

SOMETHING IMPORTANT CHANGES

COMPARING KINDERGARTEN READINESS TO GRADE 3 PROFICIENCY RATES FOR AFRICAN AMERICAN STUDENTS AND OTHER STUDENT GROUPS

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In recent years, Kentucky students have taken the KSCREEN assessment of kindergarten readiness at the start of their elementary school careers and then taken KPREP reading and mathematics assessments for the first time in grade 3. For two cohorts, it is possible to compare results for those assessments, and doing so quickly identifies African American results as a distinctive and important puzzle.

HOW DO READINESS AND PROFICIENCY RESULTS COMPARE?

For students overall, the 2013-14 KSCREEN readiness rate was followed by higher 2016-17 KPREP proficiency rates in both subjects. Among student groups, only African American students had proficiency levels lower than KSCREEN readiness by more than 10 points in both subjects, with American Indian/Alaska Native students (a small population in Kentucky) as the only other group with results 10 point lower in math.

2013-14 KINDERGARTEN READINESS COMPARED TO 2016-17 PROFICIENCY					
	2013-14 Percent Kindergarten Ready	2016-17 Reading Proficient or Above	2016-17 Math Proficient or Above	Readiness to Reading Difference	Readiness to Math Difference
All Students	49.0	55.8	50.9	6.8	1.9
African American Students	44.2	32.8	30.3	-11.4	-13.9
American Indian/Alaska Native Students	49.2	52.5	37.3	3.3	-11.9
Asian Students	61.6	65.9	73.4	4.3	11.8
Hispanic Students	28.0	42.7	40.6	14.7	12.6
Native Hawaiian/Pacific Islander Students	51.4	55.3	47.1	3.9	-4.3
Students of Two or More Races	50.5	52.8	47.3	2.3	-3.2
White (Non-Hispanic) Students	51.2	60.2	54.6	9.0	3.4
Students Identified as English Learners	26.1	28.5	30.9	2.4	4.8
Students Not Identified as English Learners	50.4	57.2	51.9	6.8	1.6
Students With Identified Disabilities	28.2	38.8	31.1	10.6	2.9
Students Without Identified Disabilities	52.0	58.9	54.6	6.9	2.5
Students Eligible for F/R Meals	37.6	47.1	42.2	9.5	4.6
Students Ineligible for F/R Meals	67.3	72.2	67.3	4.9	0.0
Male Students	43.6	52.7	51.0	9.1	7.4
Female Students	54.5	58.9	50.9	4.4	-3.6

Orange highlights proficiency results lower than readiness by two points or more, with darker orange for differences of 10 points or more. Green highlights proficiency higher than readiness by two points or more, again darker for differences of 10 points or more.

More recently, 2014-15 KSCREEN readiness for students overall was followed by a higher 2017-18 proficiency rate in reading and a lower one in math. Again, only African American students had proficiency more than 10 points lower than their readiness levels in both subjects, and only Native Hawaiian/Pacific Islander students (another very small Kentucky population) had results 10 points lower in math.

2014-15 KINDERGARTEN READINESS COMPARED TO 2017-18 PROFICIENCY					
	2014-15 Percent Kindergarten Ready	2017-18 Reading Proficient or Above	2017-18 Math Proficient or Above	Readiness to Reading Difference	Readiness to Math Difference
All Students	50.0	52.3	47.3	2.3	-2.7
African American Students	46.3	28.6	26.1	-17.7	-20.2
American Indian/Alaska Native Students	45.5	47.1	51.0	1.6	5.5
Asian Students	64.2	65.7	70.4	1.5	6.2
Hispanic Students	28.7	38.3	35.1	9.6	6.4
Native Hawaiian/Pacific Islander Students	49.0	50.0	35.9	1.0	-13.1
Students of Two or More Races	51.0	47.5	41.9	-3.5	-9.1
White (Non-Hispanic) Students	52.1	57.0	51.3	4.9	-0.8
Students Identified as English Learners	28.7	27.6	27.7	-1.1	-1.0
Students Not Identified as English Learners	51.3	53.9	48.5	2.5	-2.8
Students With Identified Disabilities	27.6	36.0	28.4	8.4	0.8
Students Without Identified Disabilities	53.8	55.4	50.9	1.7	-2.8
Students Eligible for F/R Meals	39.4	43.5	38.0	4.1	-1.4
Students Ineligible for F/R Meals	69.2	68.2	64.1	-1.0	-5.0
Male Students	44.6	49.2	48.0	4.6	3.4
Female Students	55.6	55.5	46.5	-0.1	-9.1

HOW DO GAPS IN READINESS AND PROFICIENCY COMPARE?

African American students entered kindergarten in Kentucky with readiness rates less than 8 points lower than their white classmates, but completed grade three with proficiency rates 24 points or more below White (Non-Hispanic) students. That is, both gaps in proficiency were more than three times the size of the gap in readiness for both cohorts.

Each year saw only one other gap change by ten points or more, and those changes were for different groups and subjects each year.

Meanwhile, in both years and both subjects, gaps got smaller between Hispanic and White (Non-Hispanic) students, male and female students, students with and without identified disabilities and students eligible and ineligible for free or reduced-price meals. The tables on the next page show these patterns.

COMPARING GAPS IN 2013-14 KINDERGARTEN READINESS AND 2016-17 GRADE 3 PROFICIENCY

Gap Between	Gap in 2013-14 Percent Kindergarten Ready	Gap in 2016-17 Reading Proficient or Above	Gap in 2016-17 Math Proficient or Above	Readiness to Reading Gap Difference	Readiness to Math Gap Difference
African American and White (Non-Hispanic) Students	-7.0	-27.4	-24.3	-20.4	-17.3
American Indian/Native Alaskan and White (Non-Hispanic) Students	-2.0	-7.7	-17.3	-5.7	-15.3
Hispanic and White (Non-Hispanic) Students	-23.2	-17.5	-14.0	5.7	9.2
Native Hawaiian/Pacific Islander and White (Non-Hispanic) Students	0.2	-4.9	-7.5	-5.1	-7.7
Students of Two or More Races and White (Non-Hispanic) Students	-0.7	-7.4	-7.3	-6.7	-6.6
Students Identified and not Identified as English Learners	-24.3	-28.7	-21.0	-4.4	3.3
Students With and Without Identified Disabilities	-23.8	-20.1	-23.5	3.7	0.4
Students Eligible and Ineligible for F/R Meals	-29.7	-25.1	-25.1	4.6	4.6
Male and Female Students	-10.9	-6.2	0.1	4.7	11.0

COMPARING GAPS IN 2014-15 KINDERGARTEN READINESS AND 2017-18 GRADE 3 PROFICIENCY

Gap Between	Gap in 2014-15 Percent Kindergarten Ready	Gap in 2017-18 Reading Proficient or Above	Gap in 2017-18 Math Proficient or Above	Readiness to Reading Gap Difference	Readiness to Math Gap Difference
African American and White (Non-Hispanic) Students	-5.8	-28.4	-25.2	-22.6	-19.4
American Indian/Native Alaskan and White (Non-Hispanic) Students	-6.6	-9.9	-0.3	-3.3	6.3
Hispanic and White (Non-Hispanic) Students	-23.4	-18.7	-16.2	4.7	7.2
Native Hawaiian/Pacific Islander and White (Non-Hispanic) Students	-3.1	-7.0	-15.4	-3.9	-12.3
Students of Two or More Races and White (Non-Hispanic) Students	-1.1	-9.5	-9.4	-8.4	-8.3
Students Identified and not Identified as English Learners	-22.6	-26.3	-20.8	-3.6	1.8
Students With and Without Identified Disabilities	-26.2	-19.4	-22.5	6.7	3.6
Students Eligible and Ineligible for F/R Meals	-29.8	-24.7	-26.1	5.1	3.6
Male and Female Students	-11.0	-6.3	1.5	4.7	12.5

WHERE DOES JEFFERSON COUNTY FIT IN THIS STORY?

Jefferson County’s public schools serve roughly 15% of Kentucky’s public school students and fully 50% African American public school students. Accordingly, it’s worth looking at how that one district compares to the rest of the state. The table below gives a quick look at comparing 2014-15 KSCREEN and 2017-18 KPREP that way. (A similar analysis is not possible with for the previous cohort because the public date reports do not identify the number of students of each race who were took KPREP in Jefferson County.)

Jefferson reported higher kindergarten readiness than the rest of the state for students overall, African American students, and White (Non-Hispanic) students. Then Jefferson had lower proficiency rates than other districts for African American students than the rest of the state and higher proficiency rates for White (Non-Hispanic) students. As a result, the gaps grew more in Jefferson County than elsewhere.

However, across the rest of the state, African American students still had grade three proficiency rates in both subjects more than 10 points lower than their readiness rates, while White (Non-Hispanic) students had a very reading proficiency more than five points higher than readiness, and math proficiency only slightly below readiness. The gap between the groups started and ended smaller than in Jefferson County, but they still basically tripled, and there’s still a challenge to be addressed for the rest of the state.

	2014-15 Percent Kindergarten Ready	2017-18 Reading Proficient or Above	2017-18 Math Proficient or Above	Readiness to Reading Difference	Readiness to Math Difference
RESULTS FOR JEFFERSON COUNTY					
All Students	51.9	43.5	39.5	-8.4	-12.4
African American Students	48.8	26.1	22.5	-22.7	-26.3
White (Non-Hispanic) Students	58.5	58.2	53.0	-0.3	-5.5
<i>Gap between African American Students and White (Non-Hispanic) Students</i>	-9.7	-32.1	-30.5	-22.4	-20.8
RESULTS FOR ALL OTHER DISTRICTS COMBINED					
All Students	49.6	53.8	48.6	4.2	-1.0
African American Students	43.6	31.1	29.7	-12.5	-13.9
White (Non-Hispanic) Students	51.4	56.9	51.1	5.5	-0.3
<i>Gap between African American Students and White (Non-Hispanic) Students</i>	-7.8	-25.8	-21.4	-18.0	-13.6

HOW CAN WE UNDERSTAND THIS PATTERN AND CHANGE IT?

It’s common to think of achievement gaps as following a pattern in in which students in some groups enter school with substantially weaker preparation than students in other groups, and then the gaps widen incrementally as students move through school. In this comparison of kindergarten readiness and KPREP proficiency, African American students’ results do not fit that model. For that one group, the outcomes of the early elementary are not incremental changes, but major ones.

It’s also common to think of gaps all working in the same way, but in this comparison, that is not true. On the same tests, over the same years, no other group followed the pattern shown in African American results. There

were only two other instances when third grade proficiency was more than 10 points lower than kindergarten readiness in a single subject in a single year, with no repeats and no years of trouble like that in both subjects.

Let's not say that this analysis proves that something works very differently for a single group of Kentucky children than it does for any other group during their early elementary years. Something could be distorted in the data itself, and that possibility deserves study. The one caution to add is that the explanation has to be one that doesn't apply to other groups.

Absent a data problem, this analysis suggests a sobering possibility: something very important in our schools may be working very differently for African American students during their early elementary years. Other research on achievement gaps suggests that those difference may be in how African American students are taught or in what they are taught or in how they are treated. The difference may also be in schools' cultural competency and capacity to build on the strengths African American students bring to school. (Equity, after all, is about delivering what works for each participant, rather than about doing identical things that yield differing results for those involved.) We cannot set the school possibilities aside, because the one major change that we know happened for these young learners is this: they enrolled in our elementary schools.

There may be readers who want to explore how the pattern have its roots in things that happen outside our schools for African American students during their early elementary years. Any such claims should be specific about what other parts of those students' lives change in these particular years. Frankly, that avenue of exploration seems far less promising than checking on the data issues and looking hard at factors within our schools.

Whatever we learn from further exploration and discussion, we need to understand what is working so differently for African American students, and changing that pattern must be a deep and urgent priority for all of us.

Let's do that exploring and discussing. Let's figure out what needs to be changed for Kentucky's African American students, and let's make the changes needed to ensure that these gaps narrow and disappear for them in their elementary years.

Source Note:

All data for this analysis originated with the Kentucky Department of Education. KSCREEN reporting for both years and KPREP reporting for 2016-17 came from <http://applications.education.ky.gov/SRC/DataSets.aspx>, with KPREP results for 2017-8 available at <https://openhouse.education.ky.gov/Data> under the Assessment tab. For students not identified as English learners, students without identified disabilities, and students ineligible for free or reduced-price meals, the Department did not publish results, though KRS 158.649 requires publication of that data. Accordingly, those results were calculated from the data that was published, as were combined results for all districts other than Jefferson County.