

**Optimal Context Size in Elementary Schools:  
Disentangling the Effects of Class Size and School Size**

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Over the past several decades, researchers, politicians, and corporate leaders have focused on the size of educational contexts. Billions of public and private dollars have been invested in reforms that reduce the size and scope of both classrooms and schools. Curiously, these important policy initiatives—reduced class size and reduced school size—have not been simultaneously considered within the context of elementary schools. Using data from the Early Childhood Longitudinal Study, Kindergarten Cohort of 1998–99 (ECLS-K), and growth-curve analyses within a three-level hierarchical framework, this study examines the influence of public school organizational size on children’s literacy and mathematics development during kindergarten and first grade.

Our results support findings from the Tennessee and Wisconsin class-size experiments. With literacy and mathematics in both kindergarten and first grade, children learn more in small classrooms (up to seventeen children) than in large classrooms (twenty-five children or more), even after we account for the associations between class size, school size, and school social composition. Our study adds an additional dimension to the well-known randomized class-size experiments: we also examine medium-size classrooms, the size of classroom that elementary school students are most likely to experience. Small and medium-size classes do not differentially influence student learning in kindergarten literacy and mathematics or first-grade mathematics. Rather, large classes are detrimental to student learning. Only in first-grade literacy learning do we find small classes more beneficial than medium-size classrooms. After accounting for class size and other school and student characteristics, we find elementary school size to be marginally related to student learning. First graders gain somewhat fewer literacy skills in large schools (those enrolling more than 800 students) and gain somewhat more literacy skills in small schools (those enrolling fewer than 275 students).