



Changes to MSDE's Websites

Protecting Confidential Student
Information

Report to the Board of Education
June 21, 2011

Information & Transparency vs. Privacy

- **Two important goals that can compete:**
 - **Desire to provide information about student achievement to the public, and meet federal reporting requirements**
 - **Legal requirements to protect individual student information**

Websites Must BE FERPA Compliant

- **FERPA: Family Education Rights and Privacy Act**
- **New guidance has resulted in restrictions in the amount of data that will appear on the 2011 Maryland Report Card website**
 - **Significant data have be suppressed to protect student privacy**
- **Schools will have access to all of their data**

Source

Statistical Methods for Protecting Personally Identifiable Information in Aggregate Reporting

National Center for Education Statistics, SLDS
Technical Brief: Guidance for Statewide
Longitudinal Data Systems

December 2012 Brief 3, NCES 2011-603

Examples of Unintended Disclosures

- Often associated with small group sizes
- Can require mathematical manipulation
- School level data where specific students are known to be in subgroups and that subgroup's data are reported in detail, and/or parents have specific information.

Examples of Unintended Disclosures

- **Issue:** 100% proficiency in mathematics at School A
- Anyone knowing a student at School A also knows their mathematics performance
- **Solution:** Report score as a range (> 95)

Examples of Unintended Disclosures

- **Issue:** 100% of students in Grade 4 Special Education subgroup score Basic.
 - Students and parents of Grade 4 students who know which students have IEPs also know those students' scores – Basic
- **Solution:** Suppress data for subgroup or report a range (>95 % scored basic). Depending on N size, this may be insufficient.

Examples of Unintended Disclosures

- **Issue:** Suppressing data for one subgroup but providing numbers for remaining percentages

Group	Percentage	Detail
Group 1	25%	25/100
Group 2	17%	17/100
Group 3	50%	50/100
Group 4	8%	8/100

- **Solution:** Do not provide numerators and denominators, suppress more than one group

Examples of Unintended Disclosures

- **Issue:** Ten students in a subgroup, 90% score Basic. Parent of the single proficient student knows and other students in the subgroup, and because they know their child's score, they also know the others.
- **Solution:** Suppress data for entire subgroup, report all data in a range

Federal Recommendations

- Do not publish counts
- Collapse across categories (proficient and above instead of 2 categories: proficient and advanced)
- Group size no smaller than 10, additional suppression if number of affected subgroups is small
- Recoding – ranges, “estimated” percentages
- Percentages reported only in whole numbers

Complications

Insufficient or missing data can cause misinterpretation.

Example: N Counts are suppressed, only performance data percentages reported

Possible Result: Subgroup is identified as a major school issue when in fact the issue is constrained to a very small group of students.

Possible Solution: Replace with ranges?
Indicator of small group size

Complications (cont.)

Insufficient or missing data can cause misinterpretation.

Example: Gross estimates of percentages are presented

Possible Result: Total is not 100%, validity of data are questioned

Possible Solution: Education...

Complications (cont.)

Suppressed Data Download files are insufficient to meet researchers' needs

Example: Gross estimates of percentages are presented

Possible Result: More individual requests for data, long queues to obtain it

Possible Solution: File availability at State and LEA level as well as school

The 2014 AYP Dilemma

- For years, schools have been working toward the 2014 AYP goal of getting every student (100%) scoring at the proficient level.
- In 2014, any school meeting AYP cannot be reported as meeting that goal, because to do so would release the individual performance levels of all of the students in the school.

Our Websites Prior to 2011

- Suppressed data for groups less than 5
- Reported all data that are used in calculations of percentages (numerator and denominator)
- Reported percentage data to tenths or hundredths place

Our Websites Now

- **Goal:** Preserve as much information as possible (conditional suppression/focus on school level)
 - Suppress data for groups smaller than 10
 - Recode all percentages of 5 or less to ≤ 5 , of 95 and above to ≥ 95
 - Remove all counts that are used in numerators and denominators
 - Round percentages to whole numbers

Our Websites Now (cont.)

- Fewer categories (may not be able to separately report Mod MSA from regular, may need to combine proficient and advanced)
- Schools have access to their own complete data, can only access public (suppressed) version for other schools

Next Steps

- **Phased-in changes**
- **Education for stakeholders**
- **Monitoring (MSDE and Federal)**



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DISCUSSION