## FY15 Local Report Card Part I Analysis

Ohio Education Policy Institute

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## Background

ODE released Part I of the FY15 Local Report card data on January $14^{\text {th }}$. Part II of the Report Card data is scheduled to be released on February 25, 2016. The Part I data released last week includes many new outcome measures not included on previous Local Report cards. These measures are grouped into 3 categories:

## K-3 Literacy

- K-3 Literacy improvement (different from the simple percentage of students passing the $3^{\text {rd }}$ grade reading test)

Graduation Rate

- Class of 2014 4-year graduation rate
- Class of 2013 5-year graduation rate


## Prepared for Success

- \% of Class of 2014 participating in ACT
- ACT mean test score
- \% of Class of 2014 scoring remediation free on ACT
- \% of Class of 2014 participating in SAT
- SAT mean test score
- \% of Class of 2014 scoring remediation free on SAT
- \% of Class of 2014 graduating with an Honors diploma
- \% of Class of 2014 graduating with an industry-recognized credential
- \% of Class of 2014 participating in one or more AP courses
- \% of Class of 2014 receiving an AP score of 3 or higher
- \% of Class of 2014 participating in one or more International Baccalaureate (IB) courses
- \% of Class of 2014 receiving an IB score of 4 or higher
- \% of Class of 2014 with at least 3 Dual Enrollment (college) credits
- \% of Class of 2012 \% enrolled in College within 2 years of Graduation

Of the measures listed above, only the 4-year graduation rate was included on prior versions of the Local Report Card.

Letter grades were assigned to districts based on the K-3 Literacy and Graduation rate measures, but not on the Prepared for Success measures.

Part II data to be released in February will include student performance on math, English language arts, science, and social studies subject tests in various grade levels, along with the overall test performance index measure. Preliminary FY15 test results (without the Performance Index measure) were released by ODE in November 2015. Analysis of these 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. This analysis can be found on the OEPI website at: http://www.oepiohio.org/index.php/research-reports/

## OEPI Analysis of Part I 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 Graduation Rate and Prepared for Success results in comparison to the percentage of economically disadvantaged students in each district.

In order to conduct this analysis, OEPI broke Ohio's 608 school districts for which Report Card measures were reported into 10 groups. These groups are summarized below.

| Economically Disadvantaged Grouping | \# of Districts | \# of Students <br> Class of 2014 |
| :--- | :---: | :---: |
| $0-10 \%$ Economically disadvantaged students | 30 | 6,964 |
| 10-20\% Economically disadvantaged students | 49 | 14,037 |
| 20-30\% Economically disadvantaged students | 83 | 16,760 |
| $30-40 \%$ Economically disadvantaged students | 128 | 20,508 |
| $40-50 \%$ Economically disadvantaged students | 127 | 18,303 |
| $50-60 \%$ Economically disadvantaged students | 81 | 13,178 |
| $60-70 \%$ Economically disadvantaged students | 45 | 12,090 |
| $70-80 \%$ Economically disadvantaged students | 23 | 4,394 |
| $80-90 \%$ Economically disadvantaged students | 19 | 4,555 |
| $>90 \%$ Economically disadvantaged students | 23 | 10,572 |
| Statewide Total | $\mathbf{6 0 8}$ | $\mathbf{1 2 1 , 3 6 1}$ |

The 10 groups could have been organized differently (i.e. with equal numbers of students or equal numbers of districts); however, from the standpoint of this analysis, the objective is to illustrate the disparity in outcomes between districts with different percentages of economically disadvantaged students, and so equal $10 \%$ intervals (or "deciles") were used.

OEPI examined the following 11 measures of high school student outcomes by computing averages for each of the 10 economically disadvantaged student deciles. (Future OEPI analysis will examine K-3 Literacy)

- Class of 2014 4-year graduation rate
- Class of 2013 5-year graduation rate
- \% of Class of 2012 \% enrolled in College within 2 years of Graduation
- \% of Class of 2014 participating in ACT
- \% of test takers scoring remediation free on ACT (this measure is different than that reported by ODE)
- \% of Class of 2014 participating in SAT
- \% of test takers scoring remediation free on SAT (this measure is different than that reported by ODE)
- ACT mean test score (average across districts in each group)
- SAT mean test score (average across districts in each group)
- \% of Class of 2014 participating in one or more AP courses
- \% of Class of 2014 graduating with an Honors diploma

Each of these 11 measures showed a clear and strong negative correlation with the percentage of economically disadvantaged students.

## Highlights of Findings

## A. High school graduation \& college matriculation

The first 3 graphs focus on high school graduation rate and college matriculation within 2 years of graduation.

- There is a 23.5 percentage gap between the average 4-year graduation rate in districts with less than $10 \%$ economically disadvantaged students ( $97.4 \%$ ) and districts with greater than $90 \%$ economically disadvantaged students (73.9\%).
- The average 4 -year graduation rate in districts with more than $70 \%$ economically students are at least 8 percentage points below the statewide average ( $89.3 \%$ ).
- While the gap between districts with high and low percentages of economically disadvantaged students is narrower when the 5 -year graduation rate is examined, it is still evident ( $97.9 \%$ in districts with less than $10 \%$ lower income students and $80.5 \%$ in districts with more than $90 \%$ lower income students).
- Again, districts with $70 \%$ or more economically disadvantaged students are noticeably below the statewide average 5 -year graduation rate ( $91.8 \%$ ).
- The $3^{\text {rd }}$ graph shows that districts with less than $10 \%$ economically disadvantaged students have nearly twice as many students on average (82.5\%) enrolled in college within 2 years of graduation than do districts with more than $90 \%$ economically disadvantaged students (44.4\%).
- Furthermore, Graph 3 shows a clear pattern of increased college enrollment as the percentage of low income students declines.


## - As study after study that the lifetime earnings advantage which accrues to college graduates compared to high school graduates shows, this pattern is particularly disturbing.

## B. College Preparatory Test Participation \& Performance (ACT \& SAT)

The next 6 graphs examine the relationship between college preparatory test participation and performance levels and the percentage of economically students. These graphs show the percentage of students taking the ACT and SAT, the average median score on each test by economically disadvantaged student decile, and the percentage of ACT and SAT test-takers scoring at a level not requiring remediation.

Note that the OEPI analysis computes the "remediation free' percentages according to the number of students who took each test, rather than according to the total number of students in the class of 2014 as is shown by ODE on the Report Card. For example, if a district has 100 students in the class of 2014, 60 of whom take the ACT and 45 of whom score at a remediation-free level, ODE will show the remediation free percentage as $45 \%$ ( 45 out of 100 students) and the OEPI analysis will compute it as $75 \%$ ( 45 out of the 60 students who actually took the test). The ODE measure has the advantage of avoiding any undesirable incentives for districts to discourage lower achieving students from taking college preparatory tests, while the OEPI measure has the advantage of providing insight as to the performance across districts of those students who actually took either the ACT or SAT.

The main findings relating to college preparatory tests are as follows:

- ACT participation ( $58.7 \%$ statewide) is much higher than SAT participation ( $8.7 \%$ statewide). This is likely influenced by the fact that Ohio's state universities have long accepted the ACT for admissions purposes.
- ACT participation increases steadily as the percentage of lower income students declines across 9 of the 10 deciles. The only exception is the decile including districts with $90 \%$ or more economically disadvantaged students. In this decile ACT participation rates in Cleveland (66.3\%) and Akron (76.9\%) raise the average nearly to the statewide average participation rate.
- The vast majority of students taking the SAT are in districts with less than $20 \%$ economically disadvantaged students.
- The average percentage of students scoring remediation free on the ACT is 4.5 times higher in districts with fewer than $10 \%$ economically disadvantaged students ( $69.0 \%$ ) than it is in districts with greater than $90 \%$ economically disadvantaged students (15.1\%).
- There is also a very clear pattern where the percentage of remediation free ACT performance increases as the percentage of lower income students decreases.
- A similar pattern is also shown for remediation free SAT performance.
- The average median ACT score increases as the percentage of economically disadvantaged students decreases. A similar pattern is found for the median SAT score.


## C. Advanced Placement Courses and Honors Diplomas

The final 2 graphs compare the percentage of economically disadvantaged students with the percentage of students taking at least one Advanced Placement (AP) course and the percentage receiving an Honors diploma (based on taking a certain number of core subject courses and also meeting additional criteria).

The main findings relating to these measures are as follows:

- Students in districts with fewer than $10 \%$ economically disadvantaged students are at least 6 times as likely on average to have taken at least one AP course as are students in districts with more than $70 \%$ of economically disadvantaged students.
- Students in districts with between $10 \%$ and $20 \%$ economically disadvantaged students are at least 3.5 times as likely on average to have taken a least one AP course as Ohio students in districts with more than $70 \%$ economically disadvantaged students.
- A very clear pattern exists whereby the likelihood of receiving an Honors diploma increases dramatically as the percentage of economically disadvantaged students declines.
- Students in districts with fewer than $10 \%$ economically disadvantaged students are nearly 8 times as likely on average to receive an Honors diploma as are students in districts with less than $10 \%$ economically disadvantaged students.


## 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. However, 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 some way to move the needle in a meaningful fashion and weaken this relationship.

