

Reference: Achilles, C.M. & Finn, J.D. (2005-2006). Class size and pupil-teacher ratio confusion: A classic example of mixing “apples and oranges.” National Forum of Applied Educational Research Journal, 18 (2), pp. 5-25.

STRUCTURED ABSTRACT

Background: In education policy discussions, the concepts of “class size” and “pupil-teacher ratio” are often mistakenly used as interchangeable terms. This misunderstanding leads to ongoing confusion in interpreting research studies on the effects of class size.

Purpose: To provide a careful explication of the two terms “class size” and “pupil-teacher ratio” and to demonstrate how the two terms represent distinct concepts that translate into large numerical differences in practice.

Research Design: Analytic Essay.

Findings: Pupil-teacher ratio is the number of students at a site divided by the number of teachers, staff and/or adults at the site. The divisor used in determining pupil-teacher ratio varies according to different definitions (e.g., teachers only, all certified staff, all certified and non-certified staff), which is an important consideration when evaluating research or information based on pupil-teacher ratios. Class size is the number of students regularly in a teacher’s room. Average class size is the number of all students regularly in each teacher’s class divided by the actual number of regular teachers in those specific classes (e.g., the number of 2nd graders enrolled in regular classes in a given school divided by the number of general 2nd grade teachers in that school). In the U.S., the average difference between class size and pupil-teacher ratio is about 10 students in public elementary schools; for example, a typical elementary school with a pupil-teacher ratio of 14 in kindergarten through third grade would have an average class size in those same grades of about 24 students. Research on class size tends to show demonstrable positive effects when class size is used as the key variable whereas research that uses pupil-teacher ratios tends to show marginal effects.

Conclusions: Class size and pupil-teacher ratio are as qualitatively different from each other as apples and oranges. Policymakers and educators who do not read primary research on class size but rely on secondary sources need to know that the concepts of class size and pupil-teacher ratio are often confused not only in translational research but in the original research itself. This can result in distorted or wrong interpretations of the scientific evidence on the effects of class size.