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## FY15 Local Report Card Part II Analysis

Ohio Education Policy Institute

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## Background

ODE released Part I of the FY15 Local Report card data on January 14. The Part I report card data included K-3 Literacy improvement and Graduation Rate and "Preparation for Success" measures. OEPI released analysis of this data on January 20. The OEPI report found a consistent and pronounced negative correlation between Graduation Rate and Prepared for Success outcome measures and district percentage of economically disadvantaged students. The OEPI FY15 Report Card Part I report can be found on the OEPI website at: http://www.oepiohio.org/index.php/research-reports/

ODE released Part II of the FY15 Report Card data on February 25, 2016. This second round of Report Card data includes proficiency test results at various grade levels in Reading/English Language Arts, Math, Science, and Social Studies, along with the overall Performance Index measure. The Performance Index is an aggregate proficiency test measure which takes into account the performance of each district's students at the different performance levels (Advanced Plus, Advanced, Accelerated, Proficient, Basic, and Limited) across all of the tests.

This report contains OEPI's analysis of the Performance Index and Proficiency test results from grades 3 through 10. Preliminary FY15 test results (without the Performance Index measure) were released by ODE in November 2015. Analysis of the preliminary test results by the Ohio Education Policy Institute (OEPI) found a very strong negative correlation between student performance and the percentage of economically disadvantaged students. This pattern was evident across all subjects and grade levels in the preliminary data and is also apparent in the final Report Card data released last week. The OEPI November 2015 analysis can also be found on the OEPI website at the weblink above.

## OEPI Analysis of Part II of FY15 Local Report Card Data

ODE's Local Report Card webpage at:
http://reportcard.education.ohio.gov/Pages/default.aspx allows users to download detailed data for all school districts. OEPI has used this data to analyze the Performance Index in comparison to the percentage of economically disadvantaged students in each district.

In order to conduct this analysis, OEPI broke Ohio's 609 school districts for which Report Card measures were reported into 10 groups. These groups are summarized below.

Table 1: Percentage of Economically Disadvantaged Students, by Decile

| Economically Disadvantaged Grouping | \# of Districts |
| :--- | :---: |
| $0-10 \%$ Economically disadvantaged students | 31 |
| 10-20\% Economically disadvantaged students | 49 |
| 20-30\% Economically disadvantaged students | 83 |
| 30-40\% Economically disadvantaged students | 128 |
| $40-50 \%$ Economically disadvantaged students | 128 |
| $50-60 \%$ Economically disadvantaged students | 80 |
| $60-70 \%$ Economically disadvantaged students | 45 |
| $70-80 \%$ Economically disadvantaged students | 23 |
| $80-90 \%$ Economically disadvantaged students | 19 |
| $>90 \%$ Economically disadvantaged students | 23 |
| Statewide Total | $\mathbf{6 0 9}$ |

In addition to the Performance Index, OEPI examined the performance of economically disadvantaged and non-disadvantaged students on 19 proficiency tests from $3^{\text {rd }}$ grade through $10^{\text {th }}$ grade. (Grade 11 and 12 proficiency test results were not included because they reflect the performance of students in these grade levels taking the $10^{\text {th }}$ grade proficiency tests a $2^{\text {nd }}$ or $3^{\text {rd }}$ time.) The test results analyzed are listed below.

Table 2: FY15 Proficiency Tests

| $3^{\text {rd }}$ Grade Math | $7^{\text {th }}$ Grade Math |
| :--- | :--- |
| $4^{\text {th }}$ Grade Reading | $8^{\text {th }}$ Grade Reading |
| $4^{\text {th }}$ Grade Math | $8^{\text {th }}$ Grade Math |
| $4^{\text {th }}$ Grade Social Studies | $8^{\text {th }}$ Grade Science |
| $5^{\text {th }}$ Grade Reading | $10^{\text {th }}$ Grade Reading |
| $5^{\text {th }}$ Grade Math | $10^{\text {th }}$ Grade Writing |
| $5^{\text {th }}$ Grade Science | $10^{\text {th }}$ Grade Math |
| $6^{\text {th }}$ Grade Reading | $10^{\text {th }}$ Grade Social Studies |
| $6^{\text {th }}$ Grade Math | $10^{\text {th }}$ Grade Science |
| $6^{\text {th }}$ Grade Social Studies |  |

## Highlights of Findings

## A. Performance Index

The first 2 graphs focus on the relationship between the Performance Index (PI) and the percentage of economically disadvantaged students. Figure 1 shows the average PI in each of the 10 disadvantaged student deciles. Districts with $90 \%$ to $100 \%$ economically disadvantaged students have an average Performance Index value of 72.8. At the other end of the spectrum, districts with $0 \%$ to $10 \%$ economically disadvantaged students have an average Performance Index value of 103.3. Performance Index averages in each decile are computed by taking each district's PI score and computing the weighted average based on district ADM. The maximum possible PI value is 120 .

Figure 1: Average FY15 Performance Index Score by \% Economically Disadvantaged Students Decile


Figure 2 examines the same data, however it uses the PI score range as the base and shows the average percentage of economically disadvantaged students in each PI score grouping. The PI groupings are shown in Table 3 below.

Table 3: Performance Index Groupings

| Performance Index Range | \# of Districts |
| :--- | :---: |
| Performance Index between 60 and 70 | 7 |
| Performance Index between 70 and 80 | 45 |
| Performance Index between 80 and 85 | 52 |
| Performance Index between 85 and 90 | 129 |
| Performance Index between 90 and 95 | 167 |
| Performance Index between 95 and 100 | 131 |
| Performance Index between 100 and 105 | 64 |
| Performance Index greater than 105 | 14 |
| Statewide Total | $\mathbf{6 0 9}$ |

Figure 2 is an alternate way to depict the same strong negative correlation between the Performance Index and the percentage of economically disadvantaged students as shown in Figure 1. Districts with a PI score above 105 have an average percentage of only $8.0 \%$ economically disadvantaged students. At the other end of the spectrum, districts whose PI score is between 60 and 70 have an average of $89.4 \%$ economically disadvantaged students.

Figure 2: Average \% Economically Disadvantaged Students by FY15 Performance Index Score


## B. Proficiency Test Performance

The next 4 graphs examine the difference between proficiency test results of economically disadvantaged and non-disadvantaged students in Ohio. This analysis was conducted by utilizing the detailed proficiency test data showing the percentage of students scoring at the 6 different achievement levels on the proficiency tests:

- Advanced Plus
- Advanced
- Accelerated
- Proficient
- Basic
- Limited

For the purposes of this analysis, the percentage of economically disadvantaged students scoring at the Accelerated, Advanced, and Advanced Plus levels was compared to the percentage of non-economically disadvantaged students scoring at Accelerated, Advanced, and Advanced Plus levels. These results are shown in Figures 3 and 4.

These graphs show a sizable achievement gap between disadvantaged and nondisadvantaged students on every test at all grade levels.

Figure 3: Comparison of Economically Disadvantaged and Non-Disadvantaged Students Scoring at the Accelerated Level and Above on FY15 Proficiency Tests, Grades 3-6


Figure 4: Comparison of Economically Disadvantaged and Non-Disadvantaged Students Scoring at the Accelerated Level and Above on FY15 Proficiency Tests, Grades 7-10


Figures 3 and 4 show that the percentage of non-disadvantaged students scoring at the Accelerated, Advanced, and Advanced Plus level on $10^{\text {th }}$ grade writing was 2.57 times higher than the percentage of economically disadvantaged students scoring at a level of Accelerated or higher. In fact, the percentage of non-disadvantaged students scoring at the Accelerated, Advanced, and Advanced Plus level on $10^{\text {th }}$ grade writing was more than twice as high as the percentage of economically disadvantaged students scoring at a level of Accelerated or higher on 12 of the 19 test measures. The "smallest" achievement gap was in $10^{\text {th }}$ grade reading where the percentage of non-disadvantaged students scoring at the Accelerated, Advanced, and Advanced Plus level was only 1.64 times that of economically disadvantaged students.

Similarly, Figures 5 and 6 compare the percentage of economically disadvantaged students scoring at the Limited and Basic level with the percentage of non-economically disadvantaged students scoring at the Limited and Basic level.

These graphs show a sizable achievement gap between disadvantaged and nondisadvantaged students on every test at all grade levels

Figure 5: Comparison of Economically Disadvantaged and Non-Disadvantaged Students Scoring at the Basic and Limited Levels on FY15 Proficiency Tests, Grades 3-6


Figure 6: Comparison of Economically Disadvantaged and Non-Disadvantaged Students Scoring at the Basic and Limited Levels on FY15 Proficiency Tests, Grades 7-10


## Conclusion

This analysis is far from the first to demonstrate a strong negative correlation between student achievement and socioeconomic status. In fact, 2016 will mark the $50^{\text {th }}$ anniversary of the Coleman Report, the first study to systematically analyze this issue and demonstrate this finding. In Ohio, as in other states, the persistence of the negative correlation between socioeconomics and student achievement has proven all too persistent over time. The analysis reaffirms that there is still a considerable gap in achievement between Ohio's economically disadvantaged and non-disadvantaged students. For the future of the state and its workforce, along with the well-being of our 11 million residents, it is imperative that policymakers find solutions to close the significant achievement gap shown in this analysis.

