885
1	Wyoming	17,199	10,065	4,514	10,199	6,486	2,854
2	New York	16,882	9,286	4,877	11,885	7,101	3,850
3	Pennsylvania	15,111	7,722	4,539	9,258	5,422	3,153
4	New Jersey	15,092	8,605	4,030	8,788	5,634	2,556
5	Connecticut	15,086	8,447	4,181	9,276	5,912	2,878
6	Vermont	14,808	8,403	3,686	8,882	5,587	2,498
7	Illinois	14,590	7,461	4,646	8,886	5,084	3,148
8	Delaware	14,306	7,669	3,981	8,936	5,441	2,868
9	North Dakota	13,413	8,062	2,957	8,029	5,463	2,048
10	New Hampshire	13,339	7,224	3,379	8,357	5,182	2,418
11	**Alaska**	13,333	6,343	3,808	7,195	4,088	2,382
12	Nebraska	13,244	7,649	2,679	8,624	5,447	1,960
13	Ohio	13,106	7,566	2,953	7,657	4,951	1,831
14	Michigan	13,004	6,422	4,169	7,604	4,281	2,796
15	Rhode Island	12,566	7,359	3,405	7,310	5,001	2,266
16	Minnesota	12,416	7,722	2,727	8,096	5,431	1,948
17	District of Columbia	12,305	8,735	1,532	6,909	6,132	1,022
18	Iowa	12,218	7,804	2,578	7,436	5,209	1,698
19	Wisconsin	11,904	6,729	2,929	6,959	4,628	1,948
20	West Virginia	11,773	6,560	3,164	6,786	4,099	1,965
21	Massachusetts	11,730	7,415	2,836	7,307	5,073	2,049
22	Louisiana	11,693	6,336	3,227	6,567	4,081	2,028
23	Maine	11,689	7,050	2,835	6,679	4,697	1,924
24	Missouri	11,471	7,160	2,211	6,848	4,728	1,439

K-12 Investment Levels

Salaries & Wages

Adjusted for Cost of Living (State)

Alaska had already fallen to below the middle of the U.S. states in FY16; 63 percent of Wyoming

Table 8. Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State: Fiscal Year 2016

(Dollars.) ADJUSTED FOR STATE AVERAGE COST OF LIVING, C2ER

SORT

RANK	Geographic area	Total [1]	Instruction				
			Salaries and wages	Employee benefits	Total [1]	Salaries and wages	Employee benefits
	United States	11,762	6,866	2,806	7,160	4,603	1,885
1	Wyoming	17,199	10,065	4,514	10,199	6,486	2,854
2	New York	16,882	9,286	4,877	11,885	7,101	3,850
3	District of Columbia	12,305	8,735	1,532	6,909	6,132	1,022
4	New Jersey	15,092	8,605	4,030	8,788	5,634	2,556
5	Connecticut	15,086	8,447	4,181	9,276	5,912	2,878
6	Vermont	14,808	8,403	3,686	8,882	5,587	2,498
7	North Dakota	13,413	8,062	2,957	8,029	5,463	2,048
8	Iowa	12,218	7,804	2,578	7,436	5,209	1,698
9	Pennsylvania	15,111	7,722	4,539	9,258	5,422	3,153
10	Minnesota	12,416	7,722	2,727	8,096	5,431	1,948
11	Delaware	14,306	7,669	3,981	8,936	5,441	2,868
12	Nebraska	13,244	7,649	2,679	8,624	5,447	1,960
13	Ohio	13,106	7,566	2,953	7,657	4,951	1,831
14	Illinois	14,590	7,461	4,646	8,886	5,084	3,148
15	Maryland	11,038	7,421	2,925	6,875	4,453	2,032
16	Massachusetts	11,730	7,415	2,836	7,307	5,073	2,049
17	Rhode Island	12,566	7,359	3,405	7,310	5,001	2,266
18	New Hampshire	13,339	7,224	3,379	8,357	5,182	2,418
19	Missouri	11,471	7,160	2,211	6,848	4,728	1,439
20	Maine	11,689	7,050	2,835	6,679	4,697	1,924
21	Virginia	11,190	6,970	2,741	6,818	4,618	1,805
22	Texas	9,886	6,878	1,203	6,046	4,604	774
23	Wisconsin	11,904	6,729	2,929	6,959	4,628	1,948
24	West Virginia	11,773	6,560	3,164	6,786	4,099	1,965
25	Montana	11,303	6,545	2,024	6,674	4,444	1,340
26	Arkansas	11,214	6,540	1,868	6,309	4,179	1,194
27	Kansas	11,040	6,521	1,953	6,721	4,312	1,287
28	Georgia	10,761	6,480	2,396	6,582	4,378	1,692
29	Michigan	13,004	6,422	4,169	7,604	4,281	2,796
30	Kentucky	10,526	6,401	2,608	6,091	4,134	1,633
31	Washington	10,766	6,400	2,420	6,103	4,024	1,489
32	Alaska	13,333	6,343	3,808	7,195	4,088	2,382
33	Louisiana	11,693	6,336	3,227	6,567	4,081	2,028
34	New Mexico	10,214	6,063	2,130	5,710	4,012	1,390
35	Mississippi	10,228	6,055	2,063	5,820	3,923	1,323

K-12 Investment Levels

Instructional Salary & Wages

Adjusted for Cost of Living (State)

Table 8. Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State: Fiscal Year 2016

(Dollars.) ADJUSTED FOR STATE AVERAGE COST OF LIVING, C2ER

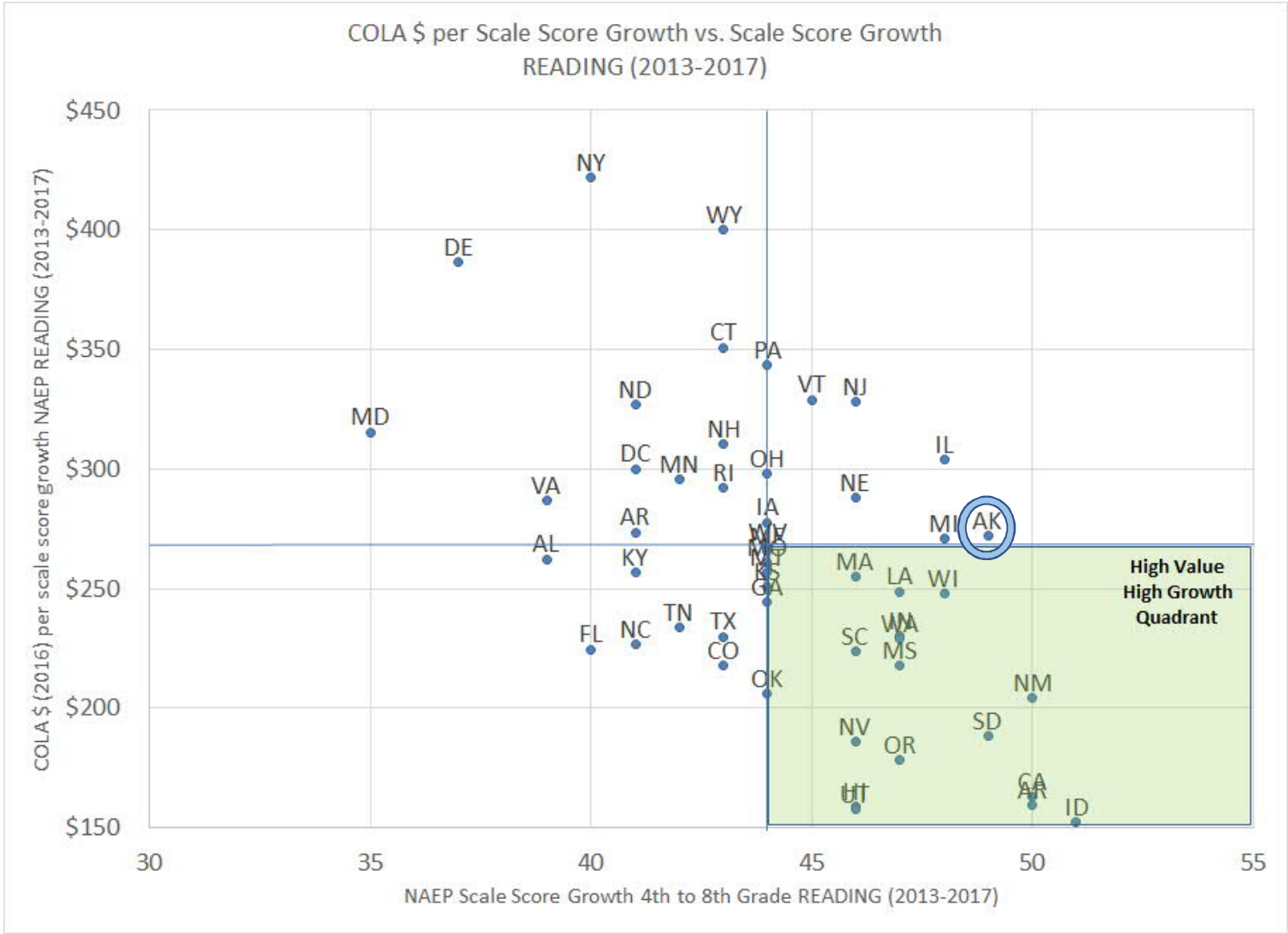
SORT

RANK	Geographic area	Total [1]	Instruction		Total [1]	Salaries and wages	Employee benefits
			Salaries and wages	Employee benefits			
	United States	11,762	6,866	2,806	7,160	4,603	1,885
1	New York	16,882	9,286	4,877	11,885	7,101	3,850
2	Wyoming	17,199	10,065	4,514	10,199	6,486	2,854
3	District of Columbia	12,305	8,735	1,532	6,909	6,132	1,022
4	Connecticut	15,086	8,447	4,181	9,276	5,912	2,878
5	New Jersey	15,092	8,605	4,030	8,788	5,634	2,556
6	Vermont	14,808	8,403	3,686	8,882	5,587	2,498
7	North Dakota	13,413	8,062	2,957	8,029	5,463	2,048
8	Nebraska	13,244	7,649	2,679	8,624	5,447	1,960
9	Delaware	14,306	7,669	3,981	8,936	5,441	2,868
10	Minnesota	12,416	7,722	2,727	8,096	5,431	1,948
11	Pennsylvania	15,111	7,722	4,539	9,258	5,422	3,153
12	Iowa	12,218	7,804	2,578	7,436	5,209	1,698
13	New Hampshire	13,339	7,224	3,379	8,357	5,182	2,418
14	Illinois	14,590	7,461	4,646	8,886	5,084	3,148
15	Massachusetts	11,730	7,415	2,836	7,307	5,073	2,049
16	Rhode Island	12,566	7,359	3,405	7,310	5,001	2,266
17	Ohio	13,106	7,566	2,953	7,657	4,951	1,831
18	Missouri	11,471	7,160	2,211	6,848	4,728	1,439
19	Maine	11,689	7,050	2,835	6,679	4,697	1,924
20	Wisconsin	11,904	6,729	2,929	6,959	4,628	1,948
21	Virginia	11,190	6,970	2,741	6,818	4,618	1,805
22	Texas	9,886	6,878	1,203	6,046	4,604	774
23	Maryland	11,038	7,421	2,925	6,875	4,453	2,032
24	Montana	11,303	6,545	2,024	6,674	4,444	1,340
25	Georgia	10,761	6,480	2,396	6,582	4,378	1,692
26	Kansas	11,040	6,521	1,953	6,721	4,312	1,287
27	Michigan	13,004	6,422	4,169	7,604	4,281	2,796
28	Arkansas	11,214	6,540	1,868	6,309	4,179	1,194
29	Kentucky	10,526	6,401	2,608	6,091	4,134	1,633
30	West Virginia	11,773	6,560	3,164	6,786	4,099	1,965
31	Alaska	13,333	6,343	3,808	7,195	4,088	2,382
32	Louisiana	11,693	6,336	3,227	6,567	4,081	2,028
33	North Carolina	9,296	5,890	1,961	5,829	4,047	1,327
34	Tennessee	9,814	5,919	1,918	6,022	4,036	1,331
35	Washington	10,766	6,400	2,420	6,103	4,024	1,489
36	New Mexico	10,214	6,063	2,130	5,710	4,012	1,390
37	Mississippi	10,228	6,055	2,063	5,820	3,923	1,323

Alaska had already fallen to below the middle of the U.S. states in FY16; 63 percent of Wyoming 58 percent of New York

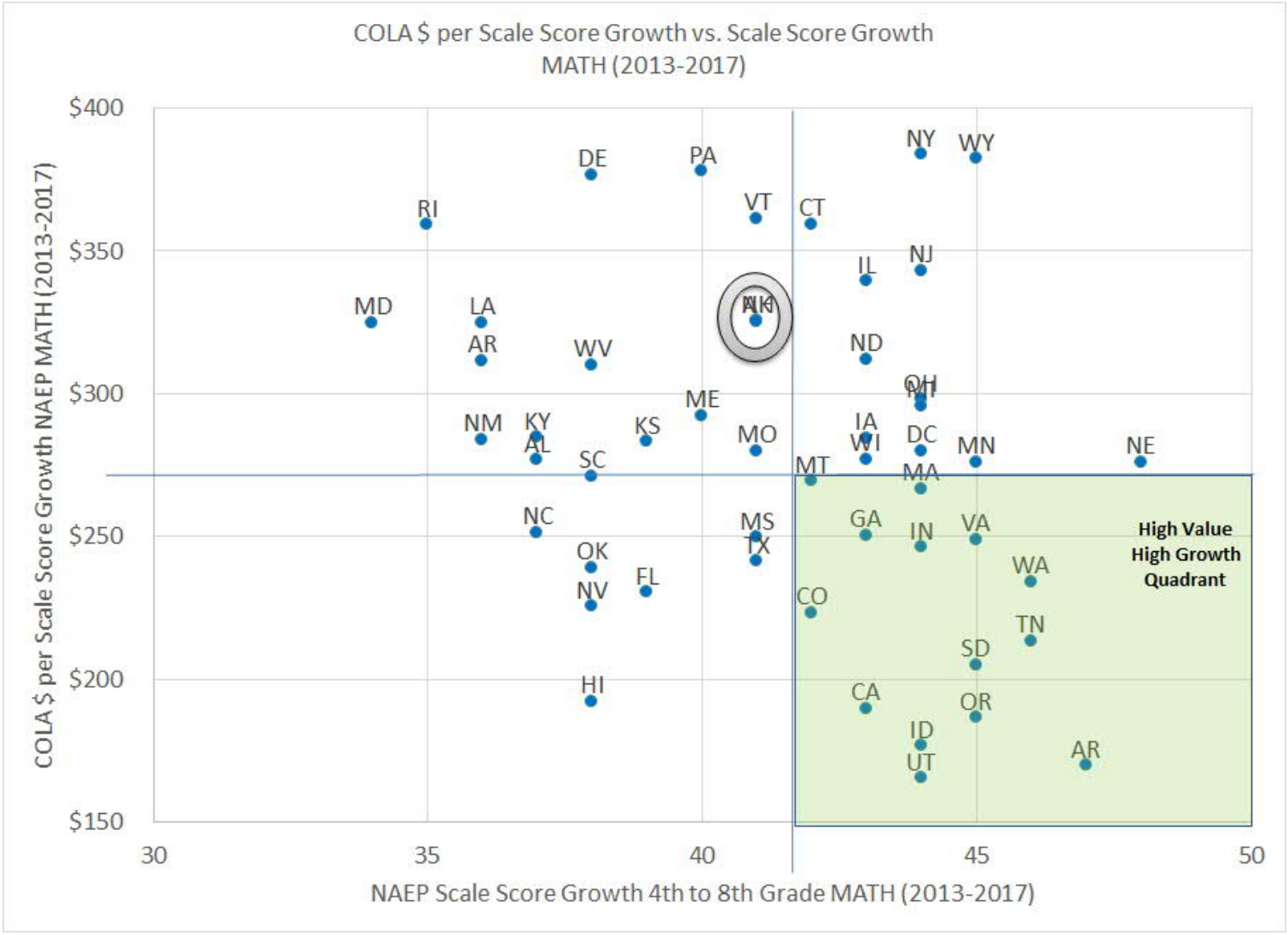
Return on K-12 Investments

COLA $ per NAEP scale score growth - READING



Return on K-12 Investments

COLA $ per NAEP scale score growth point – **Math**



K-12 Investment Levels

Instructional Salary & Wages

Governor's Proposed Budget FY20

Adjusted for Cost of Living (State)

AK Governor's Proposed FY20 Budget would likely plunge Alaska's cost of living adjusted instructional salaries and wages per pupil to last in the U.S.; this scenario presents a high risk of exacerbating mounting challenges around attracting and retaining highly qualified and effective teachers

Table 8. Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems

by State: PROJECTED TO FY20 AK Gov's Proposed Budget (-23%); L48 Growth (+3% CAGR)^4 = 12.6% increase)

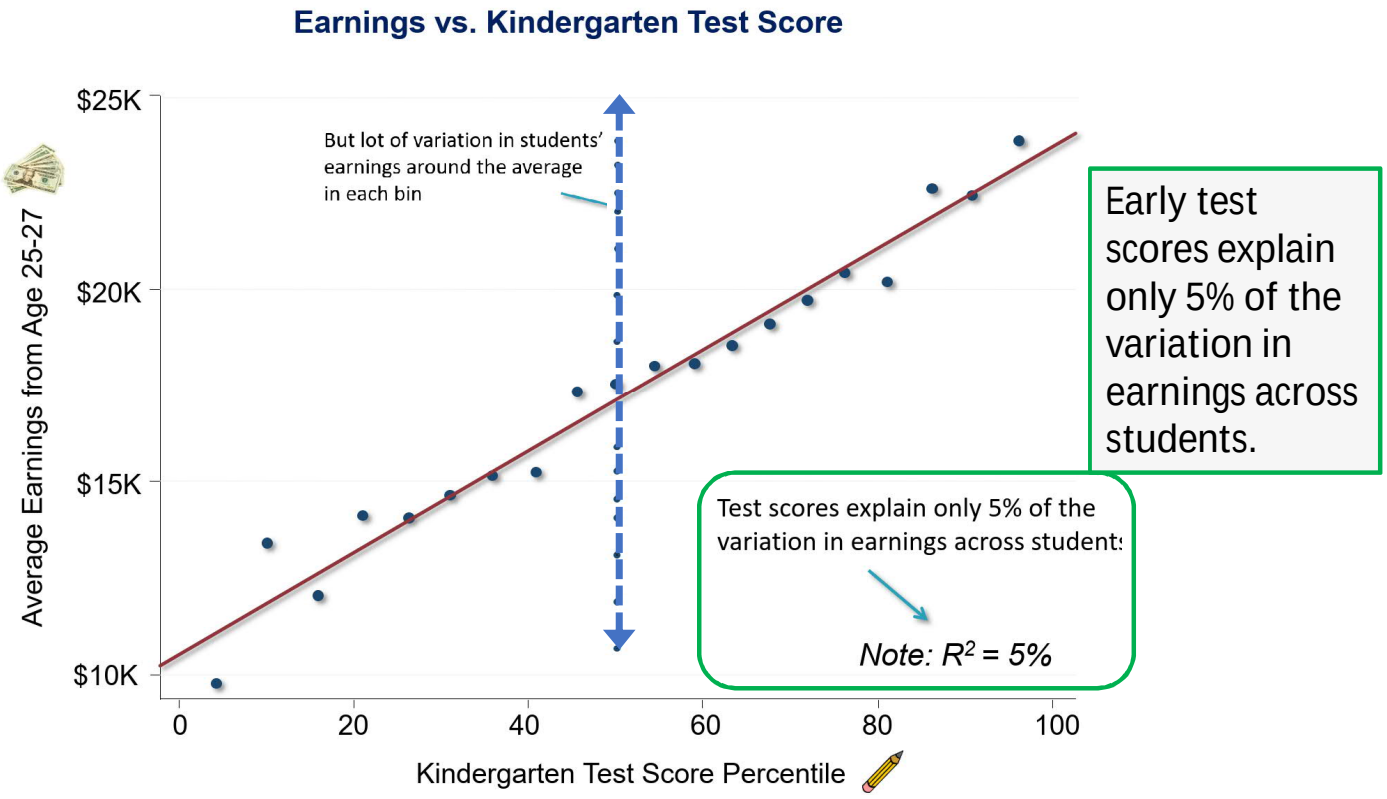
(Dollars.) ADJUSTED FOR STATE AVERAGE COST OF LIVING, C2ER

SORT

RANK	Geographic area	112.6% / 77.0% Total [1]	Salaries and wages	Employee benefits	Instruction Total [1]	Instruction Salaries and wages	Instruction Employee benefits
	United States	13,238	7,728	3,158	8,058	5,181	2,122
1	New York	19,001	10,451	5,489	13,377	7,992	4,333
2	Wyoming	19,357	11,328	5,080	11,479	7,300	3,212
3	District of Columbia	13,850	9,831	1,725	7,776	6,902	1,151
4	Connecticut	16,979	9,507	4,706	10,440	6,654	3,240
5	New Jersey	16,986	9,685	4,536	9,891	6,341	2,876
6	Vermont	16,666	9,458	4,149	9,996	6,288	2,811
7	North Dakota	15,096	9,073	3,328	9,037	6,148	2,306
8	Nebraska	14,906	8,609	3,015	9,706	6,131	2,206
9	Delaware	16,101	8,631	4,480	10,058	6,124	3,228
10	Minnesota	13,974	8,691	3,069	9,112	6,113	2,192
11	Pennsylvania	17,007	8,691	5,108	10,420	6,102	3,548
12	Iowa	13,751	8,783	2,901	8,370	5,862	1,911
13	New Hampshire	15,013	8,131	3,803	9,406	5,832	2,721
14	Illinois	16,421	8,397	5,229	10,001	5,722	3,544
15	Massachusetts	13,202	8,345	3,192	8,224	5,710	2,306
16	Rhode Island	14,143	8,283	3,832	8,227	5,629	2,550
17	Ohio	14,751	8,515	3,323	8,618	5,572	2,061
18	Missouri	12,911	8,058	2,488	7,707	5,322	1,619
19	Maine	13,155	7,935	3,190	7,517	5,286	2,165
20	Wisconsin	13,397	7,573	3,296	7,832	5,209	2,193
21	Virginia	12,595	7,845	3,085	7,674	5,197	2,032
22	Texas	11,126	7,741	1,354	6,804	5,182	871
23	Maryland	12,423	8,352	3,292	7,738	5,012	2,287
24	Montana	12,722	7,366	2,278	7,512	5,002	1,509
25	Georgia	12,112	7,293	2,697	7,408	4,928	1,904
26	Kansas	12,425	7,339	2,198	7,565	4,854	1,449
27	Michigan	14,636	7,228	4,692	8,559	4,818	3,147
28	Arkansas	12,621	7,361	2,103	7,101	4,703	1,344
29	Kentucky	11,847	7,204	2,935	6,856	4,653	1,838
30	West Virginia	13,251	7,384	3,561	7,637	4,614	2,212
31	Louisiana	13,161	7,131	3,632	7,391	4,593	2,283
32	North Carolina	10,463	6,629	2,208	6,561	4,555	1,493
33	Tennessee	11,046	6,662	2,159	6,778	4,543	1,499
34	Washington	12,117	7,204	2,724	6,869	4,529	1,675
35	New Mexico	11,495	6,824	2,397	6,426	4,515	1,565
36	Mississippi	11,512	6,814	2,322	6,551	4,415	1,489
37	Indiana	12,180	6,716	3,618	7,051	4,411	2,316
38	South Carolina	11,591	6,682	2,453	6,366	4,284	1,540
39	South Dakota	10,379	6,172	1,820	6,063	4,193	1,209
40	Alabama	11,515	6,427	2,599	6,554	4,168	1,604
41	Colorado	10,538	6,608	1,962	5,968	4,137	1,177
42	Nevada	9,637	5,726	2,376	5,574	3,668	1,510
43	Oklahoma	10,214	5,664	1,957	5,711	3,637	1,274
44	Florida	10,109	5,741	1,800	6,208	3,634	1,101
45	Idaho	8,742	5,212	1,887	5,205	3,581	1,273
46	California	9,177	5,323	2,227	5,468	3,417	1,399
47	Arizona	8,964	5,344	1,704	4,801	3,321	1,032
48	Oregon	9,437	5,002	2,708	5,507	3,251	1,725
49	Utah	8,174	4,693	2,308	5,251	3,171	1,528
50	Hawaii	8,218	4,535	1,865	4,821	3,114	1,254
51	Alaska	10,267	4,884	2,932	5,540	**3,052**	**1,930**
	Alaska/U.S.					0.59	

What drives success in life?

Chetty et al., early test scores as ~5% of success in life as measured by earnings age 25-27



Source: Professor Raj Chetty, Head Section Leader Rebecca Toseland, "Using Big Data to Solve Social & Economic Problems", Opportunity Insights, Lecture Chart Pack #5

What drives success in life?

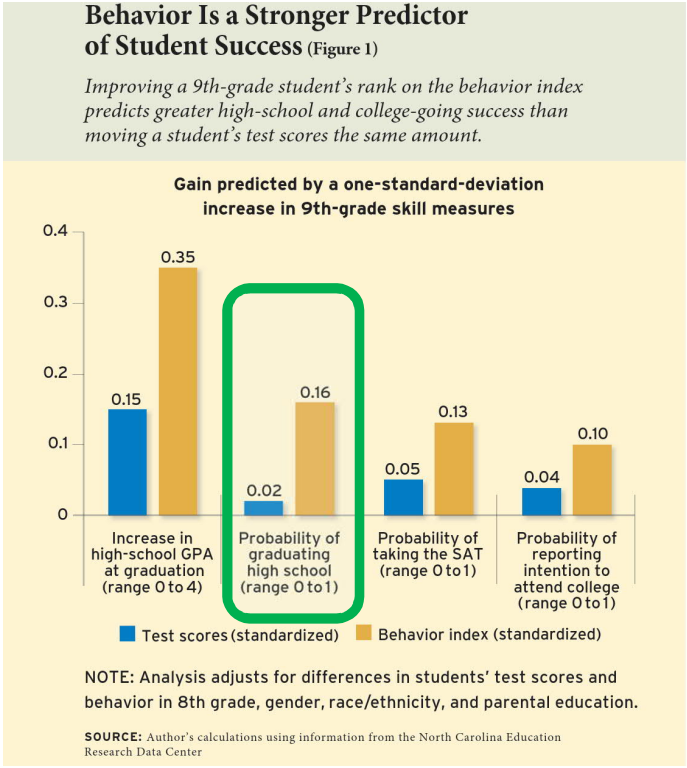
Jackson,

Social skills as primary driver of success in school and success in life; teachers impact on social skills is more predictive of students' longer term success in graduating high school and going on to success in life

Test scores are often the best available measure of student progress, but they do not capture every skill needed in adulthood. A growing research base shows that non-cognitive (or social-emotional) skills like adaptability, motivation and self-restraint are key determinants of adult outcomes. Therefore, if we want to identify good teachers, we ought to look at how teachers affect their students' development across a range of skills – both academic and non-cognitive.

A robust data set on 9th grade students in North Carolina allows me to do just that.

I find that, while teachers have notable effects on both test scores and non-cognitive skills, their impact on non-cognitive skills is 10 times more predictive of students' longer-term success in high school than their impact on test scores.

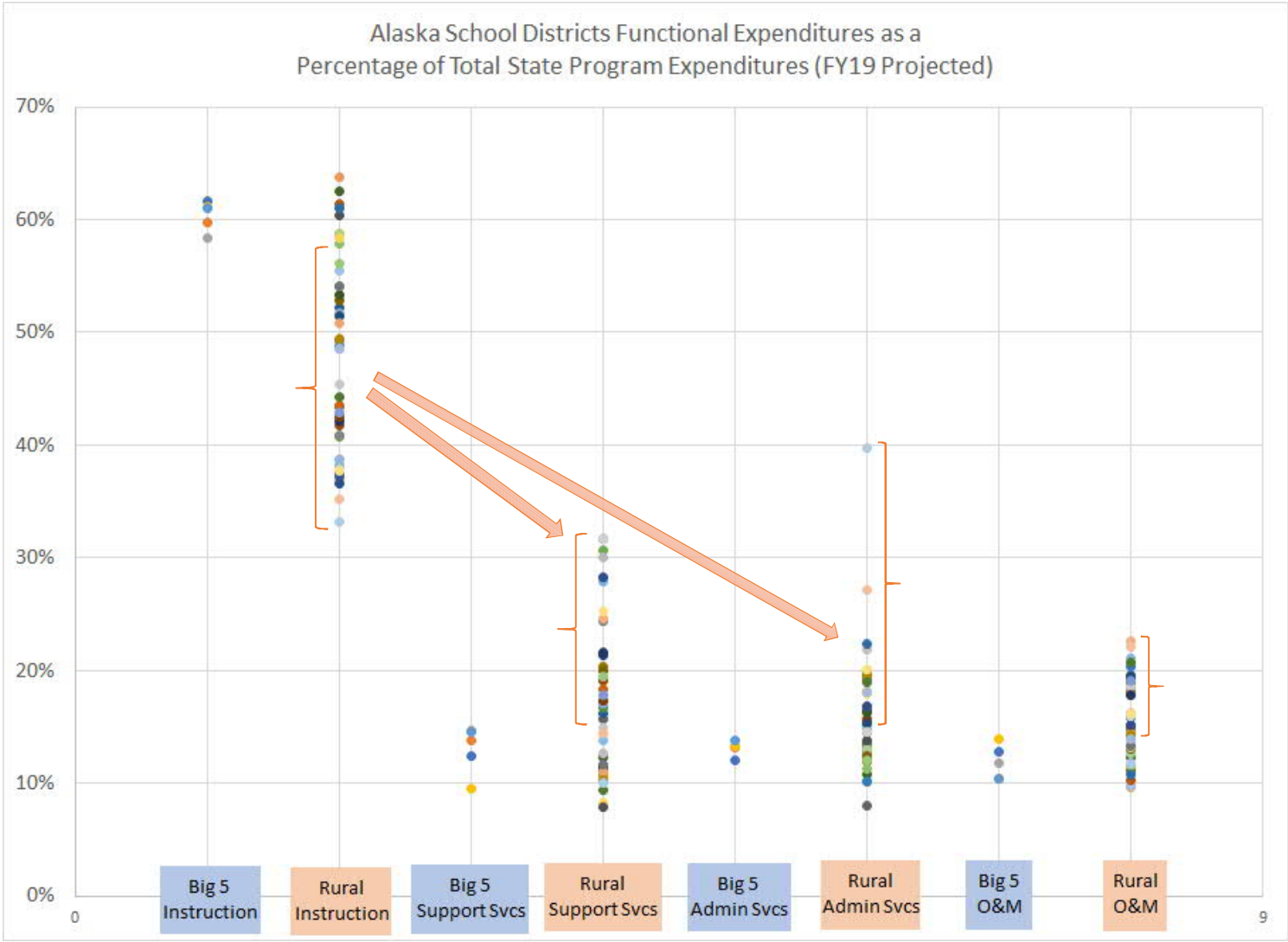


Source: C. Kirabo Jackson, "The Full Measure of a Teacher", Education Next, Winter 2019

Review of Alaska School District Functional Expenditures

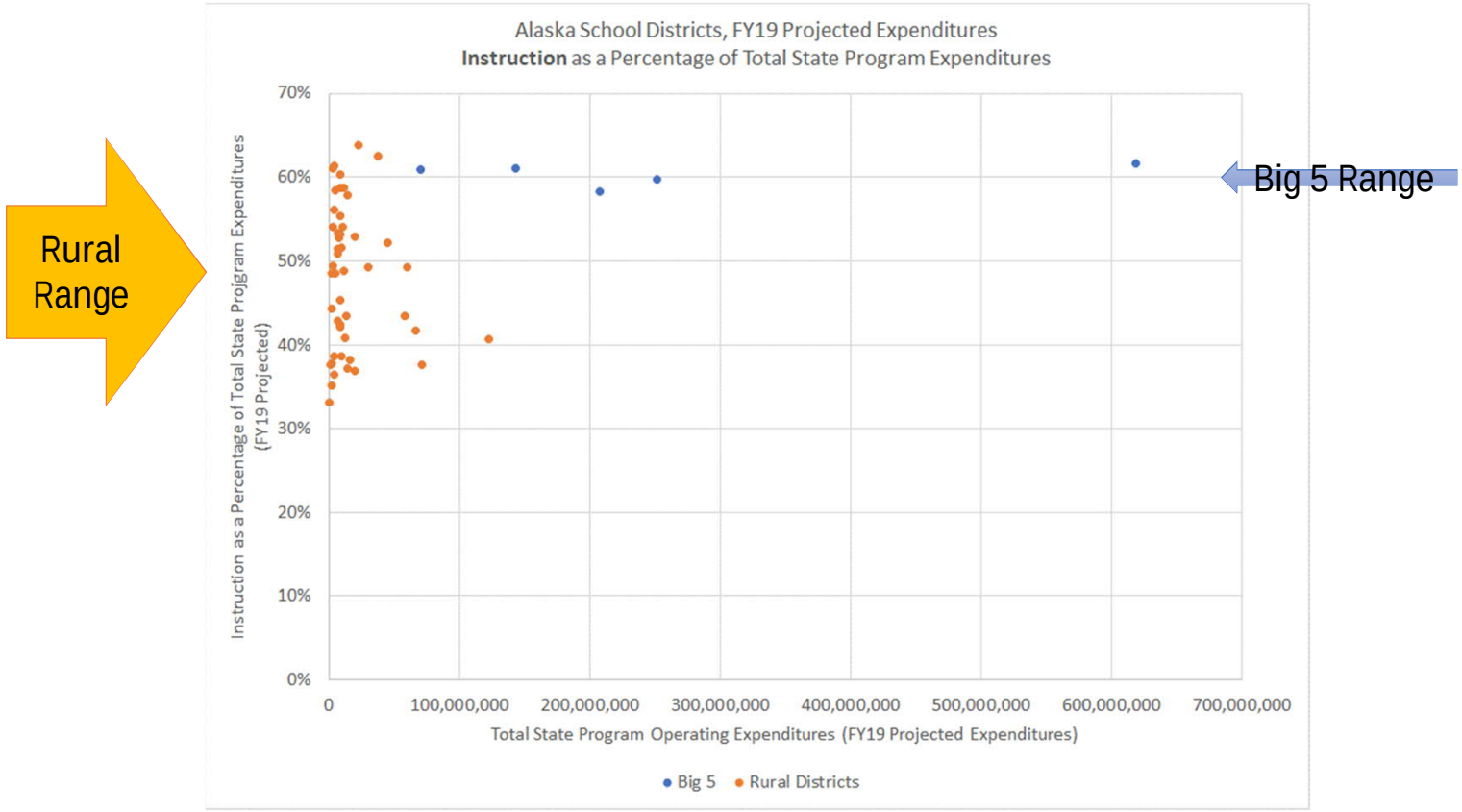
Big 5 & Rural Alaska Districts

Alaskan districts continue to face significant challenges training, attracting and retaining qualified and effective teachers. These challenges remain especially daunting across rural Alaska where many districts hire the local talent they can find to fill positions in support and administrative services to help support their students.



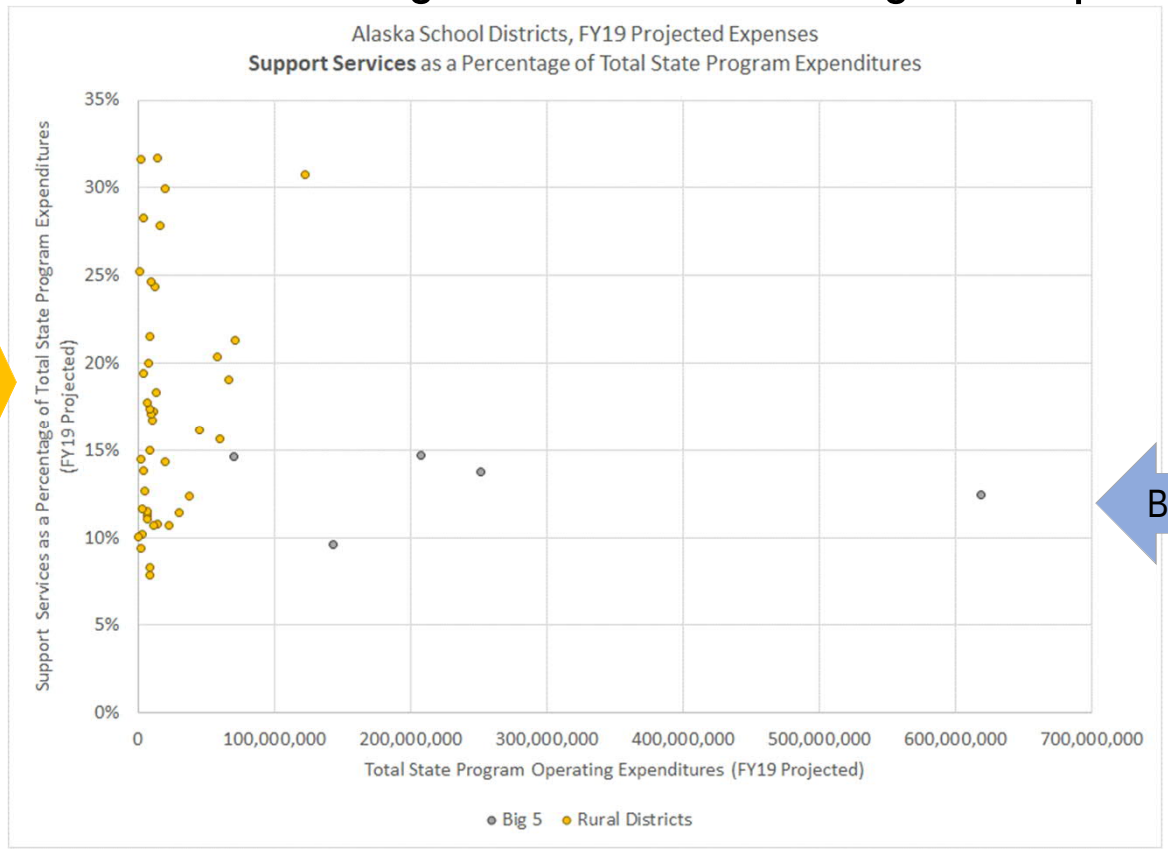
Alaska Districts Expenditures by Function

Instruction as Percentage of Total State Program Expenditures (FY19)



Alaska Districts Expenditures by Function

Support Services as Percentage of Total State Program Expenditures (FY19)

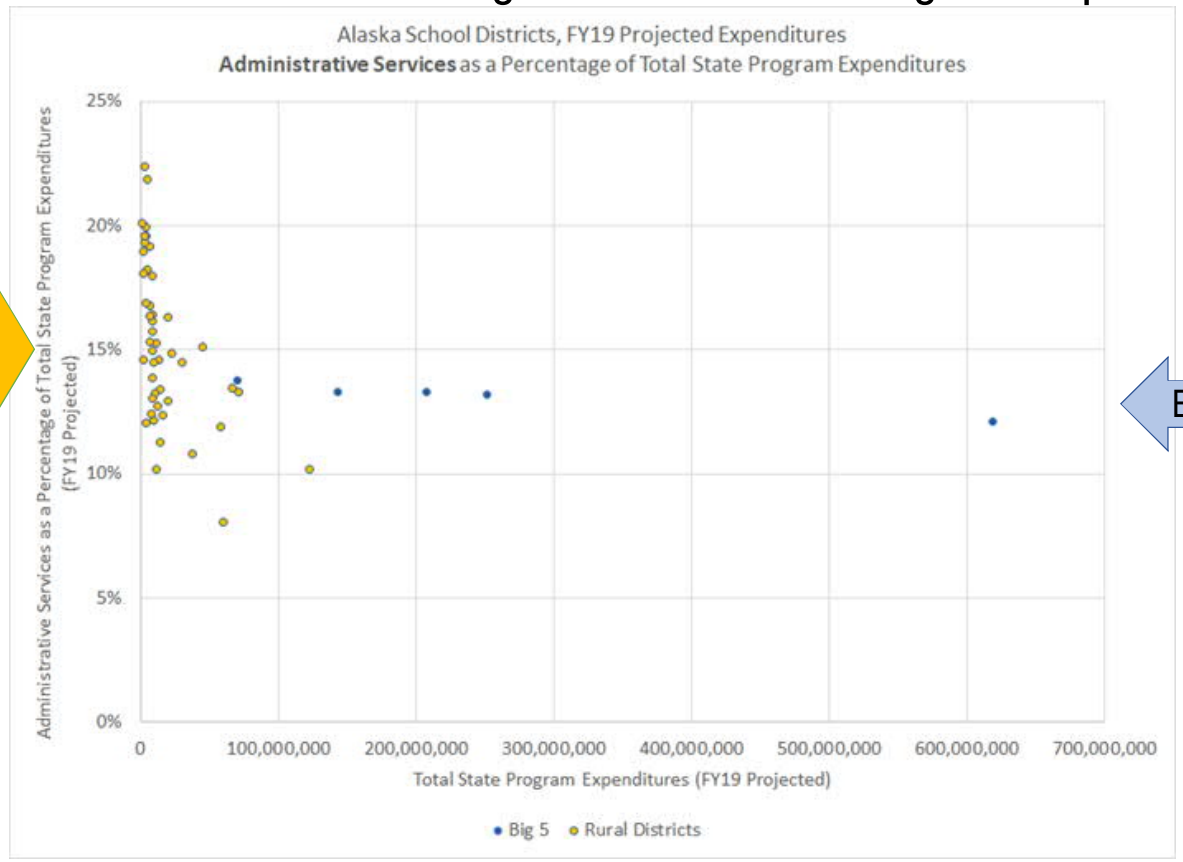


Rural Range

Big 5 Range

Alaska Districts Expenditures by Function

Administrative Services as Percentage of Total State Program Expenditures (FY19)

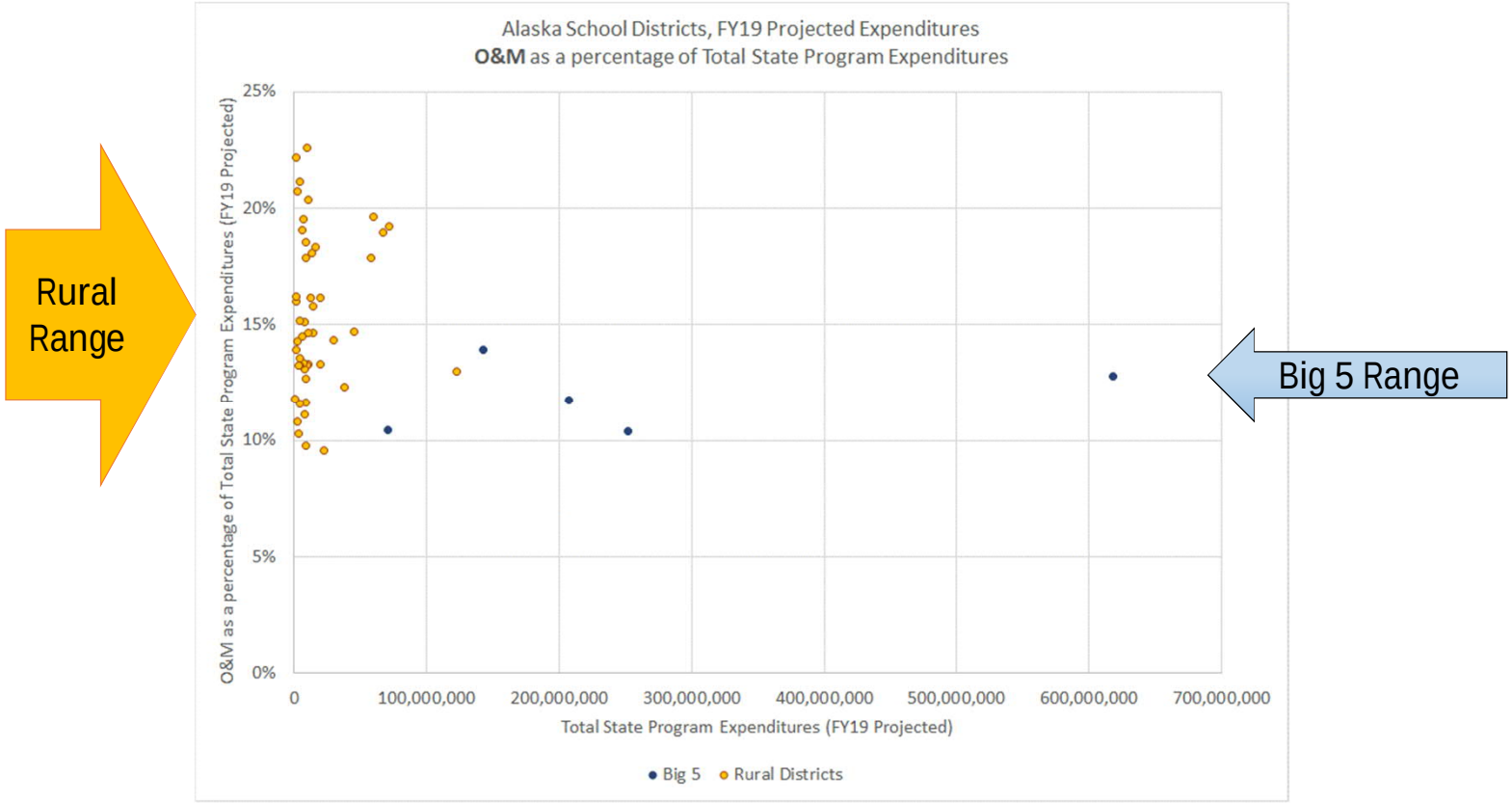


Rural Range

Big 5 Range

Alaska Districts Expenditures by Function

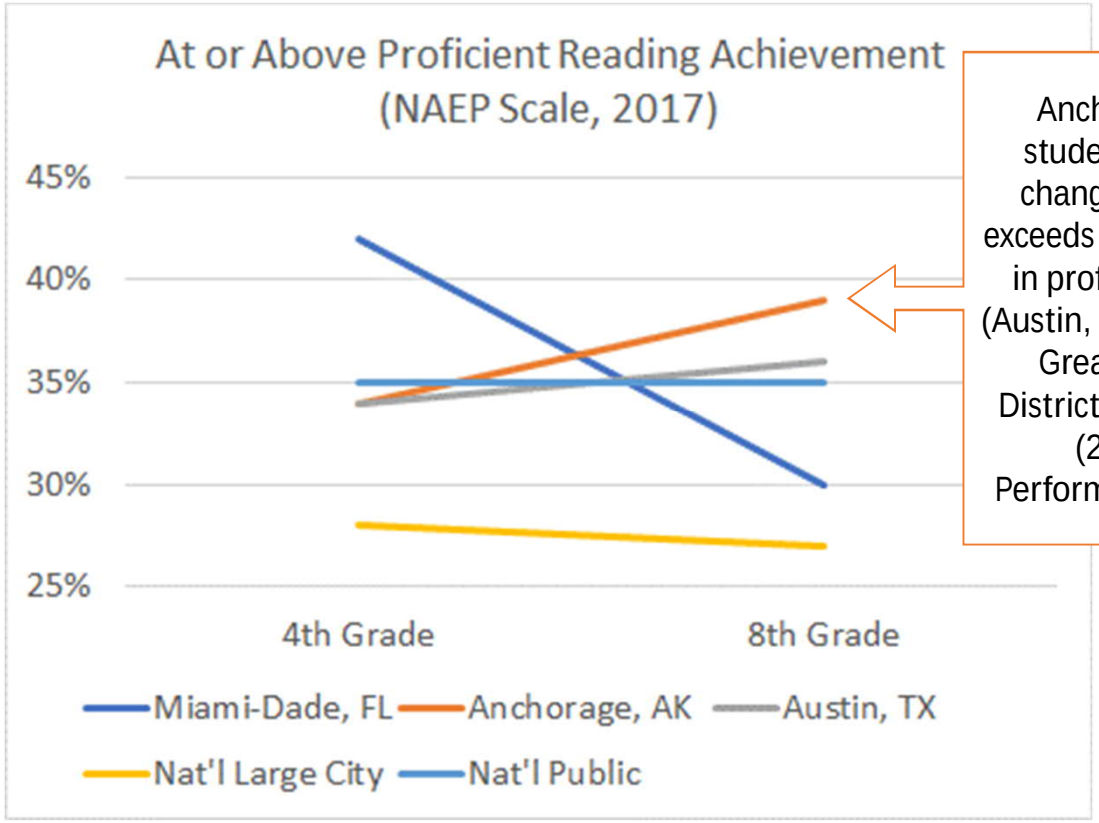
O&M as Percentage of Total State Program Expenditures (FY19)



4th to 8th Grade Reading Assessments

Council of Great City Schools Academic Key Performance Indicators Report (October 2018)

Normalized to NAEP Scale (2017)



Anchorage School District student reading proficiency change from 4th to 8th grade exceeds the top district in change in proficiency and proficiency (Austin, TX) among the Council of Great City Schools School Districts reporting NAEP scores (2018 Key Academic Performance Indicators Report)

3rd to 9th grade English Language Arts PEAKS Assessments, Year over Year Growth & Proficiency Among Cohorts