To the members of the Kentucky Board of Education

RE: Wednesday Briefing on NAEP Results

Dear KBE Members:

On Wednesday, December 8, 2022 you are scheduled to receive a briefing about "Data at a Glance" with recent results from a number of different education indicators. Some of the indicators to be discussed include the National Assessment of Educational Progress (NAEP) 2022 results from Grade 4 and Grade 8 reading and in mathematics.

I have reviewed the slides to be presented and want you to know that part of the NAEP presentation does not follow recommendations from the NAEP's own administrators for doing comparisons of results across different states. These recommendations are discussed in the NAEP 2009 Science Report Card (online here: <a href="http://nces.ed.gov/nationsreportcard/pdf/main2009/2011451.pdf">http://nces.ed.gov/nationsreportcard/pdf/main2009/2011451.pdf</a>) on Page 32. On that page, Kentucky is actually used as an example in Figure 32 of why you must break the data out at least by race to get an accurate picture of relative performance. As the report card states:

Some might assume that states that score above the national average would have student groups that exhibit similar performance, but that is not necessarily true.

It definitely is not true in the case of Kentucky.

Due to time constraints, I will only show you how Kentucky's white student Grade 4 NAEP Math results stack up against other states. As you can see, the picture is far worse than the slide KDE is presenting.

2022 Kentucky average scale score (0–500)

**KY - 237** 

35 # jurisdictions significantly higher

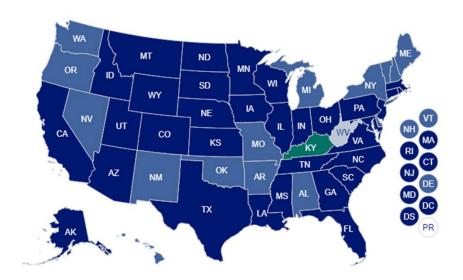
15 jurisdictions not significantly different

# jurisdictions significantly lower jurisdictions no assessment/data not available

Was not selected for comparison

Mathematics, grade 4

Difference in average scale scores between jurisdictions, for race/ethnicity used to report trends, school-reported [SDRACE] = White 2022



NOTE: DS = Department of Defense Education Activity (DoDEA). DoDEA = Department of Defense Education Activity. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP). 2022 Mathematics Assessment.

When we only consider Kentucky's most populous student racial group, a total of 35, not just 17, other jurisdictions statistically significantly outscore the Bluegrass State for Grade 4 NAEP Math. Only 1 state, not 12 states, does worse. That's all.

As far as rankings go, this table was directly assembled in the NAEP Data Explorer web tool and you can clearly see that Kentucky's white students rank quite low, in 43<sup>rd</sup> place.

Mathematics grade 4 Results sorted by average scale score White, 2022

Order	Jurisdiction	Cross-jurisdiction significant difference	Number of jurisdictions			2022
			significantly higher	not significantly different	significantly lower	White average scale score
1	District of Columbia	30 ↑	0	0	51	267
2	DoDEA	17 ↑	1	3	47	254
3	Florida	16 ↑	1	10	40	253
4	Texas	15 ↑	1	13	37	252
	Minnesota	13 ↑	2	20	29	250
	Nebraska	13 ↑	2	20	29	249
	New Jersey	12 ↑	1	28	22	249
	Wisconsin	12 ↑	2	27	22	248
	Massachusetts	12 ↑	2	27	22	248
	Connecticut	11 1	3	22	26	248
	Maryland	11 1	2	29	20	248
	Illinois	11 1	2	29	20	248
	Colorado	10 +	4	28	19	247
	Virginia	10 +	3 2	32	16	247
	Arizona	10 ↑ 10 ↑	4	34 31	15 16	247 247
	South Carolina Utah	10 1	4	31	16	247
	North Carolina	10 ↑	4	31	16	247
	Georgia	9 1	4	30	17	246
	Indiana	9 1	4	32	15	246
_	Pennsylvania	9 1	4	32	15	246
	South Dakota	9 1	6	29	16	246
	Mississippi	8 1	6	30	15	245
	Wyoming	8 1	7	29	15	245
	California	8 1	3	38	10	245
	North Dakota	8 1	7	30	14	245
27	Tennessee	8 1	6	33	12	245
	Ohio	8 1	7	31	13	245
	Iowa	8 ↑	7	31	13	245
	Hawaii	7	4	39	8	244
31	Rhode Island	7 +	10	30	11	244
32	Louisiana	6 ↑	10	31	10	243
33	Montana	6 ↑	14	26	11	243
34	Kansas	6 ↑	13	28	10	243
	Alaska	5 ↑	19	23	9	242
	Washington	5	13	30	8	242
	Nevada	5	12	34	5	242
	Idaho	4 ↑	25	17	9	241
	Michigan	4	24	21	6	241
	Alabama	3	27	19	5	240
41	New Hampshire	3	28	17	6	240
	Missouri	2	30	16	5	239
	Kentucky	†	35	15	1	237
	New York	#	33	17	1	237
45	Oklahoma	# *	37	13	1	237
46	Delaware	# ·	37	13	1	236
	Arkansas	-1 ·	39	11	1	236
	Vermont Maine	-2	42 42	8	1	235 234
		-3	42	8	1	234
51	New Mexico Oregon	-3 -4	42	8	1	234
	Oregon	-4	42		1	233
	West Virginia	-10 ↓	51	0	0	227

I did a detailed report with full comparisons for both white and Black students using the 2019, pre-COVID, NAEP data, and you can find that here if you want the full picture: <a href="https://bit.ly/3rgBgqP">https://bit.ly/3rgBgqP</a>

The board deserves the full picture, just as the people who create the NAEP advise you examine. You will be embarrassingly under-informed without it.

**Richard Innes** 

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