

Small is beautiful? Reflections on the school class size debate

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In the contentious field of school reform, class size reduction seems to hold all the aces. It is popular with academics, teachers, students and parents alike.



But, with the Education and Science Select Committee this month inquiring into teacher education, it's timely to ask: with the funds available to the government for education spending, do we want more teachers for extra classes or do we want better teachers?

The single most important influence on student achievement (apart from intelligence) is teacher quality. What teachers do in the classroom has more effect on how much a student learns than class size, family background or gender. Unlike class size, this relationship has been consistently confirmed by research both in Australia and overseas.

It makes sense. A great teacher in front of a large class is better than a mediocre teacher in front of a smaller class. Conventional wisdom on class size does not stand up to the same scrutiny.

To some, it seems intuitive that to have fewer children in a class is better and many people would have us believe that research confirms this. Thorough examination of the research

on class size and student achievement, however, reveals that this belief is misplaced.

First, many studies have methodological problems that make their application in a real world context doubtful. For example, in the largest and most frequently cited study – Project STAR in Tennessee – teachers involved in the study were arguably motivated to ensure that the findings were in favour of smaller classes. This incentive would not exist if small classes were implemented across the board.

Second, many studies introduced other reforms such as curriculum changes at the same time as class size reduction, making their separate effects impossible to determine.

Third, even setting aside these methodological problems, the large majority of studies have found no significant effects of class size on student achievement. The remainder have shown small benefits, usually only when class size has been substantially less than 20 students. Auckland University researcher John Hattie, for example, suggests that class sizes need to be reduced to 15 pupils or fewer for "appreciable, positive" benefits to occur. Even so, we don't know whether these benefits are large enough to justify the cost.

Fourth, class size effects are mediated by the competence and effectiveness of the teacher.

The most common argument for smaller classes is that teachers can spend more time on individual instruction. However,

the impact on individual instruction time is small – even for significant changes in class size.

For example, in New South Wales, average kindergarten to Year 2 class size is just over 25 students. The recent Vinson Report on Public Education in New South Wales recommends reducing maximum class size to 20 students. This extra cost of AU\$1,150 per year per student,

amounting to billions of dollars over the next few years, would only buy an extra two minutes per day of individual instruction.

In 2001, in New Zealand, the School Staffing Review Group recommended a long-term goal of reducing student:teacher ratios to 20:1 for years 1-3 and 25:1 for years 4-8. While no public estimates are available for the cost of reducing class size, one rough estimate is that the additional teacher salary costs from reducing the overall average ratio of state primary and secondary students to teaching staff by just one pupil from current levels would be in excess of \$100 million per year, excluding property and overhead costs.

Furthermore, class size research has found that the use of teacher's aides, or team teaching, has no effect on student achievement. This again suggests that the ratio of staff to students is less important than the teacher's qualifications.

Smaller classes are hugely popular with classroom teachers, and understandably so. It seems obvious that having fewer students makes their jobs easier. Teachers claim to be able to do a better job. The trouble is that this does not necessarily translate into significantly better learning outcomes

Before considering increasing the teaching force to create smaller classes, the priority for school education should be to ensure that the existing and future teaching force is the best it can be.

What constitutes effective pedagogy is an issue: there seems to be agreement that teacher education in Australian and New

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Zealand universities is not adequately imparting knowledge of the curriculum, or pedagogical and behaviour management skills to teachers.

Another problem lies in professional development. Around \$60 million is spent annually in New Zealand on in-service training for teachers. Publicly funded in-service training for teachers should have increased student learning as its

objective, but very few schools evaluate the effectiveness of this training in terms of educational outcomes.

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When it comes to teachers, quality is far more important than quantity. The push for class size reduction serves only to weaken the case for more urgent and supportable investments, such as improved teacher education, better professional development and a salary arrangement that rewards good teaching.

This article does not necessarily reflect the views of the Education Forum.

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