



Synthesis

Reducing class sizei

Moderate impact for high cost, based on moderate evidence





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As the size of a class or teaching group gets smaller it is suggested that the range of approaches a teacher can employ and the amount of attention each student will receive will increase, improving outcomes for pupils.

How effective is it?

Reducing class size appears to result in around three months' additional progress for pupils, on average. Intuitively, it seems obvious that reducing the number of pupils in a class will improve the quality of teaching and learning, for example by increasing the amount of high quality feedback or one to one attention learners receive. However, overall, the evidence does not show particularly large or clear effects until class size is reduced substantially to fewer than 20 or even 15 pupils. It appears to be very hard to achieve improvements from modest reductions in class size to numbers above 20, for example from 30 to 25.



Overall the evidence does not show particularly large or clear effects, until class size is reduced substantially.

The key issue appears to be whether the reduction is large enough to permit the teacher to change their teaching approach when working with a smaller class and whether, as a result, the pupils change their learning behaviours. If no change occurs then, perhaps unsurprisingly, learning is unlikely to improve. When a change in teaching approach does accompany a class size reduction (which appears hard to achieve until classes are smaller than about 20) then benefits on attainment can be identified, in addition to improvements on behaviour and attitudes. In some studies, these benefits persist for a number of years (from early primary school through to at least the end of primary school).

There is some evidence that reducing class sizes is more likely to be effective when accompanied by professional development for teachers focusing on teaching skills and approaches. Some evidence





suggests slightly larger effects are documented for lower achievers and, for very young pupils, those with lower socio-economic status.

Smaller class sizes may also provide more opportunities for teachers to develop new skills and approaches.

Latin American Evidenceii

Further robust research about reducing class size is still needed in Latin American and the Caribbean. However, the existing evidence seems to show a positive association between learning outcomes and small class sizes. For example, a study conducted in Colombia, analysing how headmasters manage the implementation of the National Program of Bilingualism (GNP) suggests that a smaller number of students in a second language class may create an appropriate learning environment because it seems to facilitate the interaction of the students and their continuous communication in the target language, and allow the teacher to provide more timely feedback about students' performance in the different activities.

Another study in Costa Rica shows that lower student/teacher ratios are associated with improvements in the teaching and learning processes.

More research in the region is required on reducing class size, because it is difficult to establish causal claims about the impact of this type of intervention on learning outcomes based on limited evidence. In this sense, schools that implement a strategy like this should be cautious as to how they make any investment of time or resources in reducing class size, especially as the international evidence suggests small changes to class sizes are expensive but not effective.

How secure is the evidence?

Overall, there is a relatively consistent finding that smaller classes are associated with slightly higher attainment when other factors are controlled for and when class sizes have been deliberately reduced in experimental evaluations.

One difficulty in interpreting the evidence about class size is that many countries or schools already teach lower-attaining pupils in smaller groups.





The strongest evidence comes from research into primary schools in the USA where the benefits appear to be sustained for three to four years when classes are reduced below 18. There is some evidence that pupils in disadvantaged areas in the UK benefit from classes of fewer than 20 pupils in primary schools.

What are the costs?

Reducing class sizes to a level where a significant benefit is likely is expensive. The evidence suggests that typical classes would need to be reduced to between 15 and 20 pupils. The additional teacher costs of splitting a class of 30 pupils into two classes of 15 pupils. This does not take into account the cost of additional classrooms. Overall, costs are estimated as high.

What should I consider?

Before you implement this strategy in your learning environment, consider the following:

- 1. Small reductions in class size (for example, from 30 to 25 pupils) are unlikely to be costeffective relative to other strategies.
- 2. Reducing class sizes for younger children may provide longer term benefits.
- 3. Smaller classes only impact upon learning if the reduced numbers allow teachers to teach differently. Have you considered how you will adjust your teaching strategies and what professional development will be required?
- 4. The gains from smaller class sizes are likely to come from the increased flexibility for organising learners and the quality and quantity of feedback the pupils receive (see Feedback). Have you considered how you will organise learning in smaller classes and how you will improve feedback to your pupils?
- 5. As an alternative to reducing class sizes, have you considered changing the way you deploy staff (both teachers and teaching assistants) so that teachers can work more intensively with smaller groups (see Small group tuition)?

SUMMA (2019) Latin American Evidence, Reducing class size.

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