

Schools Targeted for Improvement: Are Small Sample Sizes Masking Poor School Performance?

The Issue

In some states, a disproportionately large share of schools identified for Targeted Support and Improvement (TSI) are middle schools that have low-performing students with disabilities. In one state, these middle schools accounted for **67% of all TSI schools** in the state. The Regional Educational Laboratory Mid-Atlantic [partnered](#) with two states in the region to explore why this might be.

The Evidence

We examined school accountability systems in two states and identified two features that, when combined, make middle schools more likely than other schools to be identified for TSI because of the performance of their students with disabilities:

1. Students with disabilities are less likely to pass state exams than the general student population.

Accountability systems measure several dimensions of a school's performance, including students' academic proficiency, typically measured as the percentage of students who pass state math and English language arts exams.

What is a TSI school?

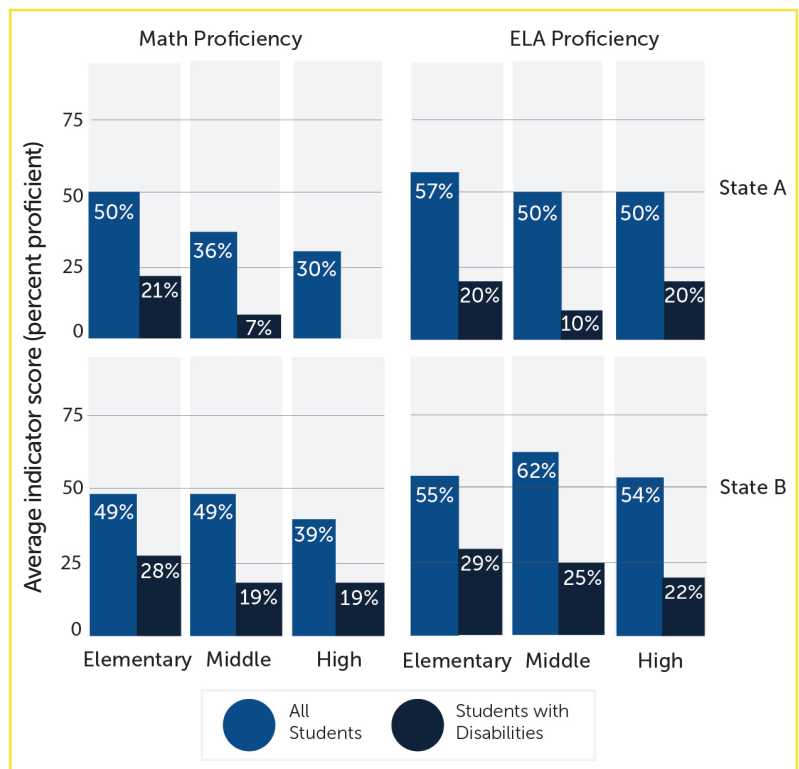
- **TSI schools** have one or more student subgroups that consistently underperform relative to all students in the state.
- States provide additional support to help these subgroups improve.



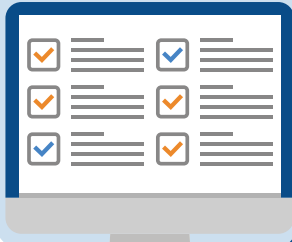
How are TSI schools identified?

- Each state develops a plan to identify underperforming schools through an **accountability system**, which gauges schools' performance overall and by subgroup.
- Accountability systems usually measure academic achievement, academic progress, and graduation rates within a school, among other performance dimensions.
- Each state sets a minimum number of students that each school and subgroup must meet for each performance dimension before that dimension is included in the overall accountability score.
- Schools are identified for TSI if their subgroup accountability scores are low compared with those of the overall student population in the state.

Students with disabilities in both states were **20 to 40 percentage points** less likely to pass state exams than students overall.



Are all subgroups assessed on every dimension?



If a school or subgroup does not have data on the minimum number of students for a performance dimension, information on that dimension is not included in the school's accountability score.

For example, if a school's number of students with disabilities who take state exams falls below the state's minimum, the school's accountability score for students with disabilities will not include academic proficiency information.

2. Compared with elementary or high schools, middle schools are much more likely to have enough students with disabilities take state exams to meet state-set minimum thresholds, meaning that the subgroup's proficiency rates count toward middle schools' accountability scores more often.

Importantly, this study does not find that students with disabilities in middle schools perform substantially and consistently worse than students with disabilities in elementary and high schools. Rather, middle schools are more often identified for TSI because **small sample sizes at the elementary and high school levels mask poor performance.**



Middle schools are more often identified for TSI because small sample sizes at the elementary and high school levels mask poor performance.

The Implications

To address this, states could:

- Change the accountability system so that schools are only compared with other schools that meet minimum sample size requirements for the same performance dimensions
- Incorporate [empirical Bayesian techniques](#) to enhance the precision of accountability scores or subgroups with small samples

In both states, **middle schools'** students with disabilities subgroups were **by far the most likely** to meet sample size thresholds for academic proficiency

