

**Reference:** Finn, J. D., Gerber, S.B., & Boyd-Zaharias, J. (2005). Small classes in the early grades, academic achievement, and graduating from high school. Journal of Educational Psychology, 97 (2), pp. 214-223.

## STRUCTURED ABSTRACT

**Background:** No prior research has been published examining the relationship of small class size in the early elementary grades to school dropout rates several years later. Project STAR, one of the few large-scale experiments ever conducted in education in the United States, randomly assigned a cohort of students in Tennessee to small class sizes of about 13-17 students or regular class size of about 22-25 students in kindergarten through third grade between 1985 and 1989. Follow-up data from Project STAR provide unique insight into the association between attending a small class in grades K-3 and subsequent high school graduation and dropout rates.

**Purpose:** To investigate the long-term effects of being assigned to a small class in the early elementary grades by examining high school graduation data.

**Population:** 4,948 former participants in Project STAR who had either graduated or dropped out of high school.

**Research Design:** Quantitative comparison. Long-term follow-up of participants in Project STAR, the Tennessee class size randomized-controlled field trial.

**Data Collection and Analysis:** High school transcripts of former Project STAR participants were collected and 4,948 students were identified who could be clearly classified as graduating or dropping out of high school and for whom achievement data was available for grades K-3. Project STAR achievement data in grades K-3 consisted of reading and math scores on two standardized tests: the nationally-normed Stanford Achievement Test and the criterion-referenced Tennessee Basic Skills First test.

**Findings:** Project STAR participants who attended a small class for four years were much more likely to graduate from high school than their counterparts in regular size classes: 87.8% of students who had four years of small classes graduated from high school compared to 76.3% of students who had regular size classes. Furthermore, attending small classes for 3 or 4 years in the early elementary grades had a positive effect on high school graduation rates that was independent of the academic benefit of being in a small class in grades K-3. Attending small classes for only one or two years in grades K-3 was not found to have a positive effect on high school graduation rates.

The effect of attending small classes for 3 or 4 years in grades K-3 on high school graduation rates was especially notable for students who received free lunches, a socioeconomic indicator of low-income households. Approximately 55% of students in Project STAR received free lunches, and among this group there was an 18 percentage point difference in graduation rates for students who attended small classes for four years compared to their counterparts in regular size classes (88.2% vs. 70.2%). In addition, among this group there was a 9 percentage point

difference in graduation rates for students who attended small classes for three years compared to their counterparts in regular size classes (79.6% vs. 70.2%).

**Conclusions:** Students who attended a small class for four years in the early elementary grades were significantly more likely to graduate from high school several years later. This benefit of small classes was particularly salient for students from low-income households, where the positive effect on high school graduation rates was 9 percentage points for students who attended small classes for three years and 18 percentage points for students who attended small classes for four years. This study provides further evidence that small classes in the early elementary grades over three or more years is a research-validated intervention with positive long-term outcomes.