



JEOC BRIEF

October 12, 2018

Classification of Districts on Six Report Card Measures

Summary: This brief shows which of the 608 public school districts in Ohio received unusually high or low measures on the 2018 report card after adjusting for the percent of students identified as economically disadvantaged in each district (**Table 1**).

Description: District performance data were downloaded from the Ohio Department of Education 2018 Report Card website.¹ The six measures used are those reported on district report cards for 2017-18. These are:

- Achievement (labeled **Achieve** in Table 1)
Achievement is a weighted combination of the Performance Index score and the Indicators Met score expressed as a percent. Values can be between 0% and 100%
- Progress (labeled **VA** in Table 1)
This measure is a combination of progress (i.e. value-added) for the following groups: all students, gifted students, students with disabilities, and students ranked in the bottom 20% statewide. The measure used is the Overall Composite which is the Composite Gain Index Score – a measure that indicates the confidence that the value added gain is above or below the state average fixed at zero. The range of the index is typically between positive 100 and negative 100.
- Gap Closing (labeled **GAP** in Table 1)
According to the ODE site, “It compares the academic performance of each subgroup against the expected performance goals for that subgroup to determine if there are gaps and whether improvement is happening.” Components include: all students, students disaggregated by race (6 categories), economically disadvantaged students, students with disabilities, and English language learners. The scale used for grade assignment is based on points.²
- Graduation Rate (labeled **GRAD** in Table 1)
This is a weighted combination of the 4-year and 5-year graduation rates for the prior year cohort (i.e. Class of 2017) expressed as a percent.

¹ Sourced at <https://reportcard.education.ohio.gov/>

² Sourced at <http://education.ohio.gov/getattachment/Topics/Data/Report-Card-Resources/Gap-Closing-Component/Technical-Documentation-AMO-Calculation.pdf.aspx?lang=en-US>

- Improving At-Risk K-3 Readers (Labeled **K3** in Table 1)
A percentage score is derived from measures of students moving to on-track status adjusted for those dropping off-track for meeting a third grade Reading score for promotion eligibility. Some school districts are without a determination; according to ODE, “Any school or district that had fewer than 5 percent of its kindergartners reading below grade level at the beginning of the 2017-2018 school year will not receive a letter grade for this measure.” The scale is defined to be between zero and 100 but some districts are reported with negative values.
- Prepared for Success (Labeled **Success** in Table 1)
For the purposes of this measure, students are prepared for success by either demonstrating college readiness or work readiness through qualifying exams such as industry credentials totaling at least 12 points, an ACT score, or Advanced Placement credits.

The data were interpreted by identifying districts that were performing unusually high or unusually low on each of the six measures after adjusting for the percent of students in the district that were reported as economically disadvantaged.³ The adjustments for percent economically disadvantaged were made by fitting either a straight line (a linear equation) to the data or fitting a curved line (a quadratic equation) to the data to predict values for each of the six measures based on percent economically disadvantaged. Table 1 data are based on the difference between each of the six observed measures from that predicted by the equation fit for that particular measure and that particular district’s percent economically disadvantaged. Selection of the form of equation fit was based on how well the data fit the equation.⁴

Each district’s observed score (as described above) was compared to the score predicted by the line fit and those with observed scores that were statistically significantly higher than predicted by the line fit were flagged for high performance (and indicated with ▲); and those with values that were statistically significantly lower than predicted by the line fit were flagged for low performance (▼).⁵ District values for each measure that are not statistically significantly different from that predicted by the line fit were marked with ●.

Results of the analysis are shown in Table 1. Districts that were not flagged for any of the six measures were deleted from Table 1. District IRN is included for instances where districts share the same name.

Observations: Most districts perform as the equations predict (after compensating for higher performance at more affluent districts and lower performance at less affluent ones). The table lists 131 out of 608 districts.

³ Sourced at <https://education.ohio.gov/Topics/Finance-and-Funding/School-Payment-Reports/State-Funding-For-Schools/Traditional-School-Districts/Bridge-Report/FY2018-Foundation-Funding-Report>

⁴ The selection of either a linear equation or a quadratic equation to fit of each of the six measures was based on the R-squared statistic and the visual appeal of the fit data. For example, higher order equations often fit more of the data but may not visually suggest that the higher order equation is appropriate. A cubic equation might fit more of the data (produce a higher R-squared statistic) but is there some reason to think that the underlying phenomenon would be cubic? Or perhaps the quadratic fits more of the data based on R-squared but the increase in R-squared for the quadratic seems immaterial compared to the linear relationship. Where reasonable, the simpler linear equation was selected. The following equation types were used: Achievement measure: Quadratic; Progress measure: Linear; Gap Closing measure: Linear; Graduation Rate measure: Linear; Improving At-Risk K-3 Readers measure: Linear; Prepared for Success measure: Quadratic

⁵ Districts with studentized residuals greater than 1.96 are flagged for high performance (and indicated with ▲); residuals below -1.96 are flagged for low performance (▼). Residuals within -1.96 to +1.96 are marked with ●.

Table 1. Characterization of Ohio Districts

District IRN	DISTRICT	Achieve	VA	GAP	GRAD	K3	Success
043489	Akron City SD	●	▼	●	▼	●	●
046623	Ansonia Local SD	●	●	●	●	●	▼
047043	Archbold-Area Local SD	●	●	●	●	▲	●
043513	Ashtabula Area City SD	●	●	▼	▼	▼	●
043570	Bellaire Local SD	●	●	●	▼	●	●
048926	Benton Carroll Salem Local S	▲	●	●	●	●	●
047167	Berkshire Local SD	●	●	●	●	●	▼
046862	Bloom Carroll Local SD	●	●	●	●	●	▼
050096	Bloomfield-Mespo Local SD	▲	●	●	●		●
049593	Bloom-Vernon Local SD	▲	●	●	●	●	●
043646	Brecksville-Broadview Height	●	▲	●	●	●	●
043653	Brooklyn City SD	●	●	●	●	●	▲
043703	Campbell City SD	●	●	▼	●	●	●
043711	Canton City SD	●	●	▼	▼	●	●
049833	Canton Local SD	●	●	●	●	●	▲
045260	Carey Ex Vill SD	▼	●	●	●	●	●
043752	Cincinnati City SD	●	▼	●	▼	●	●
049601	Clay Local SD	●	●	▼	●	●	●
048132	Clearview Local SD	●	●	●	▲	●	●
046326	Clermont-Northeastern Local	▼	●	▼	●	●	●
043786	Cleveland Municipal SD	●	▼	●	▼	●	●
045328	Columbiana Ex Vill SD	▲	●	●	●	●	●
043802	Columbus City SD	●	▼	▼	●	●	●
043810	Conneaut Area City SD	●	●	●	●	▼	●
047548	Conotton Valley Union Local	●	●	▼	▼	●	●
049999	Coventry Local SD	●	▼	●	●	●	●
045351	Crooksville Ex Vill SD	●	●	▲	▲	●	●
047928	Dawson-Bryant Local SD	▲	●	▲	▲	●	●
043844	Dayton City SD	▼	●	▼	▼	●	●
043885	Delphos City SD	▲	●	●	●	●	●
043901	East Cleveland City SD	▼	●	▼	▼	●	●
043950	Euclid City SD	●	●	▼	▼	●	●
047936	Fairland Local SD	▲	●	●	●	●	●
045369	Fairport Harbor Ex Vill SD	●	●	▼	▼	●	▼
047332	Finneytown Local SD	●	▼	●	●	●	●
050484	Fort Frye Local SD	●	●	●	●	●	▲
044016	Fremont City SD	●	●	●	●	●	▲
044040	Garfield Heights City SD	▼	●	●	●	●	●
044065	Girard City SD	▲	▲	●	●	●	●
046193	Graham Local SD	▼	●	●	●	●	●

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District IRN	DISTRICT	Achieve	VA	GAP	GRAD	K3	Success
049619	Green Local SD	●	●	●	●	▲	●
044107	Hamilton City SD	●	●	●	▼	●	●
045419	Hicksville Ex Vill SD	▲	●	●	●	●	●
047019	Hilliard City SD	●	▼	●	●	●	●
044123	Hillsboro City SD	●	●	●	●	▲	●
050021	Hudson City SD	●	●	●	●	●	▲
045435	Indian Hill Ex Vill SD	●	●	●	●		▲
044149	Ironton City SD	●	●	●	▲	●	●
044156	Jackson City SD	▲	●	●	●	●	●
048686	Jefferson Township Local SD	●	●	●	▼		●
047993	Lakewood Local SD	●	●	▼	●	●	●
049569	Lakota Local SD	●	●	●	●	▼	●
044222	Lima City SD	●	●	▼	▼	●	●
044230	Lockland City SD	●	●	●	▼	●	●
044248	Logan-Hocking Local SD	●	●	▲	●	●	●
044263	Lorain City SD	●	▼	▼	▼	●	●
048702	Mad River Local SD	●	●	●	▼	●	●
044289	Madeira City SD	●	●	●	●		▲
047886	Madison Local SD	●	●	▼	●	●	●
000442	Manchester Local SD	●	●	●	▲	●	●
044297	Mansfield City SD	●	●	●	▼	●	●
050211	Maplewood Local SD	▲	●	●	●	●	▲
050450	Mason City SD	●	●	●	●	●	▲
048850	Maysville Local SD	●	▲	▲	▲	●	●
050229	McDonald Local SD	●	●	●	●	▲	●
048777	Morgan Local SD	▲	●	▲	●	●	●
046995	New Albany-Plain Local SD	●	▲	●	●		●
045955	New Bremen Local SD	●	●	●	●	▲	▼
045963	New Knoxville Local SD	●	●	●	●		▼
044487	New Philadelphia City SD	●	●	●	▼	●	●
049718	New Riegel Local SD	●	●	●	●	▼	▲
047217	Newbury Local SD	●	●	●	▼	▲	●
045567	Newton Falls Ex Vill SD	●	●	▼	●	●	●
050047	Nordonia Hills City SD	●	●	●	●	●	▼
050708	North Baltimore Local SD	●	●	●	●	▲	●
044511	North College Hill City SD	▼	●	▼	●	●	●
044537	North Ridgeville City SD	▼	●	●	●	●	▼
048819	Northmor Local SD	●	●	▼	●	●	●
048736	Northridge Local SD	●	●	▼	●	●	●
049635	Northwest Local SD	●	●	●	▲	●	●

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District IRN	DISTRICT	Achieve	VA	GAP	GRAD	K3	Success
050716	Northwood Local SD	●	●	▼	●	●	●
050567	Norwayne Local SD	▲	●	●	●	●	●
044586	Oakwood City SD	●	●	●	●	●	▲
044594	Oberlin City SD	●	●	●	●	●	▲
049726	Old Fort Local SD	●	●	●	●	●	▲
046573	Olmsted Falls City SD	●	●	●	●	▲	●
046581	Orange City SD	●	▲	●	●	●	●
044602	Oregon City SD	●	●	●	●	▼	●
050724	Otsego Local SD	●	●	●	●	●	▼
044628	Painsville City Local SD	●	●	●	▼	●	●
044636	Parma City SD	●	▼	●	●	●	●
045583	Perrysburg Ex Vill SD	●	▲	●	●	●	●
044677	Princeton City SD	●	▼	●	●	●	●
048975	Put-In-Bay Local SD	▼	●	●	●	●	▼
046599	Richmond Heights Local SD	●	●	●	▼	●	●
047506	Ridgemont Local SD	▼	●	●	●	●	▼
048090	Riverside Local SD	●	●	●	●	●	▼
047944	Rock Hill Local SD	●	●	●	▲	●	●
044701	Rocky River City SD	●	●	●	●	●	▲
049817	Russia Local SD	●	●	●	●	●	▲
049130	Scioto Valley Local SD	●	▲	●	●	●	●
046607	Solon City SD	●	●	●	●	●	▲
046441	Southern Local SD	●	●	●	▲	●	▲
049064	Southern Local SD	●	●	●	▲	●	●
047381	Southwest Local SD	●	▲	●	●	●	●
044818	Springfield City SD	●	●	▼	▼	●	●
044727	St Marys City SD	▲	●	●	●	●	●
044826	Steubenville City SD	▲	●	▲	▲	▲	●
044834	Stow-Munroe Falls City SD	●	▼	●	●	●	●
044859	Struthers City SD	●	●	●	●	▲	●
050658	Stryker Local SD	●	●	●	●	▲	●
047969	Symmes Valley Local SD	●	●	▲	▲	●	●
044891	Tiffin City SD	●	●	●	●	●	▲
044909	Toledo City SD	●	●	▼	▼	●	●
046011	Union Local SD	●	●	●	●	●	▼
047522	Upper Scioto Valley Local SD	●	●	▼	●	●	●
044941	Urbana City SD	●	●	▼	●	●	●
049643	Valley Local SD	●	●	●	●	●	▲
045633	Versailles Ex Vill SD	●	●	●	●	▼	●
050393	Vinton County Local SD	●	●	▲	●	●	●

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District IRN	DISTRICT	Achieve	VA	GAP	GRAD	K3	Success
046904	Walnut Township Local SD	●	●	▼	●	●	●
045005	Warrensville Heights City SD	●	●	●	●	●	▼
049650	Washington-Nile Local SD	●	●	●	▲	●	●
050252	Weathersfield Local SD	▲	●	●	●	●	●
045658	Wellington Ex Vill SD	●	●	●	●	▼	●
047225	West Geauga Local SD	●	▲	●	●	●	●
048397	Western Reserve Local SD	●	●	●	●	▲	●
049106	Westfall Local SD	●	●	●	●	▼	●
045088	Wickliffe City SD	●	●	●	●	▼	●
045112	Wilmington City SD	●	●	▼	●	●	●
045161	Youngstown City SD	▼	▼	▼	▼	●	●