Learning in School

Evidence cited throughout this chapter indicates that schools are vital forces in children’s cognitive development. How do schools exert such a powerful influence? Research looking at schools as complex social systems—class size, educational philosophies, teacher–student relationships, and larger cultural context—provides important insights. As you read about these topics, refer to Applying What We Know below, which summarizes characteristics of high-quality education in elementary school.

Class Size

As each school year began, Rena telephoned the principal’s office to ask, “How large will Joey’s and Lizzie’s classes be?” Her concern is well-founded. In a large field experiment, more than 6,000 Tennessee kindergartners were randomly assigned to three class types: “small” (13 to 17 students), “regular” (22 to 25 students) with only a teacher, and regular with a teacher plus a full-time teacher’s aide. These arrangements continued into third grade. Small-class students—especially minority children—scored higher in reading and math achievement each year (Mosteller, 1995). Placing teacher’s aides in regular-size classes had no impact. Rather, being in small classes from kindergarten through third grade predicted substantially higher achievement from fourth through ninth grades, after children had returned to regular-size classes (Nye, Hedges, & Konstantopoulos, 2001).

Why is small class size beneficial? With fewer children, teachers spend less time disciplining and more time giving individual attention. Also, children who learn in smaller groups show better concentration, higher-quality class participation, and more favorable attitudes toward school (Blatchford et al., 2003; Finn, Pannozzo, & Achilles, 2003).

Educational Philosophies

Each teacher brings to the classroom an educational philosophy that plays a major role in children’s learning. Two philosophical approaches have received most research attention. They differ in what children are taught, the way they are believed to learn, and how their progress is evaluated.

Traditional versus Constructivist Classrooms. In a traditional classroom, the teacher is the sole authority for knowledge, rules, and decision making and does most of the talking. Students are relatively passive—listening, responding when called on, and completing teacher-assigned tasks. Their progress is evaluated by how well they keep pace with a uniform set of standards for their grade.

A constructivist classroom, in contrast, encourages students to construct their own knowledge. Although constructivist classrooms vary, many are grounded in Piaget’s theory, which views children as active agents, who reflect on and coordinate...