



Preschool Policy Facts

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Advancing Quality Pre-Kindergarten for All

Class Size: What's the Best Fit?

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Is class size an important influence on the quality and educational effectiveness of preschool programs? Teachers and parents generally believe so. Common sense suggests that smaller classes and higher staff-child ratios are better for young children, allowing more individual attention, reducing the time and effort devoted to classroom management, and reducing the number of stressful interactions. Yet, some states do not set limits on class size in their prekindergarten programs, and some researchers have suggested there is no causal link between class size and educational effectiveness. Of course, no one really believes that it doesn't matter how many preschool children are packed into a classroom. Thus, it is useful to consider what research has discovered about the relationship of class size to preschool children's experiences and outcomes.

The relationship between class size and cost also deserves consideration. Just as smaller classes benefit young children, smaller classes also cost more. Therefore policy makers and parents face a tradeoff. They must weigh the value of the gains to children from reducing class size against the costs. This is a difficult task, made more difficult by the fact that the costs are easily measured while the benefits may be hard to see and measure without rigorous research. This fact sheet provides information on costs and guidance on comparing the benefits from smaller classes to those costs.

What We Know:

- **Class size reduction is a policy that can increase educational effectiveness.**
- **Small class size and better staff-child ratios offer health and safety benefits.**
- **Most state preschool programs and the federal Head Start program do not require the small class sizes found to produce the large educational gains desired for disadvantaged students.**
- **Some state preschool programs set no limits on class size.**
- **Costs of class size reduction depend on the starting point, opportunities for more efficient allocation of staff, and the extent of cost-savings from lower administrative costs (from reduced turnover, for example).**

Policy Recommendations:

- **All states should set research-based program standards that jointly address class size, ratios, teacher qualifications and teaching practices.**
- **Reductions in class size can be phased in gradually and should be accompanied by adequate financial support so as to avoid unintended consequences.**
- **Policies that support teachers in adapting their teaching to smaller class sizes may maximize the benefits of class size reduction.**
- **Given the potential benefits and costs of class size reduction, the federal and state governments should conduct experiments with different class sizes to identify the optimal class size for classrooms with various mixes of children with economic and other disadvantages, including special education needs.**

Research on Class Size

Studies demonstrate that class size is one of the components of a quality preschool program that produces positive outcomes for young children. Research on child care classrooms indicates that when groups are smaller and staff-child ratios are higher, teachers provide more stimulating, responsive, warm, and supportive interactions. They also provide more individualized attention, engage in more dialogues with children, and spend less time managing children and more time in educational activities.

Preschool research strongly indicates that smaller class sizes and better ratios are associated with greater educational effectiveness and other benefits. Even within studies that focus only on preschool children, the effects of class size have been found to be larger for younger children.

The preschool research is bolstered by research on class size for children in K-12 education, which finds that smaller classes are most productive for younger and more disadvantaged children, and “the major

benefits from reduced class size are obtained as the size is reduced below 20 pupils.” If anything, recommended class size based on studies in kindergarten and the early grades may be too large, given the characteristics and educational needs of younger children.

Remaining Research Questions

Although class size and ratios have been studied extensively, policy makers could benefit from more precise guidance. There are still many areas for further exploration. Important questions worthy of future research include:

- Are there threshold levels at which lowering class size has a particularly large effect, or at which class size is so small that reducing it further has little impact?
- What are the costs of reducing class size (from specific high levels to other specific low levels)?
- What types of training help teachers take full advantage of smaller classes and the resultant increased opportunities for interaction with their students?

- Are there important interdependencies in program standards – for example, are gains from increasing teacher quality much larger with small classes?
- When it is not feasible to reduce class sizes to the desired level, are there other steps that can be taken to compensate until it is possible to reduce class sizes?
- Given that much of the research on class size involves child care centers serving infants, toddlers, and preschoolers, or the early elementary school grades, shouldn't consideration be given to whether the effects of class size differ appreciably for state prekindergarten program settings or Head Start compared to these other programs?

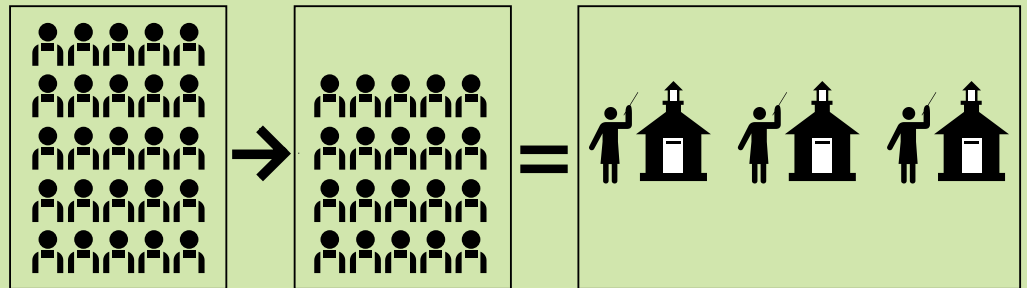
Additional research could help shed light on these unresolved questions and enable policymakers to determine when and how it is best to modify class size. Strong preference should be given to true experiments (or strong quasi-experiments where class size is actively changed) over purely statistical studies that depend on “natural” variation.

The Costs of Smaller Class Sizes

Even those who accept that smaller class sizes improve educational outcomes may still question whether the benefits outweigh the costs. Publicly funded preschools do not pose the challenges that can result from decreasing class sizes for preschools in the private sector, where the additional costs can make it difficult for programs to remain financially viable or drive up fees. However, there are still costs for reducing class size that governments will have to bear. Smaller classes increase the cost per student, so public agencies must increase their budgets for prekindergarten to achieve their class size goals without decreasing the number of children able to participate

Reducing class size from 25 to 20 in a program with 300 students requires the addition of 3 teachers and classrooms as the number of classes goes from 12 to 15. Reducing class size from 20 to 15 in a program of 300 students requires the addition of 5 teachers and classrooms as the number of classes goes from 15 to 20.

In a program with 300 students, decreasing class size from 25 to 20 requires the addition of three teachers and classrooms.



In a program with 300 students, decreasing class size from 20 to 15 requires the addition of five teachers and classrooms.

