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Smaller classes become big issue

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STUDENT-teacher ratios are going to be a major issue in 2003, especially in NSW, where the Primary Principals Association and Teachers Federation have launched campaigns for reduced class sizes.

But are the would-be reformers right that "Twenty is Plenty"?

It is almost certainly true that smaller class sizes will make classroom life more pleasant for teachers, and probably also our children. But the more important question is whether there will be any educational benefit.

Unfortunately, research on this question is scantier than most advocates seem willing to admit.

This arises because small classes tend to appear in two contexts — in rural Australia or in rich private schools. Comparing the outcomes in these settings with larger classes found in suburban public schools risks comparing apples with oranges.

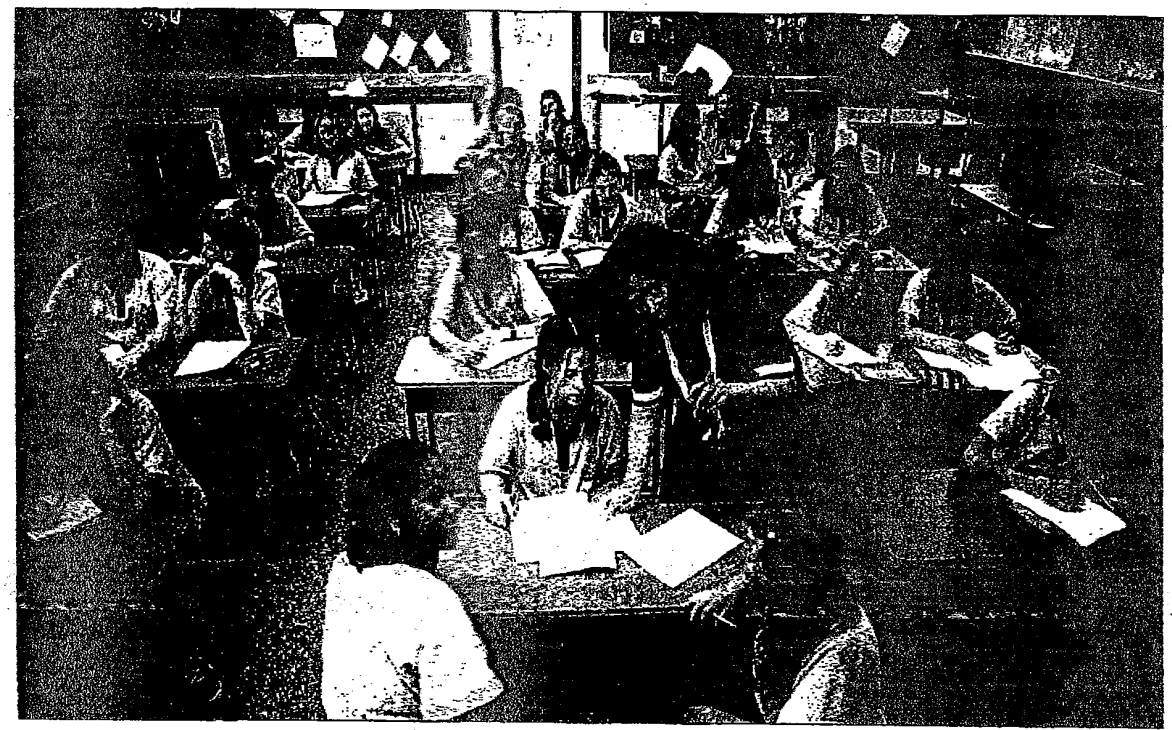
Moreover, comparisons within a school are not much better.

Principals often tend to use small classes as a means of either enriching gifted students or remedying disadvantage among at-risk students. Thus, comparisons of the performance of small and large classes may obscure more than they reveal.

In the absence of any good Australian experimental evidence, both advocates and sceptics have drawn — often selectively — from American research. But until very recently, most of this research has been of poor quality.

An influential review by Stanford's Eric Hanushek concluded that it is hard to find any effect of class size on student achievement. But while this militates against across-the-board reductions in class size, Hanushek argues that there probably are gains from reducing student numbers in specific circumstances — such as for disadvantaged and at-risk youth.

This is where the debate rested until the results from Project Star materialised. One of the largest education policy experiments ever conducted, Project Star cut class sizes in a randomly selected group of Tennessee schools.



Is less more?: Policymakers should put reforms to the test

Students from these schools were then compared with a control group who had experienced no such reduction in student-teacher ratios.

When follow-up studies were conducted, Princeton's Alan Krueger and collaborators concluded that test scores of those in smaller classes had indeed improved by a substantial margin, relative to those in larger classes.

Patricia Forsythe, the NSW Shadow Minister for Education, has claimed lately to have been following the US evidence closely.

Presumably Project Star underpins her claim that "the weight of evidence in relation to smaller class sizes for the beginning years of school seems to be compelling." But is Project Star compelling?

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The sceptics doubt it. Social science has long known about the "Hawthorne effect" — the tendency of subjects to alter their behaviour when they know they are being observed.

Thanks to a prior agreement with the Tennessee education union, teachers in the schools with smaller classes knew that if their students performed well, class sizes would be reduced statewide. If not, they would return to their earlier levels.

In other words, Project Star's teachers had a powerful incentive to improve student performance that would not exist under ordinary circumstances.

In the past few years, the most persuasive piece of evidence in the class size debate has been a novel study by Harvard University's Caroline Hoxby. Instead of conducting a new experiment, Professor Hoxby adopted an ingenious research strategy, looking for a "natural experiment".

As in Australia, many US schools have a rule that when class sizes exceed a fixed number, another class will be created.

For example, if class sizes were capped at 25 students, one school may have 50 students in second grade, yielding two classes each with 25 students, while a neighbouring school with 51 second-graders would have three much smaller classes.

By examining many such natural experiments, Hoxby's study avoided distorting the regular incentives that teachers face.

The results of this study have turned the class size debate on its head. Basing her analysis on a large sample of Connecticut schools, Hoxby found that the effect of smaller class sizes was precisely nil.

This research supports the view enunciated last year by a spokesman for NSW Education Minister John Aquilina that "we are not aware of any current research which shows reducing class size significantly improves student outcomes".

This leaves us with something of a puzzle. Why don't smaller class sizes improve student performance?

The answer may lie in how teachers spend the extra time they have when class sizes are reduced.

Consider an analogy. A doctor working in a hospital may be obliged to visit 25 patients per shift. If we required the doctor to visit only 20 patients instead, then either they will carry out better consultations or their patients will get the same attention but the doctor will feel less pressure. So it is with teaching.

Most likely, both effects will occur — lower class sizes will translate to some extent into better outcomes for students, while also contributing to a more comfortable life for teachers.

This may not be a bad thing — as the relative wages of teachers have fallen over recent decades, perhaps it is only fair that we ask them to do less. The key is to ensure that we get the balance right.

One thing Project Star successfully showed is that across-the-board reductions in class size will produce gains in student learning if teachers face strong incentives to produce better outcomes.

International evidence also teaches us that getting rid of the very largest classes is useful.

In Israel, studies have shown major gains from getting classes closer to 30 than 40 students.

Yet the same does not necessarily hold for countries that already have smaller classes.

According to the OECD, the average primary school pupil-teacher ratio is 19 in the US, 21 in England/Wales, 17 in Canada, 21 in Japan and 18 in Australia.

Doubt about the efficacy of across-the-board class size cuts should not deter education reformers from seeking innovative solutions to improving the quality of education. Better teacher training, fresh ways of improving teacher quality in poorer areas, remedial after-school programs, and targeted class cuts are all potentially effective ways of targeting resources where they will do most good.

The lesson of class size research is that policymakers should be modest enough to put reforms to the test, and flexible enough to adapt them in response.

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