Cross-age peer learning

Peter Tymms and Christine Merrell explain how the initial effort it takes to organise cross-age peer tutoring is an investment that leads to greater learning gains for the tutor and the tutee

ONE OF THE MOST SUCCESSFUL WAYS TO improve children's learning is to use the peer learning classroom approach in which students learn from one another. There are various types of peer learning, such as group work or pairs of children of the same age working together. Then there is cross-age peer tutoring, where an older child teaches a younger one. Cross-age peer tutoring, in our opinion, is the most likely approach to be successful.

Cross-age peer tutoring does not guarantee success. But evidence suggests that children should learn more from a cross-age peer tutoring session than they would in a typical lesson. This is a technique that can change a child's approach to learning and can be transformative.

We have researched the impact of cross-age peer tutoring and same-age peer tutoring in primary schools on a large scale across a whole district. Taking our results and the findings of other studies, we have reached the conclusion that cross-age peer tutoring is an effective method to use to improve children's learning, although it requires effort to set up.

One approach to cross-age peer tutoring

First, choose a topic that is important to you and to the children. It might be in mathematics, reading, science, or indeed in any area – but it must be something where you want learning to happen and where you feel that there is a need for some kind of understanding or cognitive change to take place.

Arrange for two classes to work together. The pupils should be two years apart (eg, Year 5/Grade 4 pupils working with Year 3/Grade 2). Fix a six-week period for the classes to work together in one session per week. This might be the hardest things to arrange! Each session should last about 20 minutes. In the session, the older child is going to tutor the younger one so you need to talk to the older children in advance to explain what to do – what are they going to tutor and how. It really should be something that they have just about understood but are not expert in. This might vary from class to class and from group to group.

> ❝ **Evidence suggests that children should learn more from a cross-age peer tutoring session than they would in a typical lesson** ❞

For the most successful outcome, pair the children according to their ability in that particular area. Rank order the older children and rank order the younger children according to how well they are doing in the subject of interest. Pair the most able older child with the most able younger child and so on down the rank order.

Prepare a worksheet, or worksheets differentiated by ability, for each session and ensure that they include exercises that will require the older pupil to teach and require responses from the tutee. Explain to the older children that they are going to work with a younger child once a week for six weeks.

Explain what the first session will involve – that they will sit with the younger child and work through the sheet you prepared. Explain how they will need to explain some things and then listen carefully to what the younger child says. Prepare the older child

What we know

- Cross-age peer tutoring has excellent support from research and it has been shown to work for all ages and many subjects.
- It does not guarantee success, but it is worth trying.
- A programme of one 20-minute session every week for six weeks is recommended.
- Clear preparation is needed by the teacher and for the tutor.

younger child has understood. The peer-tutor should expect the session to last 20 minutes and at the end will thank the younger child and praise them, saying "I'm looking forward to seeing you next week".

Try to organise the tutoring rooms so that each pair can sit in an area that is a little distance from others to minimise the distraction of pairs working nearby. Since two classes are working together, two classrooms should be available and two teachers will be available for supervision.

At the end of the first week, you need to do a bit of a debriefing. Listen to what the pupils have got to say (both the older and younger ones) and encourage them. You may well find a change in the tutors. To begin with, they might be a bit blasé, but as the weeks progress they will typically take on the responsibility and thrive.

It is important for you to monitor that learning has taken place. You might even set up a proper evaluation. In any case it would be useful to test the older and younger children before and after, just to check that there are no surprises. In the sessions, observe what is happening and try not to intervene unless something is really going wrong. After each session, talk to the tutors and the tutees about how they feel the session has gone.

What can you expect?
It is normally the case that when you get somebody to teach something, they learn it better than when you, the teacher, taught it to the whole group. You can also expect that tutors themselves will gain more. But why should that be? There are many possible explanations; one view is there is more cognitive engagement by the children in this unusual situation. It is one-to-one, which gives personal attention, and you are capitalising on the natural instinct of people to be teachers and to learn. You can expect some of the children to become really engaged and perhaps behave very differently from the way that you have come to expect.

to give positive feedback and when the younger child is successful, praise them. If the younger child is struggling to understand, the peer-tutor needs to suggest ways for the younger child to try and avoid negative comments.

Tutor the tutor
Encourage the older child to think carefully about how to work with the younger child. They should not ask "do you understand?" but rather ask questions to check the

How to take this forward
Cross-age peer tutoring is not a panacea. It does not replace the class teacher and does not deal with all aspects of learning. But it can invigorate learning. We recommend that you have a go and email us to let us know how you get on. *Better: Evidence-based Education* is read widely in the United States and the UK and we will be really interested to see how people respond.

The technique has been used to help very young children, aged six, to write

little booklets and then read their stories to four-year-olds, with 11-year-olds to learn more about mathematics and with 18-year-olds to learn more about organic chemistry. It has also been used to attempt to reduce feelings of racism, enhance modern language teaching, and so on. We acknowledged at the outset that cross-age peer tutoring does not guarantee success, but it is one of the most successful interventions that has been studied in modern education research.

Very good luck to you and do let us know how you get on.

Contact us
The authors are keen to hear from people who use cross-age peer tutoring. Contact Peter Tymms (p.b.tymms@dur.ac.uk).

About the authors
Peter Tymms is Director of iPIPS, an international study of children starting school. His main research interests include monitoring, assessment, interventions, and research methodology. Peter set up PIPS (Performance Indicators in Primary Schools), which runs in thousands of schools around the world.
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Further reading

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