

Reference: Pate-Bain, Helen & Jacobs, Roseanne. (1990). The case for smaller classes and better teachers. *Streamlined Seminar*. National Association of Elementary School Principals, v. 9, n. 1, pp. 1-9.

STRUCTURED ABSTRACT

Background: Small class sizes and the recruitment and retention of highly-effective teachers have been linked to the quality of education in the early grades (K-3). The Tennessee study of class size in the early school grades, also known as Project STAR, was a randomized-controlled experiment where students were randomly assigned to small (13-17 students) or regular class sizes (22-26 students) in kindergarten in 1985 and then kept in those small or regular class sizes for four years through third grade. The study's findings include the effects of small class size and the teaching practices of highly-effective teachers in the early grades.

Purpose: To report the effects of small class size on student learning and reading readiness and to report the teaching practices of 1st grade teachers in Project STAR whose students realized the largest academic gains.

Setting: Public schools in inner-city, urban, suburban, and rural districts throughout the state of Tennessee.

Participants: Over the course of the study, Project STAR involved about 6,500 students in 76 schools in 42 school systems. The investigation of highly-effective teachers focused on 49 1st grade teachers participating in Project STAR in 1987.

Research Design: Mixed methods, including quantitative comparison, secondary analysis, classroom observations and teacher interviews.

Data Collection and Analysis: To assess the math and reading performance of participants in Project STAR, students took both the Stanford Achievement Test - a nationally-normed standardized test - and the Tennessee Basic Skills First mastery test, a criterion-referenced and curriculum-based test.

In the study of highly-effective teachers, researchers analyzed student gain scores in reading and mathematics by classroom average to identify the top 15% of 1st grade teachers in four different school types: rural, urban, suburban, and inner-city.

Paired observers conducted structured classroom observations and teacher interviews of these highly-effective 1st grade teachers.

Findings: Based on the year-end nationally-normed standardized tests, students in small classes made significant academic gains over students in regular size classes. On the Tennessee Basic Skills First mastery test, students in small classes on average mastered one more objective than their counterparts in regular size classes. The effect of small class size was especially

pronounced for students from low socioeconomic status backgrounds. Small class size was a significant factor in kindergarten reading readiness achievement.

The highly-effective 1st grade teachers demonstrated highly efficient classroom routines; set and enforced high standards for classroom behavior; showed excellent positive interactions with their students; and actively involved parents and families of children in student learning. When asked to identify key attributes of successful teaching, these teachers most often replied love for children and teaching, high expectations for students, patience, and understanding.

The “average profile” of a highly-effective 1st grade teacher was a female who was 38.5 years old, had a bachelor’s degree, had appropriate teacher certification, and had 10.5 years of teaching experience, with 8 years of teaching experience in 1st grade. This “average” highly-effective teacher, furthermore, was typically enrolled in additional college courses that year and had one or more family members also involved in education.

Highly-effective teachers used enthusiasm and a sense of humor to promote learning and motivate students.

Small class size was correlated with highly-effective 1st grade teachers. There were four times as many highly-effective teachers found teaching in small classes than in regular-size classes. Because teachers as well as students were randomly assigned to small and regular-size classes in Project STAR, this difference in teaching effectiveness can be directly attributed to small class size.

Conclusions: Small class size helps students achieve at high levels and facilitates the creation of a teaching and learning environment where teachers can consistently engage in highly-effective teaching practices.