

Focus Schools

FACTS AND FIGURES

The Focus School metric identifies schools with the largest achievement gaps between their top 30% and bottom 30% within a school. This is a new metric that was required by ESEA Flexibility. MDE engaged in substantial analysis of the metric itself, with the purpose to investigate the extent to which the metric is appropriately identifying within-school achievement gaps in the state.

This brief is organized around common concerns and questions that have been voiced by stakeholders over the last several months.

Common Concern #1: Focus Schools will be those with high achievement only.

| Number of Focus Schools | |
|------------------------------|-----|
| Focus Schools | 358 |
| Districts with Focus Schools | 178 |
| ISD's with Focus Schools | 48 |

Figure #1: Distribution of Schools by Designation

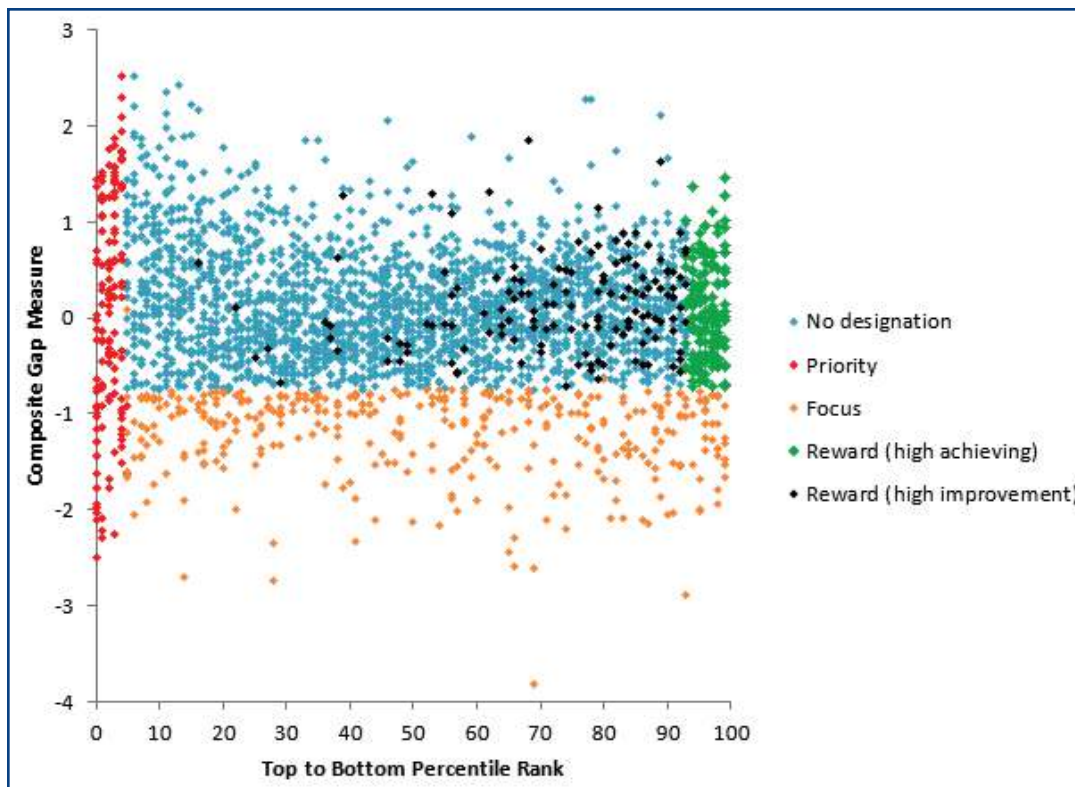


Figure 1

Figure 1 includes all schools and their designations. On the x-axis is the overall percentile rank of the school, and on the y-axis is the overall composite gap measure that was used to identify schools as Focus Schools. The red schools on the far left are Priority Schools; the orange schools are Focus schools, the blue schools are schools with no additional designation aside from their percentile rank, the green schools are high performing reward schools, and the black schools are high progress reward schools.

To address the question, “Are Focus schools only high-achieving schools,” the answer is no. If this were true, we would expect to see all the orange dots clustered in the lower right hand side of the graph. As can be seen, the orange dots are equally distributed across the range of percentile rankings. In fact, some Priority schools had very large achievement gaps and would have been named Focus schools had they not already been identified as Priority Schools.

Common Concern #2: Focus schools will be only those with wealthier students.

Figure 2: Relationship between economic disadvantage and percentile rank in Focus and non-Focus schools

Figure 2 shows the relationship between overall percentile rank and the percent of students considered economically disadvantaged in a school. The red triangles are Focus schools and the black x's are non-Focus schools. If there were a strong relationship between low economic disadvantage and Focus schools, we would expect to see all the red triangle Focus schools clustered in the lower portions of the graph. As can be seen,

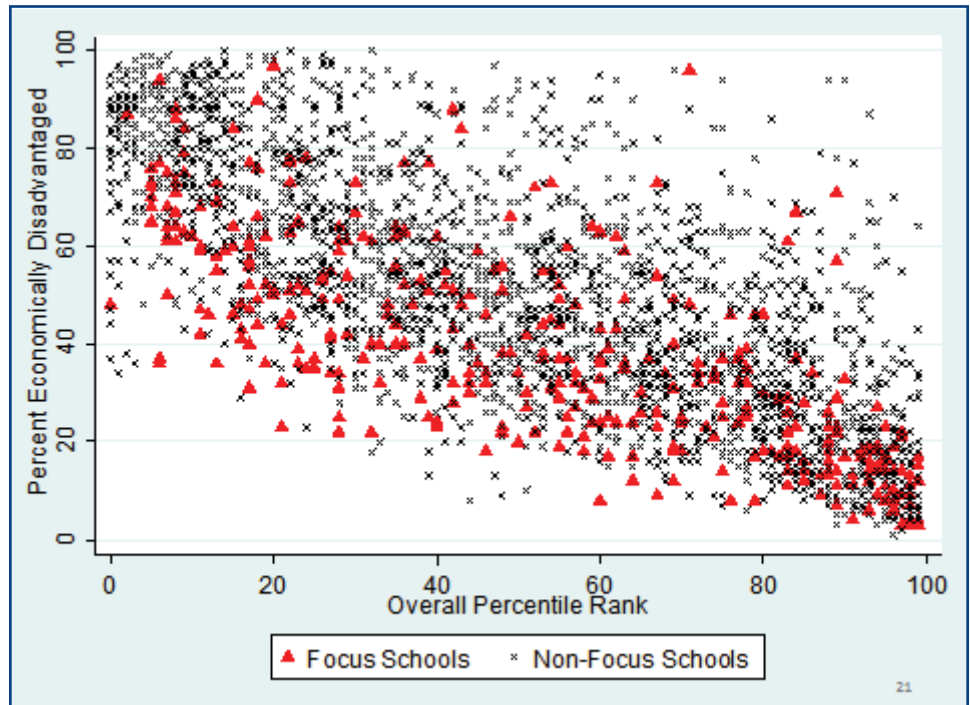


Figure 2

the Focus schools (red triangles) are distributed in a similar pattern as non-Focus schools (black X's). One thing to note, however, is that there is a general relationship between economic disadvantage and percentile ranking, where schools with lower proportions of students with economic disadvantage tended to have higher percentile ranks, although there are exceptions to this relationship. We do not believe this to be simply a result of the metric, but instead a result of the fact that there is a demonstrated relationship between socioeconomic status and educational achievement that the educational system as a whole is still trying to address. However, the relationship between the ranking displayed here and economic disadvantage is not as strong as the relationship would be if we ranked schools solely on percent of students that are proficient; given that the metric includes growth and achievement gap, the impact of economic disadvantage on percentile rank is less strong.

Common Concern #3: Focus schools will be disproportionately found:

- In cities/suburbs
- In elementary/middle schools or high schools
- In schools with high minority populations

Figure 3: Relationship between economic disadvantage and percentile rank in Focus/non-Focus schools by locale

The graphs in Figure 3 show the same relationship as was displayed in Figure 2, additionally separated out by locale. Again, it can be seen that the Focus schools follow the same pattern as the non-Focus schools, suggesting that schools in all four locale types are equally likely to be Focus or non-Focus schools.

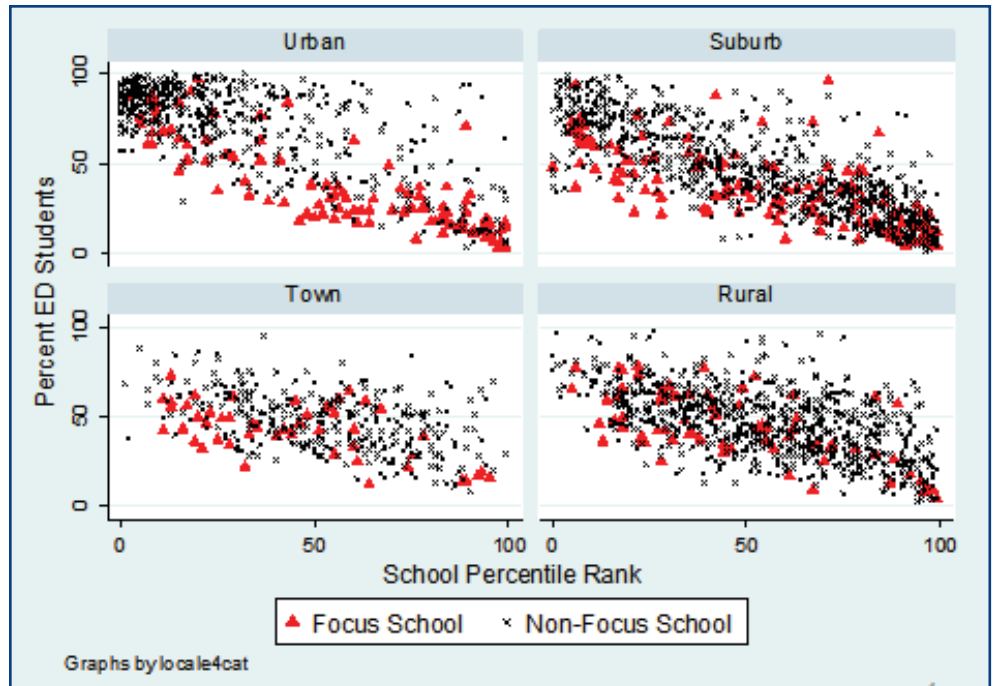


Figure 3

Figure 4: Relationship between economic disadvantage and percentile rank in Focus/non-Focus schools by school level

Figure 4 demonstrates the same relationship as Figures 2 and 3 (between percentile rank and economic disadvantage in schools), but by school level (elementary/middle school compared to high school). There are Focus schools in both levels, following a similar trend pattern in both levels.

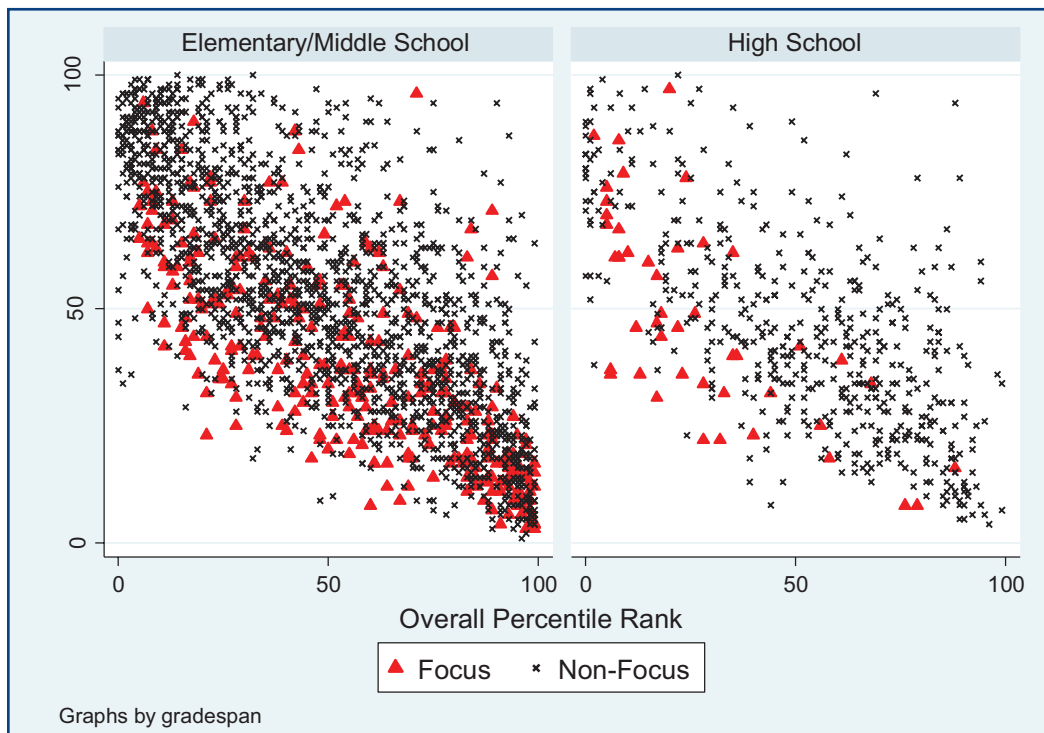


Figure 4

Figure 5: Relationship between percent minority students and percentile rank in Focus/non-Focus schools

Figure 5 displays the relationship between the percent minority students in a school (where “minority” is defined as any non-white racial/ethnic category, for the sake of parsimony), and overall percentile rank. As was seen in the relationship between economic disadvantage and overall percentile rank, Focus schools are distributed in the same manner as non-Focus schools across the graph, suggesting that Focus schools are not necessarily more likely to be high- or low-minority schools.

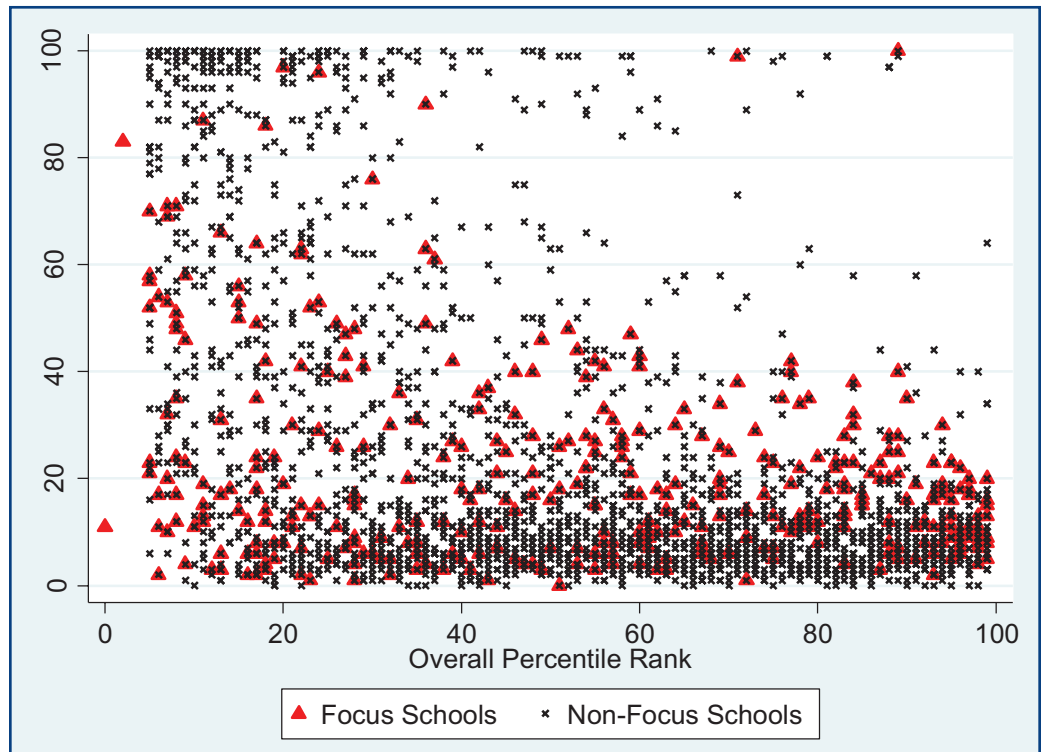


Figure 5

Common Concern #4: The bottom 30% subgroup in Focus schools is actually high-performing

What this graphic shows is the distribution of achievement in the bottom 30% in Focus and Non-Focus schools, as well as the top 30% in Focus and non-Focus schools. What you see is that while there is a small amount of overlap, where there are some non-Focus schools where the bottom 30% is higher performing than the top 30% in some non-Focus schools. However, the amount of this overlap is very small; in general, the bottom 30% subgroup is not outperforming the top 30% subgroup in other schools, and the bottom 30% is still below average.

Figure 6: Distribution of the average achievement of the bottom 30% subgroup in Focus and non-Focus schools

Stakeholders have expressed concerns that the bottom 30% subgroup in Focus schools might actually be high performing—following the logic that high-performing schools are more likely to be Focus schools (which was previously demonstrated to be false). We also analyzed the performance of the bottom 30% subgroup to see if they were in fact, high performing. The graphs above show the distribution of average student achievement

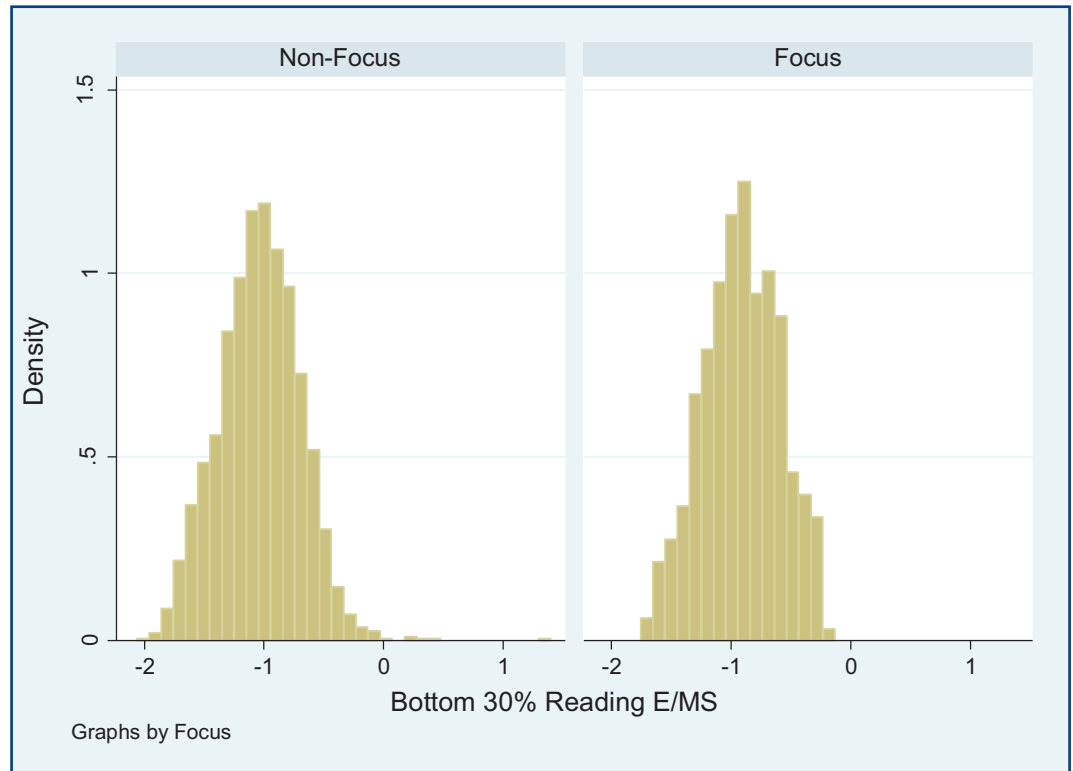


Figure 6

in the bottom 30% subgroup in non-Focus schools (on the left) and Focus schools (on the right). The important thing to note is that in Focus schools, the bottom 30% subgroup is below zero in terms of their average student achievement, where zero indicates the state average. In other words, the bottom 30% subgroup in Focus schools is always performing below the state average and is not high-performing.

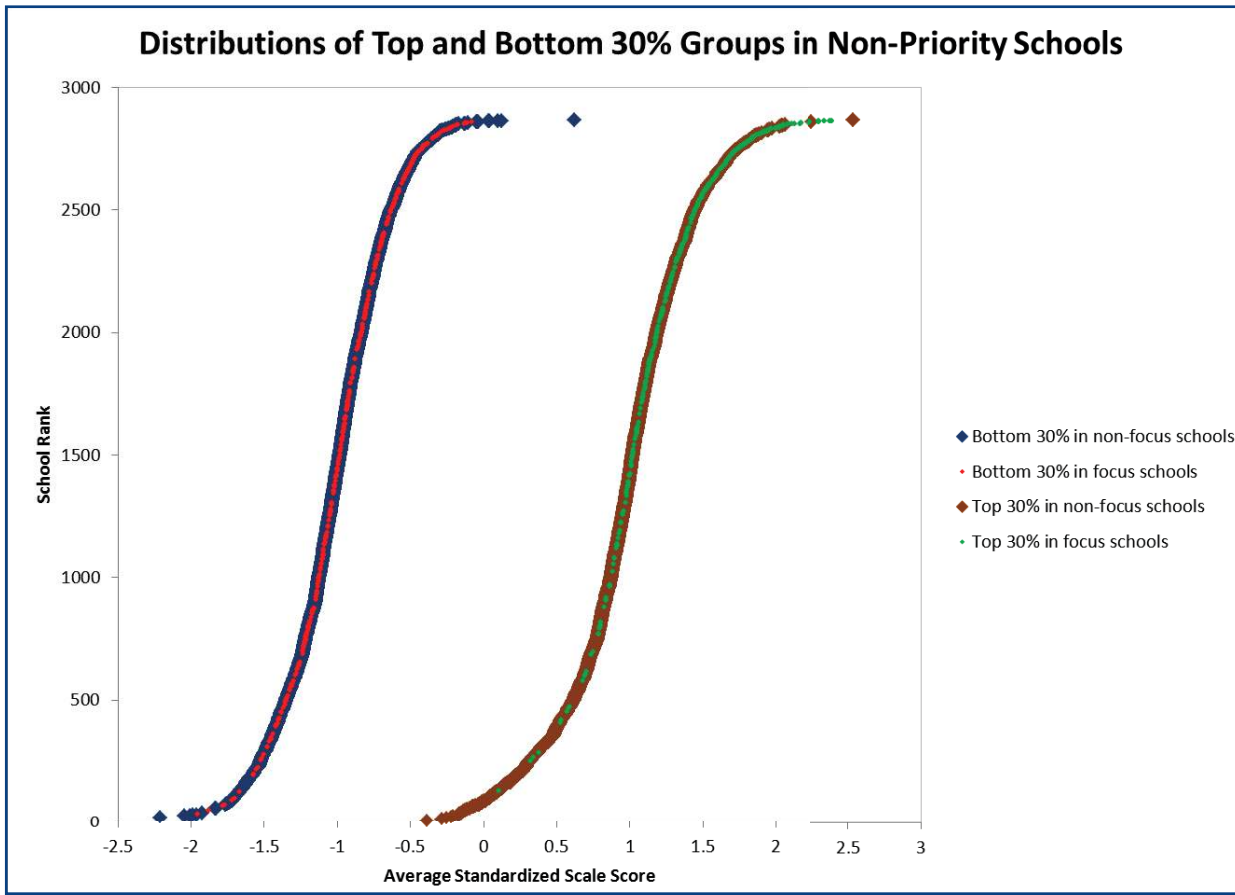


Figure 7

Figure 7: Distributions of Top and bottom 30% Groups in Focus and non-Focus schools (with Priority Schools Removed)

Figure 7 shows the distribution of achievement in the bottom 30% in Focus and Non-Focus schools, as well as the top 30% in Focus and non-Focus schools. While there is a small amount of overlap, where there are some non-Focus schools where the bottom 30% is higher performing than the top 30% in some non-Focus schools. However, the amount of this overlap is very small; in general, the bottom 30% subgroup is not outperforming the top 30% subgroup in other schools, and the bottom 30% is still below average.

Common Concern #5: Schools with the largest gap in socioeconomic disadvantage will be disproportionately likely to be Focus schools.

The logic here is that schools that have a high concentration of both low-income and high-income children will find those children clustered into the bottom 30% subgroup and top 30% subgroup, respectively. This would make the Focus methodology a proxy measure for socioeconomic gaps, as opposed to achievement gaps.

Figure 8: Distribution of socioeconomic gap and achievement gap

This graphic shows the relationship between the socioeconomic disadvantage in a school and the achievement gap. On the x-axis is a measure of the gap in socioeconomic disadvantage (i.e. the proportion of economically disadvantaged students in the bottom 30% minus the proportion of economically disadvantaged students in the top 30% subgroup). A large negative number means there are far more economically disadvantaged students in the bottom 30% subgroup than the top 30% subgroup). On the y-axis is the achievement gap measure used to calculate Focus schools.

The most important thing to note is that there is not a strong correlation between large gaps in socioeconomic disadvantage and large achievement gaps. If there were, the blue dots (representing schools) would be clustered in the lower left hand corner of the graph. Also, if achievement gap diminished as socioeconomic gap diminished, the blue dots would line up more closely with the diagonal line through the diagram.

The other important statistic is the R-squared statistic, displayed in the upper left hand corner of the graph. It is .0921. This means that 9% of the variation in the achievement gap measure can be accounted for by the socioeconomic gap between top 30% and bottom 30% subgroups.

The important takeaway is, it would be incorrect to conclude that achievement gap is largely driven by the socioeconomic gap in schools. The achievement gap measure is not merely a proxy measure for socioeconomic gap. There are economically disadvantaged students in both the top 30% subgroup and the bottom 30% subgroup.

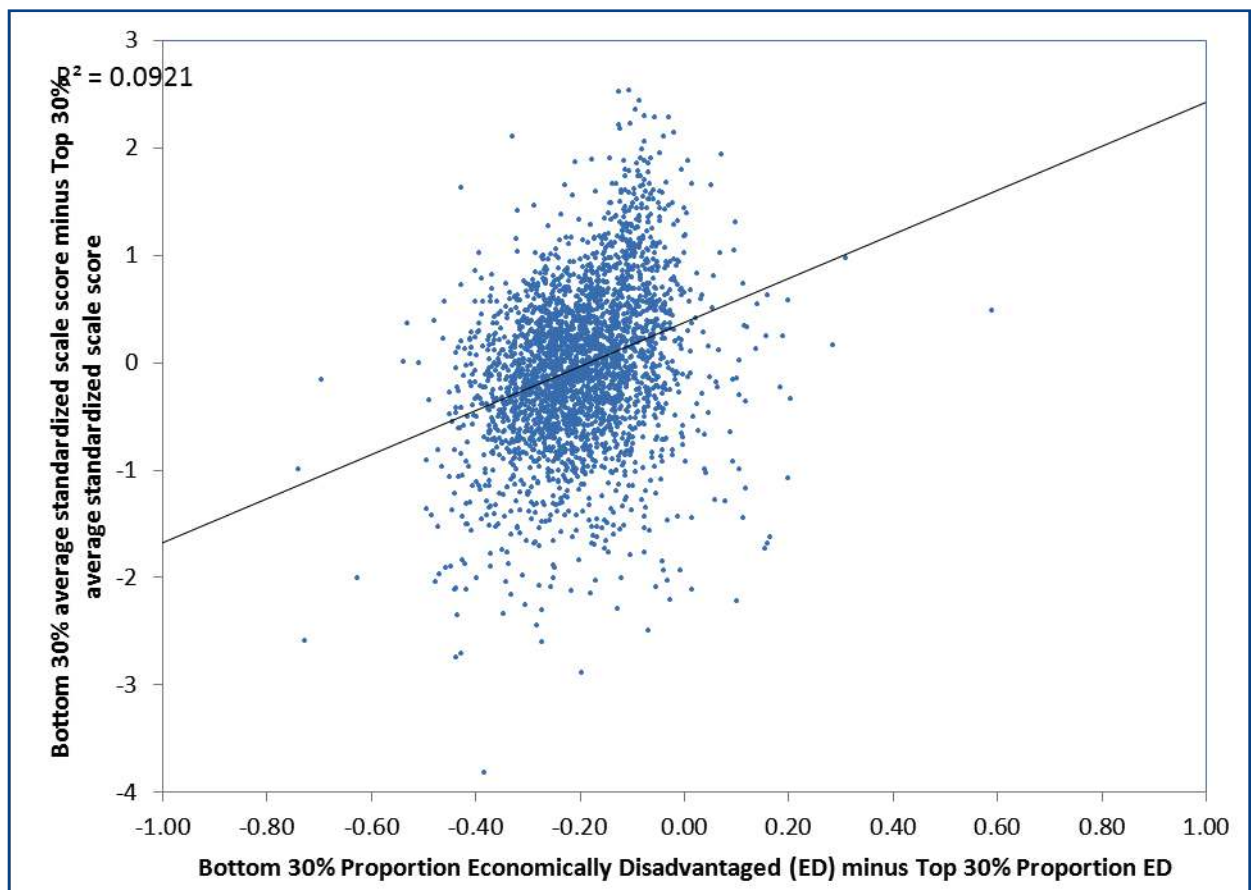


Figure 8

Exploring The Bottom 30% Subgroup: How Does This Help Increase Accountability In Michigan?

Michigan's addition of the bottom 30% subgroup has added a new layer and dimension to accountability and helps schools focus on their within-school achievement gaps. It is the size of this within-school gap between the top 30% subgroup and the bottom 30% subgroup that identifies schools as Focus schools within Michigan, meaning that the schools with the largest within school gaps are identified as focus schools. This section provides an analysis of the demographic characteristics of the bottom 30% subgroup in Focus schools.

To produce Figure 9, we calculated for each school the proportion of the bottom 30% subgroup that was marked as being in each traditional demographic subgroup (for example, the proportion of the bottom 30% subgroup that was also economically disadvantaged). We then sorted schools by whether they were or were not flagged as focus schools. Then, for each group of schools (non-focus, focus), we calculated the median proportion of the bottom 30% subgroup that was also marked as being in one of the traditional subgroups.

In Figure 9, the left panel represents non-focus schools and the right panel represents focus schools. The bars then represent the typical proportion of the bottom 30% subgroup in each type of school that are also flagged as being in one of the traditional demographic subgroups. For example, the dark blue bars indicate that in non-focus schools, the bottom 30% subgroup is typically also approximately 38% economically disadvantaged; but that in focus schools the bottom 30% subgroup is also typically approximately 43% economically disadvantaged.

Figure 9 demonstrates two main points:

1. The bottom 30% subgroup in Focus schools contains all of the standard ESEA subgroups.
2. Focus schools have a higher representation of students with disabilities (labeled "se" in the above graphic), limited English proficient (LEP) students, and black and Hispanic students in their bottom 30% subgroup than non-focus schools.

Figure 9: Composition of Bottom 30% Subgroup in Non-Focus and Focus Schools

Economically Disadvantaged in Focus Schools

Figure 10 shows the distribution of the bottom 30% subgroup that is also economically disadvantaged in Focus schools and non-Focus schools. The left panel of Figure 2 represents non-focus schools and the right panel represents focus schools, with the x axis of

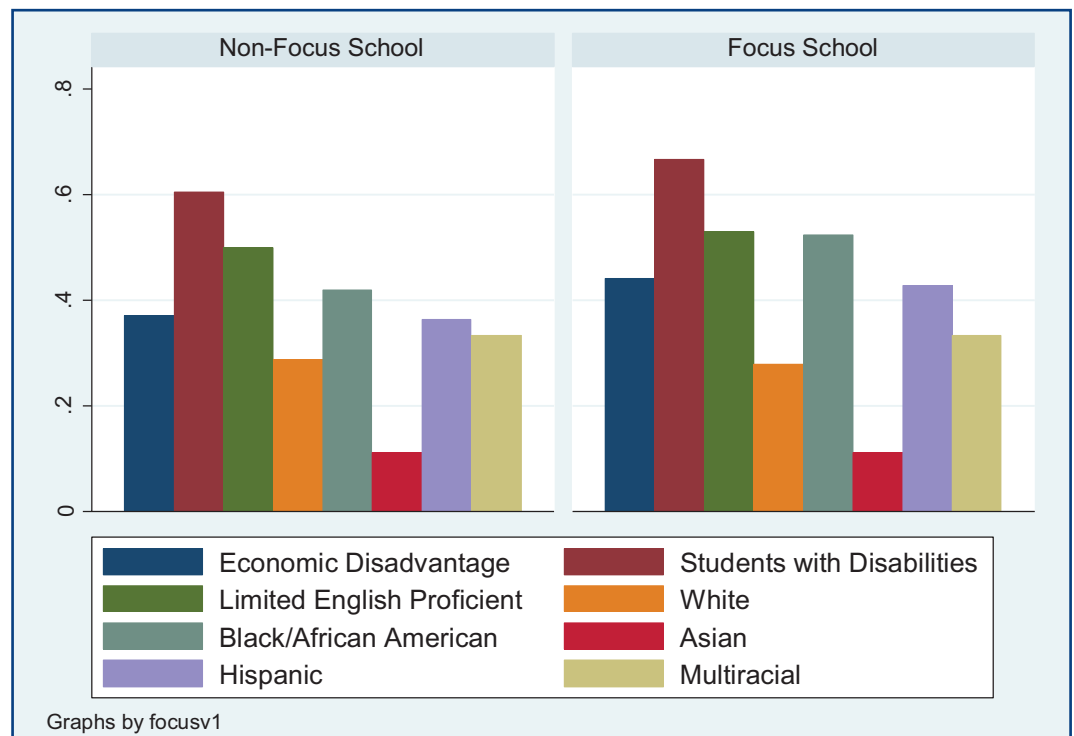


Figure 9

each panel representing the proportion of students in each school that are economically disadvantaged and the y axis representing the number of schools with each degree of economic disadvantage.

It can be seen that the bottom 30% subgroup in Focus schools includes schools with both high and low levels of economic disadvantage. While the percentages of economically disadvantaged students in the bottom 30% subgroup in Focus schools tends to be higher than in non-focus schools, it is not strikingly so, and economic disadvantage is not the defining characteristic of the bottom 30% subgroup. This was important for us to understand if the bottom 30% subgroup was simply serving as a proxy for another demographic characteristic. It does not appear to be functioning in that way.

Figure 10: Composition of the Bottom 30% Subgroup in Focus and Non-Focus Schools

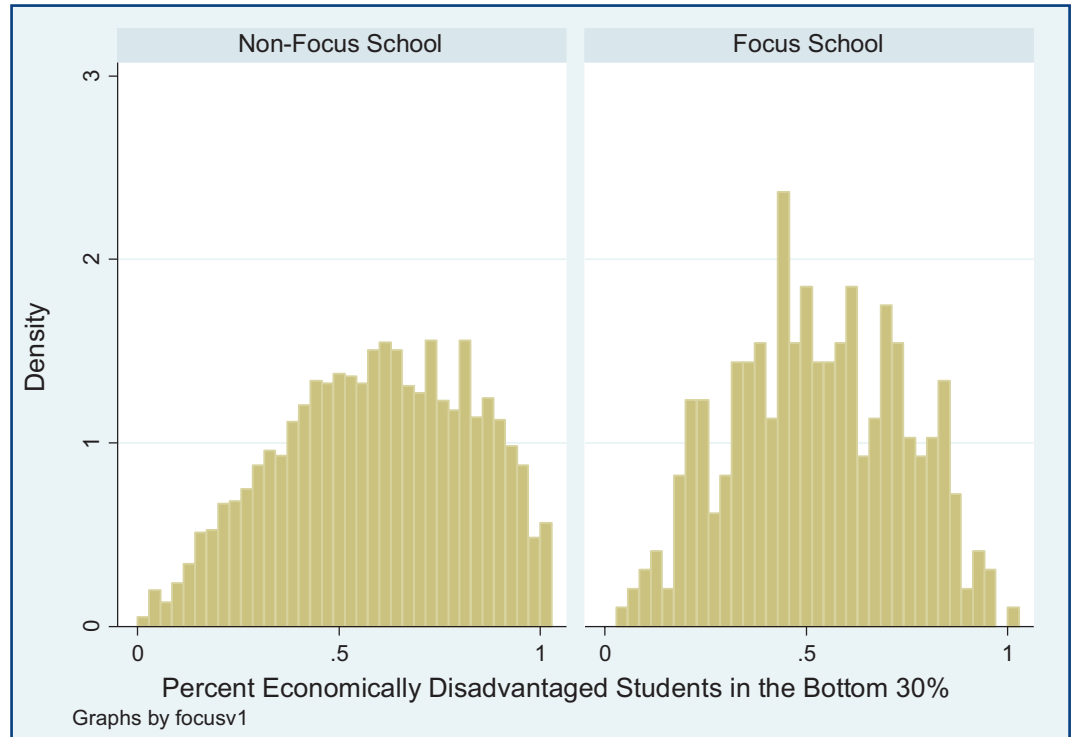


Figure 10

One reason for the somewhat lower representation of schools with a high proportion of economically disadvantaged students in the bottom 30% subgroup in the Focus category is that many of these schools are already priority schools. Figure 11 (the same as Figure 10, but with the left and right panels representing non-priority and priority schools) demonstrates that the bottom 30% subgroup in Priority schools is predominately economically disadvantaged; this is also due to the fact that Priority schools, as a whole, are highly economically disadvantaged, regardless of bottom 30% subgroup status.

Figure 11: Composition of the Bottom 30% Subgroup in Priority and Non-Priority Schools

Racial/Ethnic Categories

Returning to Figure 9, it is clear that the bottom 30% subgroup in Focus schools consists of all of the ESEA-required demographic subgroups, including the six racial/ethnic categories. To dig a bit deeper, we now analyze the composition of the bottom 30% subgroup in Focus schools in terms of the percent of students who are black/African American. The questions are twofold: 1) to what degree does the bottom 30% subgroup in Focus schools include black/African American students as compared to non-focus schools, and 2) does the bottom 30% subgroup ONLY include black/African American students? Figure 4 below shows the composition.

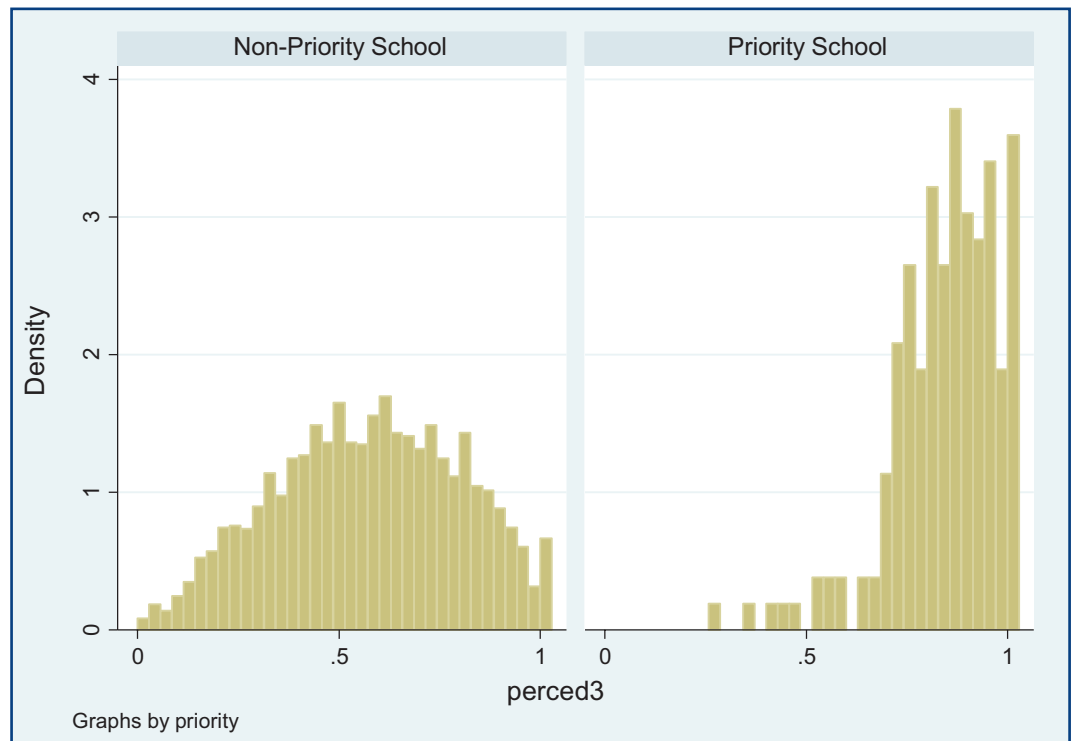


Figure 11

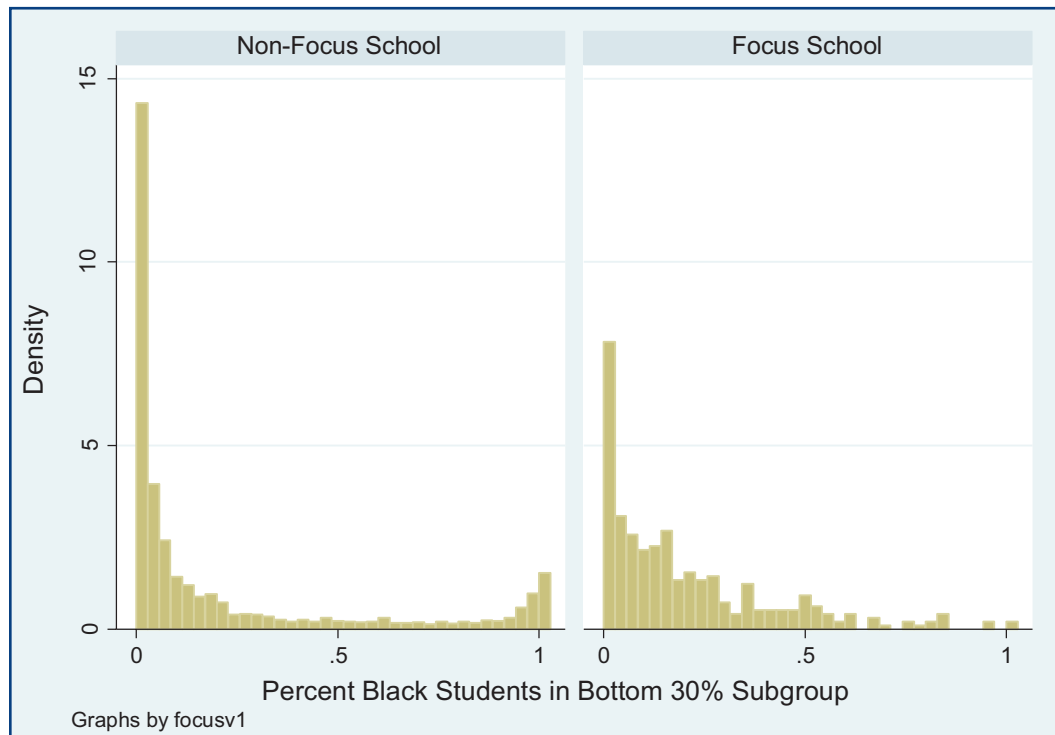


Figure 12

Figure 12: Composition of Black/African-American Students in the Bottom 30% Subgroup in Focus and non-Focus Schools

Figure 12 shows that the distribution of the percentage of the bottom 30% subgroup that is black/African American in Focus schools is different than in non-focus schools. From Figure 12, it can be seen that Focus schools tend to contain a higher proportion of black/African-American students than non-Focus Schools, but there are many non-focus schools with high

proportions of black/African American students. Figure 13 shows the proportion of the each entire school (not just the bottom 30% group) that is black/African American. In comparing Figure 13 to Figure 12, it can be seen that the distributions are very similar, demonstrating that black students are not over-represented in the bottom 30% subgroup in Focus schools as compared to the composition of the school overall. In other words, Focus schools tend to have a more diverse composition in terms of black/African-American students, and these students are relatively evenly distributed across the school and the bottom 30% subgroup.

Figure 13: Whole-School Composition of Black/African-American Students in Focus and non-Focus schools.

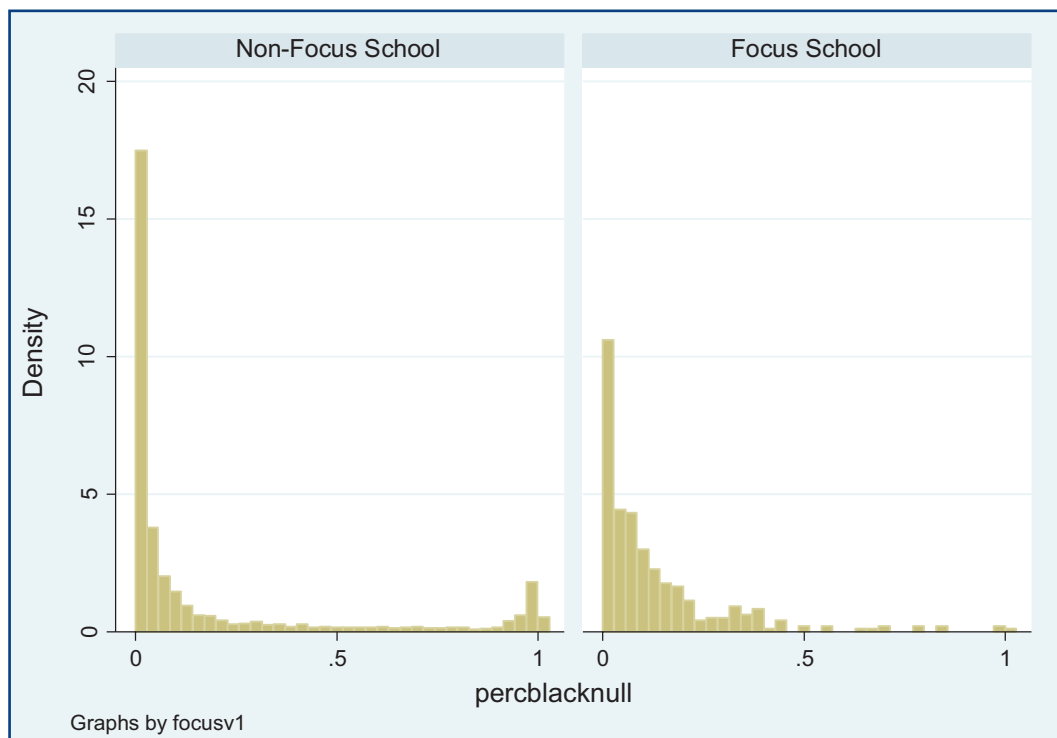


Figure 13

Students with Disabilities in the Bottom 30% Subgroup in Focus Schools

Figure 14 shows the distribution of students with disabilities in each of the subgroups (top 30% in dark blue, middle 40% in red, bottom 30% in green, and whole school in orange) in Focus and non-Focus schools. The bottom 30% subgroup includes students with disabilities at a higher rate than the other two subgroups across both types of schools as might be expected. However, the composition of the bottom 30% in Focus schools is similar to that in non-Focus schools in terms of students with disabilities.

Figure 14: Distribution of Students with Disabilities in Focus and non-Focus Schools.

Case Study

Michigan's Focus schools strategy identifies schools which otherwise may not be identified using traditional subgroup methodology. As an example, here is a case study of Sunshine School. Sunshine School has 167 students, 115 of which are white. In the traditional ESEA subgroup methodology, they would only have had an economic disadvantaged subgroup (which includes 67

students); the 21 black students, 1 Native American student, 8 Asian students, 4 Hispanic students, and 18 multiracial students would not have been detected (as they would not have met the minimum n-size). Also, the 22 students with disabilities would not have shown up as a valid subgroup.

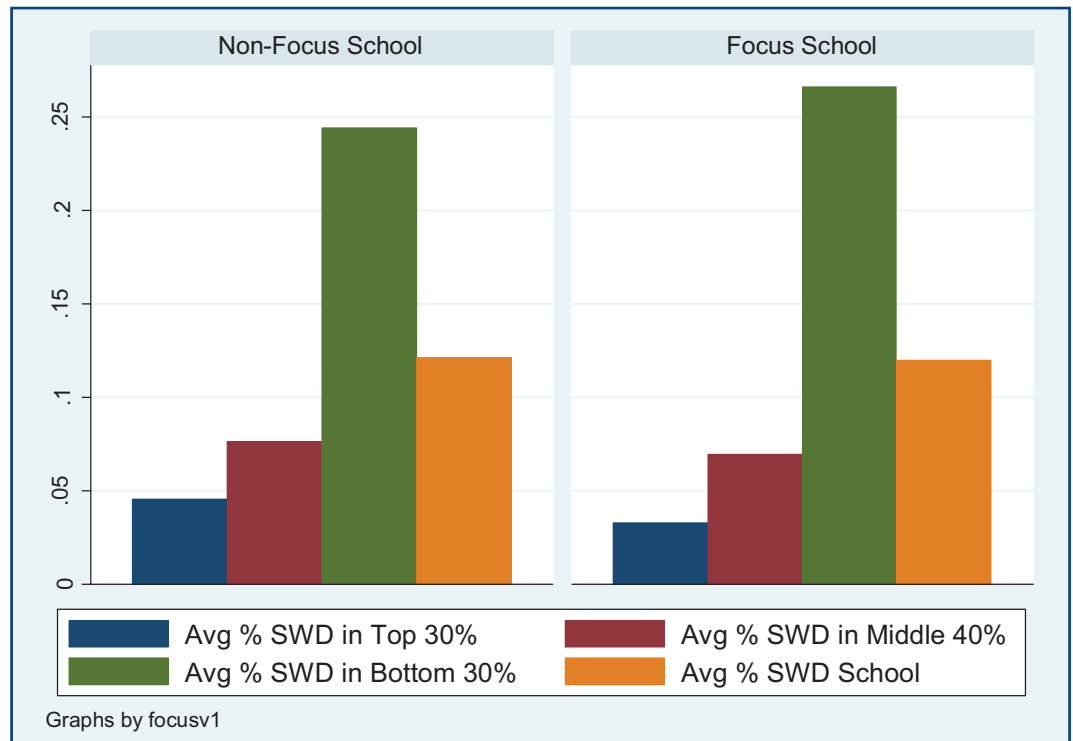


Figure 14

Using the Focus schools and the bottom 30% methodology, the bottom 30% subgroup consists of 50 students, including 12 black students, 1 Asian student, 3 Hispanic student, 23 white students, and 11 multiracial students, as well as 8 of the 22 students with disabilities and 29 of the 67 economically disadvantaged students. A couple of notes:

- This methodology actually brings to light 35 students who would not be detected using a demographic subgroup based methodology.
- In the economic disadvantage subgroup, 29 students are in the bottom 30%. However, if we were only using the economic disadvantaged demographic criteria, the higher performance of the other 38 students in the subgroup would likely have masked the lower performance of these 29 students.
- In the students with disabilities subgroup, all of those 22 students would have been hidden using a straight demographic methodology. However, in this methodology, the school is held accountable on the performance of 8 of those 22—the eight students who are lowest performing. This highlights the fact that the bottom 30% subgroup is not exclusively students with disabilities, and instead, the bottom 30% subgroup consists of the lowest performing students in those subgroups.



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