

## Elementary School Size Literature Review

### Summary:

After an exhaustive review of research that included all available peer-reviewed reports within the last 15 years, no significant conclusion can be drawn related to elementary school size and student performance. Contradictory findings and conclusions were found throughout the literature review as noted below.

While there is a deep well of research related to high school size and student outcomes, there is a limited data set available for elementary. As noted by Gershenson and Langbein (2015), they discovered only limited studies related to student-level data and the causal effect of school size on academic achievement in the context of primary schools.

### Peer-reviewed research addressing the matter:

The Effect of Primary School Size on Academic Achievement	2015	Researcher's conclude that there is <u>no evidence of a causal relationship between school size and student achievement</u> , regardless of whether school size is measured at the school or grade level. Nor did they find any evidence of a relationship between school size and student achievement, at least within the range of school sizes observed in North Carolina between 2004 and 2010. However, <u>there do appear to be relationships between school size and student achievement in math and reading for students with learning disabilities</u> . Less pronounced, they also discovered <u>a small impact between increased school size and the reading achievement of socioeconomically disadvantaged students</u> .
Public School Size and Hispanic Student Achievement in Texas: A 5-Year Analysis	2011	In this study, the researchers examined 5 years of Texas statewide data concerning elementary school size and Hispanic student performance on three state-mandated assessments in reading, mathematics, and writing from more than 1,200 elementary schools. After collapsing elementary schools into three sizes (i.e., very small less than 400 students; small 400-799 students; and large 800-1,199 students), multivariate statistical procedures revealed the presence of statistically significant differences in Hispanic student performance in reading, mathematics, and writing across all 5 years of data analyzed. In almost every analysis, <u>Hispanic students in large elementary schools outperformed Hispanic students in very small elementary schools in reading, mathematics, and in writing</u> .
Elementary School Size and Student Performance: A Conceptual Analysis	2011	National studies were located and assembled related to elementary school size and performance. <u>Five out of eight studies found students in smaller schools demonstrated higher student achievement</u> (Abbott, Joireman, & Stroh, 2002; Alspaugh & Gao, 2003; Johnson, Howley, & Howley, 2002; Office of Policy Planning and Research, 1999; Plecki, 1991). <u>One researcher reported larger schools had higher student achievement</u> (Roeder, 2002) <u>than did smaller schools</u> . In addition, <u>in two studies, the authors did not demonstrate statistically significant results at the elementary level</u> (Howley, 1996a; Lamdin, 1995).

<p>School Size and Its Relationship to Student Outcomes and School Climate</p>	<p>2006</p>	<p>Reviewed the relationship of South Carolina elementary school size and student performance by analyzing the results of two years of Metropolitan Achievement Tests, Seventh Edition (MAT-7), for fifth grade students across the state. They controlled for several factors including pupil-teacher ratios, percentage of students on the free and reduced lunch, amount of teacher experience, level of teacher education, student gender composition, student racial composition of the school, school operating costs, and community setting (rural, suburban, or urban). When control variables were in place, <u>they did not find a significant relationship between school size and mean scaled scores in reading or mathematics on the MAT-7.</u></p>
<p>School Size, achievement, and Achievement Gaps</p>	<p>2004</p>	<p>Conducted an analysis of third- and fifth-grade end-of-grade test scores for North Carolina’s 1997 third-grade cohort. <u>The researcher found no direct effect of school size on academic achievement.</u></p>
<p>An Examination of the Effect of Elementary School Size on Student Academic Achievement</p>	<p>2003</p>	<p>This study suggests that both movement to optimal school size and increased school competition result in higher student achievement. They conclude that <u>public officials who desire an improvement in student academic achievement should construct policies that (1) result in elementary school sizes of approximately 760 students, and (2) encourage educational market competition among associated schools.</u></p>