## Sent via Electronic Communications

April 25, 2022
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RE: Maryland Delegates' Letter to Superintendent Choudhury re: Student Data and Scores

Good afternoon Delegates,

The Maryland State Department of Education (MSDE) takes student data privacy seriously and data suppression plays an essential role in that effort. Data suppression ensures the protection of individuals' personal data when releasing summary data in public reporting. Reporting of data must first and foremost adhere to legal requirements to protect individuals' personally identifiable information (PII) under federal and State law. Recognizing this challenge, student disaggregation by grade and student group may not be provided publicly if the results would yield PII about an individual student. There is a balance required to protect privacy while also providing as much information as possible to families, local communities, and interested stakeholders.

The pandemic has reduced enrollment and, as a result, made school-level data exposure more vulnerable. With the first publication of the first full MCAP assessment data, MSDE examined its disclosure protocol under federal guidance and increased suppression accordingly - but that suppression does not impact public transparency. Put simply, MSDE has increased the threshold from 0\% to 1\%. Nothing more. The Department will respond to your questions, in turn, below.

## Why is MSDE exceeding the federal requirements to protect student data?

MSDE is not exceeding the federal requirements, the agency is applying data disclosure avoidance methods to meet the federal requirements. The federal requirement is to protect individuals' PII under federal and State law. Maryland utilizes data disclosure avoidance methods to ensure that the PII of students is not disclosed, which includes individual student test scores. Two such methods that have been used include minimum N -size and top and bottom coding. Other methods highlighted by the Privacy Technical Assistance Center (PTAC), which are leveraged in our public reporting of student data, include rounding of percentages and the removal of counts of students. As compared to many states, MSDE has one of the lowest minimum N -size thresholds at 10 students. ${ }^{1}$ In fact, Maryland has the lowest threshold in the country, while maintaining student data privacy and PII.

Maryland has a long precedent for its concerns about student data and is not alone in approaching data security at the levels MSDE applies for its verification - including amongst its neighbors.

## Delaware ${ }^{2}$

The Delaware Department of Education (DDOE) redacts the cell values at a greater level of suppression than Maryland. For example, DDOE suppresses the following risky cell values:

- Any cell whose student or teacher population value is less than fifteen (15), regardless of the cell's value
- Any cell whose corresponding student or teacher population value is at or above fifteen (15), but whose cell value is less than five (5) or within five (5) of the population.

To further protect the privacy of a data category or data group, DDOE will also redact a non-risky cell to prevent the value of a risky cell from being calculated by subtracting the reported values from the column row or total. This is called complementary suppression by category (CSC) or Complementary Suppression by Group (CSG).

[^0]
## New Jersey ${ }^{3}$

The New Jersey Department of Education applies suppression that exceeds Maryland's. Per State guidance:

In cases where the proficiency rate or percentage of students that "met or exceeded expectations" is less than $10 \%$ or where chronic absenteeism rates are greater than $90 \%$, then that data will not be displayed. This is done so the data does not show that either $0 \%$ of students were proficient or $100 \%$ of students were chronically absent, which would violate student privacy by giving information about all students in the school....If there are only two schools in a district, school A and school B, and information cannot be reported for school A due to low student counts, the overall district-level data would need to be hidden to be able to report information for school B.

## Pennsylvania ${ }^{4}$

In Pennsylvania, proficiency Information is not displayed for student populations of fewer than 11 and all rows of data with <=10 students tested are blank. The tested count is displayed (anywhere from one tested to 10) but all performance level data are blank. Pennsylvania reports percent proficient but only because the accountability data do not include all the test takers - only those enrolled the entire year. Summary data do not include COVID-19 exclusions, home schooled students, students who enrolled in the school after October 1, excluded from school aggregation, did not attempt, or EL students enrolled for less than one year in a school.

## $\underline{\text { Virginia }}{ }^{5}$

The Virginia Department of Education suppresses all values (Pass Advanced Count, Pass Proficient Count, Pass Count, Fail Count, and Total Count) if the total count is less than 10.

[^1]
## West Virginia ${ }^{67}$

The West Virginia Department of Education (WVDE) implements cell suppression for public reporting purposes so that no student can be identified by process of elimination where a group may include small numbers of students. Aggregate results do not show fewer than ten students. No reports are produced with tables containing small enough cells such that individual students can be identified.

The WVDE applies complementary (or secondary) suppression across student groups and result categories to guard against the possibility that a viewer could use basic arithmetic to recalculate the value of a suppressed cell. Careful complementary suppression is particularly important when school- and districtlevel total counts will be displayed in reports. The WVDE ensures that suppressed data cannot be recalculated either within the particular level of focus (i.e., at the school- or district-level alone) or through the summing of school-level information to reproduce district-level results.

Previously when the population of students tested fell between 10 to 30 students, MSDE has been required to publish the scores and school data. Why has that been changed? The number of students tested in a particular grade level falls below 30 in many schools. Kirwan will reduce class sizes even further.

There is no change. The school level data including test scores are reported when the minimum N -size of 10 is met. States are required to publish the scores and school data unless the release of the data would disclose personally identifiable information. The Maryland State Department of Education has a responsibility to our students to not disclose the data in a way that could identify or lead to the identification of our students. Only when the percentage proficiency is less than or equal to $5 \%$ and the total student count is less than 30 is the tested count suppressed. This is a critical suppression to ensure that the test results of students are not disclosed.

For example, imagine a school or grade of 15 that MSDE reported as having <= 5 percent of its students as proficient. Through a simple calculation ( $5 \%$ multiplied by 15 , or $.05 * 15=.75$ ), an individual can identify the test results of all the students in the grade or school since the result is 0.75 or less than 1 student. Because the result is 0 , an individual in the community would be able to discern the test result (not proficient) for all students in the grade or school - a disclosure of PII.

Similarly, imagine two students in a grade of 40 students. When reporting that zero students are not proficient, the test score result of every student in the grade that took the test is disclosed.

[^2]Using the new requirement mentioned above, proficiency test data is not available and will no longer be accessible to the public for multiple school populations.

This is untrue. The reporting of the percentage of students proficient has not changed. Maryland reports the percentage of students proficient when the minimum $N$ size threshold of 10 students has been met. MSDE uses top and bottom coding to suppress low and high performing students to ensure that student data is not disclosed. Only when the total count of students is below 10 will the data, including the percent proficient, be suppressed. MSDE values the release of data for the public and balances the release of data with the need to protect student data.

## Why has MSDE removed the column called "proficient count?"

States are required to publish scores and school-level data unless the release of the data would disclose personally identifiable information. Maryland reports the percent proficient as $<=5 \%$ as part of our top and bottom coding suppression method. All percentages $5 \%$ or below are to be recoded as $5 \%$. By having the count of students that are proficient along with the tested count, a user of the data would be able to calculate $0 \%, 1 \%$ or $2 \%$ which would violate the disclosure protocols already described in this letter. The percent proficient continues to be reported as <=5\%.

## Why is MSDE not applying the same enhanced deidentification measures on highly performing schools?

Maryland will continue to use bottom and top coding for schools, which includes when results are greater than or equal to $95 \%$ ('highly performing schools') to ensure that the top and bottom coding is applied consistently across all data available for the public.

## Why is MSDE going back and changing historical data?

Maryland completed a redesign of the report card website with the release of the Every Student Succeeds Act (ESSA) requirement in December of 2018 using data from the school year 2017-2018. As part of the redesign, historical data are displayed to include five prior years, inclusive of the most recent reporting year. To make the data comparable for accurate reporting purposes, MSDE is working towards updating all years of data as part of the historical reporting. MSDE is retroactively updating the data going back five years to be consistent with the format from this year so that trends in the data can be more easily used by the users of the website in addition to ensuring consistency in the suppression rules when looking across years. If you ask, why now? - the answer is simply, with the new State plan associated with the Every Student Succeeds Act, the transition from PARCC to MCAP, and the first publication of the first full MCAP assessment data from Spring 2022, this is the time where MSDE must make data comparable for accurate reporting purposes. This is not an annual process - it is one-time (pending future changes to assessments or the Every Student Succeeds Act).

As you note, the Maryland State Department of Education has provided previous responses - and those answers have not changed, nor has the inaccuracy of the public reporting by a single media outlet on this matter. MSDE continues to provide partnership and responsiveness. We have provided multiple state comparisons, detailed responses, and explanation tied directly to policy and practice. At this time, MSDE considers this matter fully resolved.

Thank you for your correspondence. If you have any questions, please contact Justin Dayhoff, Assistant State Superintendent, Financial Planning, Operations, and Strategy, by email at justin.dayhoff@maryland.gov or by telephone at 410-767-0439.



[^0]:    ${ }^{1}$ https://all4ed.org/wp-content/uploads/2018/11/N-Size-in-ESSA-State-Plans.pdf
    ${ }^{2}$ https://education.delaware.gov/community/data/data-privacy/

[^1]:    ${ }^{3}$ https://rc.doe.state.nj.us/2021-2022/state/detail/overview 4
    https://www.education.pa.gov/Documents/Data\%20and\%20Statistics/Research\%20and\%20Evaluation/PIMS\%2 0Data\%20Access\%20Policy.pdf
    ${ }^{5}$ https://www.doe.virginia.gov/about-vdoe/search?q=data\%20suppression

[^2]:    ${ }^{6}$ http://static.k12.wv.us/tt/2014/datamanagement_guidance\%20FINAL\%201-21-14.pdf
    ${ }^{7}$ https://wvde.us/wp-content/uploads/2018/02/WV_ESSA_Plan_Response_010918_f.pdf

