My first day at secondary school was one of trepidation and excitement. A new haircut and a hand-me-down uniform I’d definitely grow into by Christmas. And though the haircuts have changed, I imagine that the sense of uncertainty I felt will be shared by a large majority of the 500,000 11-year olds who will make the transition from primary to secondary school this year.

But unfortunately, we can predict some facts about this group with all too much confidence. If the outcomes of SATs this year follow previous trends, one in seven children will begin secondary school as a struggling reader. In 2013, children from low income families were twice as likely to be behind compared to their peers. For white children from low income families the picture was even worse: over 25% made the transition without achieving Level 4, the minimum expected standard for most 11-year olds.

The educational prospects of children in this group are bleak. If these pupils perform in line with previous pupils like them, approximately 1 in 10 will go on to achieve five or more good GCSEs, including English and maths. The chances of children from low income families within this group catching up are worse still.

We can be confident about these facts because they are not new. Despite repeated efforts, the proportion of struggling readers at the transition has remained static for the last decade.

But there is enough variation among similar schools and English speaking systems for us to believe that the number of children leaving primary school struggling to read can be reduced. The problem is difficult, but not hopeless.

To support struggling readers, primary and secondary schools must be able to base their decisions on accessible, accurate information about what has succeeded and what has failed in the past. We must also work together to test new approaches to build on what has been tried before. The Education Endowment Foundation is currently funding 24 literacy catch-up projects working with over 400 schools to assess their impact on struggling readers.

This *Interim Evidence Brief* is an introduction to evidence about struggling readers at the transition. It sets out the challenge of the reading gap, introduces the catch-up projects funded by the EEF, and reviews the existing evidence base which these programmes seek to extend. It will be followed by a second report next year summarising the findings from all of these studies.

As the report makes clear, the reading gap is stubborn and wide, and there are no quick fixes. But some approaches offer greater promise than others. Using evidence will increase the chances of the 11-year olds who need our help.

**Dr Kevan Collins**  
**Chief Executive**  
**Education Endowment Foundation**
Overview

In May 2012, the Education Endowment Foundation (EEF) opened a funding round dedicated to literacy catch-up projects for children at the transition from primary school to secondary school. Twenty-four projects were funded within the round, each testing an approach to supporting pupils not achieving Level 4 in English by the end of Key Stage 2.

This *Interim Evidence Brief* aims to:

- Assess the size, scale and stubbornness of the reading gap at the transition from primary to secondary school
- Provide information about 24 literacy catch-up projects which are being tested by the EEF
- Review the wider evidence from the UK and overseas on a range of catch-up approaches for struggling readers at the transition from primary to secondary school

A second report, incorporating findings from all approaches tested through the EEF’s literacy catch-up round, will be published in 2015.

## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>2</td>
</tr>
<tr>
<td>Overview</td>
<td>3</td>
</tr>
<tr>
<td>The reading gap</td>
<td>4</td>
</tr>
<tr>
<td>EEF literacy catch-up projects</td>
<td>6</td>
</tr>
<tr>
<td>Wider evidence</td>
<td>8</td>
</tr>
<tr>
<td>One to one tuition</td>
<td>9</td>
</tr>
<tr>
<td>Oral language approaches</td>
<td>11</td>
</tr>
<tr>
<td>Phonics approaches</td>
<td>12</td>
</tr>
<tr>
<td>Reading comprehension approaches</td>
<td>13</td>
</tr>
<tr>
<td>Small group tuition</td>
<td>14</td>
</tr>
<tr>
<td>Summer schools</td>
<td>15</td>
</tr>
<tr>
<td>Conclusions</td>
<td>16</td>
</tr>
<tr>
<td>Further reading</td>
<td>17</td>
</tr>
<tr>
<td>References</td>
<td>17</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>17</td>
</tr>
</tbody>
</table>
The reading gap

In 2013, between the end of Key Stage 1 and Key Stage 2, most pupils were expected to make two levels of progress with the majority expected to reach at least Level 4 by age 11.\(^1\)\(^2\)

To achieve this, it is necessary for each pupil to make an average of three sub-levels of progress every two years, or one sub-level every eight months. Based on this rate of progress, pupils achieving Level 3b are approximately 16 months behind those at Level 4c. In 2013, 75,000 children – approximately 1 in 7 – made the transition from primary to secondary school without having achieved Level 4 in reading: the minimum expected level for most 11-year olds.\(^1\) 58,000 pupils were at or below Level 3b.\(^3\)

Compared to their peers, pupils eligible for free school meals are more than twice as likely to begin secondary school without having achieved Level 4, and those that are behind are likely to be further behind than other struggling readers. In 2013, 27% of White British pupils eligible for free school meals did not achieve Level 4 (see Figure 1).

Figure 1. Struggling readers by group
In recent years the proportion of children not achieving Level 4 in reading has remained at a similar level; every year between 2007 and 2013 between 13% and 17% of pupils have not achieved Level 4 (see Figure 2).

Figure 2. How stubborn is the gap?

Less than one fifth of pupils who did not reach Level 4 in English overall in 2008 went on to achieve a C or above at English GCSE, compared with four-fifths of pupils who achieve Level 4 or above.\(^4\)

Only 11% of pupils who did not reach Level 4 in English overall in 2008 went on to achieve five or more A*-C grades at GCSE, including English and maths, compared to 72% of pupils who achieve a Level 4 or above.\(^5\)
Interim Evidence Brief: Reading at the Transition

EEF literacy catch-up projects

In May 2012, the EEF launched a grants round dedicated to literacy catch-up projects for children at the transition from primary to secondary school.

In total, 24 projects were funded through the round testing a range of catch-up approaches. Most projects involved one to one or small group support delivered in the final term of Year 6, during the summer holiday or in the first term of Year 7. Projects commonly provided one or a combination of: phonics, reading comprehension or oral language support.

For all projects an independent evaluation was commissioned, to assess the impact and potential of the approach. The progress of pupils following each approach was compared to a similar group continuing with normal lessons.

In total, 490 schools across England participated in a project in the round. The first individual project findings from the round were published in February 2014 (see Boxes 1 and 2 for examples). A full list of literacy catch-up projects funded by the EEF is set out in Figure 3, opposite.

Box 1. Switch-on Reading

Switch-on Reading is an intensive 10-week literacy intervention with phonics and reading comprehension components. It was delivered on a one to one basis by staff, most commonly teaching assistants, who had been trained in the approach. The programme involved regular sessions for struggling readers in Year 7, who attended regular 20-minute reading sessions.

Switch-on Reading was independently evaluated using a small-scale randomised controlled trial involving 19 schools in Nottinghamshire. On average, pupils receiving the intervention made three additional months’ progress compared to similar pupils who did not receive the intervention, and the approach also appeared to be effective for weak and disadvantaged readers.

The full evaluation report is available here.

Box 2. Future Foundations

The Future Foundations summer school programme was a literacy and numeracy catch-up intervention for pupils in Year 5 and Year 6 that provided extra schooling in the summer holidays. Pupils attending the four-week programme followed a specially designed curriculum involving regular literacy and numeracy lessons taught by trained primary and secondary school teachers. Lessons were supported by mentors and peer-mentors and generally conducted in small teaching groups.

The summer school was also evaluated using a randomised controlled trial. Though the evaluation’s conclusions were weakened by its small size and by pupil drop-out, the independent evaluation team identified evidence of promise for English, particularly for pupils eligible for free school meals and for Year 5 pupils.

The full evaluation report is available here.
### Figure 3. Literacy catch-up projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Delivery point</th>
<th>Related Toolkit strands</th>
<th>More information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Reader</td>
<td>An online programme that encourages reading for pleasure.</td>
<td>Year 7</td>
<td>Digital technology, Reading comprehension</td>
<td>Project summary</td>
</tr>
<tr>
<td>Butterfly Phonics</td>
<td>A phonics programme delivered by volunteers.</td>
<td>Year 7</td>
<td>Phonics</td>
<td>Project summary</td>
</tr>
<tr>
<td>Catch Up Literacy</td>
<td>A literacy intervention delivered by trained teaching assistants.</td>
<td>Year 6, Year 7</td>
<td>One to one tuition, Teaching assistants</td>
<td>Project summary</td>
</tr>
<tr>
<td>Chatterbooks</td>
<td>Library-based support encouraging reading for pleasure.</td>
<td>Year 7</td>
<td>Oral language, Collaborative learning</td>
<td>Evaluation report</td>
</tr>
<tr>
<td>Discover Summer School</td>
<td>A creative writing summer programme.</td>
<td>Summer</td>
<td>Summer schools, Small group tuition</td>
<td>Evaluation report</td>
</tr>
<tr>
<td>Fresh Start</td>
<td>A popular phonics programme.</td>
<td>Year 7</td>
<td>Phonics, Reading comprehension</td>
<td>Project summary</td>
</tr>
<tr>
<td>Future Foundations</td>
<td>A four-week academic summer school.</td>
<td>Summer</td>
<td>Summer schools, Small group tuition</td>
<td>Evaluation report</td>
</tr>
<tr>
<td>Graduate Coaching Programme</td>
<td>An academic coaching programme.</td>
<td>Year 7</td>
<td>One to one tuition</td>
<td>Project summary</td>
</tr>
<tr>
<td>Grammar for Writing</td>
<td>A whole class or small group writing approach.</td>
<td>Year 6</td>
<td>Small group tuition</td>
<td>Evaluation report</td>
</tr>
<tr>
<td>Peer Tutoring in Secondary Schools</td>
<td>A cross-age paired reading programme.</td>
<td>Year 7</td>
<td>Peer tutoring</td>
<td>Project summary</td>
</tr>
<tr>
<td>Quest</td>
<td>Collaborative learning and individualised teaching in literacy.</td>
<td>Year 7</td>
<td>Collaborative learning, Phonics</td>
<td>Project summary</td>
</tr>
<tr>
<td>Rapid Phonics</td>
<td>A phonics programme for older readers.</td>
<td>Year 6, Year 7</td>
<td>Phonics</td>
<td>Project summary</td>
</tr>
<tr>
<td>REACH</td>
<td>A phonics and comprehension programme.</td>
<td>Year 7</td>
<td>Phonics, Reading comprehension</td>
<td>Project summary</td>
</tr>
<tr>
<td>Response to Intervention</td>
<td>A targeted programme for struggling pupils.</td>
<td>Year 6</td>
<td>One to one tuition, Mastery learning,</td>
<td>Evaluation report</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Small group tuition</td>
<td></td>
</tr>
<tr>
<td>Rhythm for Reading</td>
<td>Rhythm-based exercises which aim to improve literacy.</td>
<td>Year 7</td>
<td>Arts participation</td>
<td>Evaluation report</td>
</tr>
<tr>
<td>SHINE in Secondaries</td>
<td>Saturday schools for struggling readers.</td>
<td>Year 7</td>
<td>After school programmes</td>
<td>Project summary</td>
</tr>
<tr>
<td>Summer Active Reading Programme</td>
<td>A programme providing reading material, events and support.</td>
<td>Summer</td>
<td>One to one tuition, Reading comprehension</td>
<td>Project summary</td>
</tr>
<tr>
<td>Switch-on Reading</td>
<td>An intensive 10-week literacy intervention.</td>
<td>Year 7</td>
<td>One to one tuition, Phonics, Reading</td>
<td>Evaluation report</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>comprehension, Teaching assistants</td>
<td></td>
</tr>
<tr>
<td>Talk for Literacy</td>
<td>Three speaking and listening interventions.</td>
<td>Year 7</td>
<td>Oral language</td>
<td>Project summary</td>
</tr>
<tr>
<td>Team Alphie</td>
<td>Collaborative learning in literacy using a computer programme.</td>
<td>Year 6</td>
<td>Small group tuition, Collaborative learning,</td>
<td>Project summary</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Digital technology</td>
<td></td>
</tr>
<tr>
<td>TextNow</td>
<td>A volunteer-led reading programme.</td>
<td>Year 6, Year 7</td>
<td>One to one tuition, Reading comprehension</td>
<td>Project summary</td>
</tr>
<tr>
<td>Units of Sound</td>
<td>A computer-based phonics programme.</td>
<td>Year 7</td>
<td>Digital technology, Phonics</td>
<td>Project summary</td>
</tr>
<tr>
<td>Using Self-Regulation to Improve</td>
<td>A programme which aims to improve pupils' writing and self-regulation.</td>
<td>Year 6, Year 7</td>
<td>Meta-cognition and self-regulation</td>
<td>Evaluation report</td>
</tr>
<tr>
<td>Writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary Enrichment Intervention</td>
<td>A reading intervention aimed at increasing vocabulary.</td>
<td>Year 7</td>
<td>Reading comprehension</td>
<td>Project summary</td>
</tr>
</tbody>
</table>
Wider evidence

All projects funded through the EEF’s literacy catch-up round seek to build on existing evidence from the UK and overseas. Findings will be published and synthesised into the *Teaching and Learning Toolkit*, a resource produced by the EEF in collaboration with the Sutton Trust and Durham University that provides an accessible introduction to educational research. By combining findings from a larger number of studies, the *Toolkit* provides a comparative overview of the cost, average impact and evidence strength underpinning particular approaches.

Evidence can be used to support decision-making, for example about the Pupil Premium, worth £1,300 per eligible pupil in primary school and £935 per eligible pupil in secondary school in 2013/14, or the Year 7 Catch-up Premium, worth £500 per pupil for those who did not achieve Level 4 in English or maths.

However, there are no guaranteed solutions or quick fixes. In short, evidence can act as a supplement for professional judgement, but not as a substitute. When using evidence to support struggling readers, evaluation and careful implementation are both important (see Box 3, below).

### Using evidence in practice

1. **Understanding the problem**
   The effectiveness of any catch-up approach is related to the pupil’s current reading level. Effective diagnostic assessment to identify whether problems are predominantly related to word recognition, vocabulary knowledge, comprehension or a combination can help.

2. **Consideration of evidence**
   Evidence can provide information about potential catch-up strategies, and act as a starter for discussion and aid an assessment of alternative options.

3. **Careful implementation**
   The effectiveness of any approach will depend on how it is applied. Taking time to plan, train staff and monitor implementation is likely to increase impact.

4. **Evaluation**
   Not every approach will work with every child. Evaluate to identify whether an approach is working and how it might be improved in the future.

5. **Embedding a strategy**
   An effective catch-up strategy is likely to require a combination of interventions over a number of years. Setting aside time to review your approach and co-ordinate this activity is highly worthwhile.
In this *Interim Evidence Brief*, existing evidence from six areas of the *Toolkit* relating to struggling, older readers is presented. In total, approximately 1,200 studies, including recent studies from the UK and the first findings from EEF catch-up projects, are included. Approaches are not mutually exclusive and interventions can be included in more than one section.

In some cases, due to the narrower focus on struggling, older readers in this report, findings may differ from overall findings in the *Toolkit*. For example, on average, phonics approaches appear to be slightly more effective for younger pupils than for older, struggling readers, meaning that the overall headline finding in the *Toolkit* is slightly higher.

Details of how effect sizes are calculated and converted can be found in the Technical Supplement, in addition to full references for all strands. The Technical Supplement is available on the EEF website, [here](#).

<table>
<thead>
<tr>
<th>Approach</th>
<th>Cost</th>
<th>Evidence strength</th>
<th>Average impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>One to one tuition</td>
<td>£ £ £ £ £ £ £</td>
<td></td>
<td>+5 months</td>
</tr>
<tr>
<td>Moderate impact for high cost, based on extensive evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral language approaches</td>
<td>£ £ £ £ £ £ £</td>
<td></td>
<td>+2 months</td>
</tr>
<tr>
<td>Low impact for low cost, based on moderate evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phonics approaches</td>
<td>£ £ £ £ £ £ £</td>
<td></td>
<td>+3 months</td>
</tr>
<tr>
<td>Moderate impact for moderate cost, based on moderate evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading comprehension approaches</td>
<td>£ £ £ £ £ £ £</td>
<td></td>
<td>+4 months</td>
</tr>
<tr>
<td>Moderate impact for moderate cost, based on moderate evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small group tuition</td>
<td>£ £ £ £ £ £ £</td>
<td></td>
<td>+4 months</td>
</tr>
<tr>
<td>Moderate impact for moderate cost, based on limited evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer schools</td>
<td>£ £ £ £ £ £ £</td>
<td></td>
<td>+3 months</td>
</tr>
<tr>
<td>Moderate impact for very high cost, based on limited evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
One to one tuition

What is it?
One to one tuition is where an individual pupil is removed from their class and given intensive tuition. It may also be undertaken outside of normal school time, for example as part of after school programmes or summer schools.

How effective is it as a reading catch-up approach?
Evidence indicates that as a reading catch-up approach one to one tuition can be effective, on average accelerating learning by approximately five additional months’ progress.

Short, regular sessions (about 30 minutes, 3-5 times a week) over a set period of time (6-12 weeks) appear to result in optimum impact. Evidence also suggests tuition should be additional but explicitly linked to normal teaching and that teachers should monitor progress to ensure the tutoring is beneficial.

Studies comparing one to one to small group tuition show mixed results. In some cases one to one tuition has led to greater improvement, while in others tuition in groups of two or three, has been as or more effective. The variability in findings may suggest that the quality of teaching in one to one tuition or small groups is more important than the group size, emphasising the value of professional development for tutors.

Programmes involving volunteers or teaching assistants can have an impact, but tend to be less effective than those using experienced and specifically trained teachers, which have nearly twice the effect on average. Where tuition is delivered by volunteers or teaching assistants there is evidence that training is beneficial.

How secure is the evidence?
Overall, the evidence base looking at one to one tuition is consistent and strong, including a number of meta-analyses and studies in English schools.

There are very few studies where group size has been varied systematically to explore effects in comparison groups of two or three pupils so more research would be useful in this area.

What are the costs?
Overall, costs are estimated as high. A single pupil receiving 30 minutes tuition, five times a week for 12 weeks requires about four full days of a teacher’s time, estimated to cost approximately £800 per pupil. Costs could be reduced by trialling groups of two or three (see Small group tuition).

Discussion starters
1. One to one tuition is very effective in helping learners catch up, but is relatively expensive. Could you consider trialling groups of two or three initially and evaluating the impact?
2. Tuition is more likely to make an impact if it is explicitly linked to normal lessons. Have you considered how you will support pupils and regular class teachers to ensure the impact is sustained once they return to normal classes?
3. When tuition is delivered by teaching assistants training is likely to be particularly beneficial. What training and support have you provided? Have any programmes you are adopting been evaluated?
Oral language approaches

Oral language interventions emphasise the importance of spoken language and verbal interaction in the classroom. They are based on the premise that comprehension and reading skills benefit from explicit discussion of either the content or processes of learning, or both. Approaches in this area have some similarity to approaches based on meta-cognition and collaborative learning. Meta-cognition involves making talk about learning explicit in classrooms and collaborative learning approaches promote talk and group interaction.

On average, older, struggling readers following oral language approaches make approximately two months of additional progress. Although oral language approaches can be more effective as part of a wider reading catch-up strategy, in isolation they appear to be more effective for younger pupils than older children.

Some types of oral language interventions appear to be more promising at supporting reading catch-up than others. Approaches which involve peer discussion of texts have been found to be effective, as have those which involve active use of the new vocabulary. Most studies comment on the importance of training and professional development of the teachers or teaching assistants involved. Approaches which use technology are most effective when technology is used as a medium to encourage collaborative work and interaction between pupils, rather than it taking a direct teaching or tutoring role.

Oral language approaches tend to be less effective when they are not explicitly connected to curriculum content currently being studied.

Overall, the evidence base for oral language approaches as a reading catch-up approach is assessed as moderately secure. Although a greater number of studies relate to younger children, several high-quality studies involving low attaining students aged 8-14 have been conducted, and the findings are relatively consistent.

The evidence base could be improved by examining the impact of specific programmes or approaches to particular learners' needs either by age or by attainment.

The cost of oral language approaches is estimated as low, up to about £170 per pupil per year including the cost of professional development for staff. Cheaper approaches delivered by volunteers are possible, but are likely to have a lower impact.

Discussion starters

1. Making learning explicit and encouraging pupils to talk about what they are doing supports their learning. Will the pupils need any training or support to talk together effectively?
2. Collaborative oral language approaches can be effective. However pupils are likely to need support to make them work. How will you ensure pupils are able to ask useful questions of each other?
3. Support needs to be related to learners’ current stage of capability so that the emphasis on oral language extends and supports their learning. Have you used diagnostic assessment prior to introducing an intervention?
Phonics approaches

Phonics approaches aim to teach pupils the relationship between sound patterns ('phonemes') and the written spelling patterns ('graphemes') which represent them. Phonics emphasises the skills of decoding new words by sounding them out and combining or 'blending' the sound-spelling patterns.

On average, as a catch-up approach for older, struggling readers phonics has an impact of about three months’ additional progress. This is slightly weaker than its effect on younger readers, where studies suggest that phonics tends to be more effective than other approaches such as whole language or alphabetic strategies.

The difference may indicate that children who have not succeeded using phonics approaches previously require a different approach once they have reached Year 6 or Year 7, or that they have other difficulties related to vocabulary and comprehension which phonics does not target. It is also the case that younger readers generally make progress at a slightly quicker rate, and this may account for some of the difference.

For all age groups, it appears that phonics techniques are usually more effective when embedded in a rich literacy environment, as just one part of a successful literacy strategy. Where phonics is used as a reading catch-up approach, using age-appropriate material is likely to be important.

A 2011 review by Snowling and Hulme outlined the evidence that pupils can experience two different forms of reading problem: decoding difficulties caused by problems with phonological processing and reading comprehension difficulties including problems with semantics and grammar. Effective diagnosis and an understanding of the causes of reading difficulty are therefore essential to identify when phonics is most likely to be effective.

Phonics approaches delivered by teaching assistants can increase learning. However, studies involving qualified teachers delivering phonics interventions have tended to show higher results (approximately twice the effectiveness of others on average).

Overall, the evidence base for phonics as a reading catch-up approach for older, struggling readers is assessed as moderately secure. Fewer studies have looked at the impact of phonics as a reading catch-up intervention for older readers, than have looked at younger readers, but a number of recent studies have been conducted, showing relatively consistent results.

As a catch-up approach, commonly delivered individual or to small groups, the cost of phonics is estimated as moderate. The estimate here is based on the costs of Switch-on Reading (£627 per pupil, see p.6), which included a phonics component and was delivered in small groups, usually by teaching assistants.

Discussion starters
1. Phonics is more likely to improve attainment if age-appropriate material is used. Are the materials used engaging for the target group?
2. Phonics should be matched to children’s current level of skill in terms of their phonemic awareness and their knowledge of letter sounds and patterns. Have you assessed these carefully?
3. Phonics improves the accuracy and fluency of a pupil’s reading but not necessarily their comprehension. How are you planning to develop wider literacy skills?
Reading comprehension approaches focus on learners’ understanding of words and texts. They seek to develop pupils’ skills through the explicit teaching and application of strategies focusing on meaning. Examples include techniques which pupils can use to monitor their own understanding, such as inferring meaning from context, summarising or identifying key points, and developing questioning strategies.

On average, for older, struggling readers reading comprehension approaches have an impact of about four months’ additional progress.

Many reading comprehension approaches can be usefully combined with collaborative- and peer-learning techniques. Some studies have indicated that computer-based tutoring approaches can be successful in improving reading comprehension, particularly when they focus on the development of skills such as self-questioning, though more evidence is needed in this area. When reading expository or information texts, techniques such as planners and text organisers which draw pupils’ attention to text structures are likely to be particularly useful.

Reading comprehension approaches appear to be less effective when learners lack particular phonic skills or the basic vocabulary required to comprehend the text, so it is important that teachers are able to assess pupils’ needs effectively prior to adopting an intervention. In addition, observational evidence suggests teachers tend to rely on a narrow range of comprehension strategies in their teaching, so it is likely that this is an area where high-quality professional development is helpful.

Overall, the evidence base of reading comprehension as a reading catch-up approach for older, struggling readers is assessed as moderately secure. This includes a number of high-quality recent studies, with reasonably consistent results.

As a catch-up intervention, commonly delivered in small groups or on a one to one basis, the cost of reading comprehension approaches is estimated as moderate.

Whole class or volunteer-led approaches can be significantly cheaper, but on average appear to be less effective, so a higher estimate, based on the cost of Switch-on Reading (£627 per pupil, see p.6), is used here.

Discussion starters

1. Effectively diagnosing reading difficulties is an important first step, particularly for older struggling readers. Are you confident as to whether the problem(s) a pupil has are related to decoding, the structure of language or vocabulary, which may be subject-specific?
2. Approaches to increase pupils’ vocabulary are not likely to improve reading comprehension unless vocabulary is taught in context. Is this happening?
3. Successfully adopting new reading comprehension interventions is likely to benefit from high-quality professional development. How are you planning to support teachers or teaching assistants in delivering new approaches?
Small group tuition

Intensive tuition in small groups is usually provided to support lower attaining learners or those who are falling behind, though it can also be used as a more general strategy to ensure effective progress, or to teach challenging topics or skills. Here, small group tuition is defined as one teacher or professional educator working with two, three, four or five pupils.

On average, as a catch-up approach for older, struggling readers, small group tuition has an impact of four additional months’ progress.

Studies comparing different group sizes show mixed results. Once group size increases to six or above there is a clear reduction in effectiveness compared to smaller groups. However, below this level the benefits of smaller groups are less clear, with some studies suggesting that groups of three or four pupils can sometimes be as or more effective than either one to one or paired tuition. It may be that in these cases reading practice can be efficiently organised so that all the group stay fully engaged as each take their turn, such as in Guided Reading.

The variability in findings suggests two things. First, the quality of the teaching in small groups may be as or more important than group size. This is supported by evidence showing the positive impact of professional development on outcomes.

Second, it is important to evaluate the effectiveness of different arrangements as the specific subject matter being taught and composition of the groups may influence outcomes. Given that small group tuition and one to one tuition have a similar average impact, and that small group tuition has a lower per pupil cost, it may be sensible to trial small group tuition as an initial option, before moving to one to one tuition if small group tuition is ineffective.

More research has been undertaken into paired tuition than other kinds of small group tuition, so the evidence for small group teaching across varying sizes of groups and at different levels of intensity is not conclusive and mainly comes from single studies. There are very few studies where group size has been varied systematically to explore the effects beyond one-to-two and one-to-three so more research would be useful in this area.

A recent EEF evaluation of Switch-on Reading, a small group intervention usually delivered by teaching assistants (see p.6), found that Year 7 pupils made an additional three months of progress.

The cost of one to two tuition has been estimated as £400 per pupil per term (based on two pupils receiving 30 minutes tuition, five times a week for 12 weeks) plus any resource or equipment costs, with one to three cheaper still (£270 per pupil). Costs are therefore estimated as moderate.

Discussion starters
1. Small group tuition is most likely to be effective if it is targeted at pupils’ specific reading problems. How will you assess pupils’ needs accurately before adopting a new approach?
2. One to one tuition and small group tuition are effective interventions. However, the cost effectiveness of one to two and one to three indicates that greater use of these approaches may be worthwhile. Have you considered trialling one to two or one to three as an initial option?
3. Training and support are likely to increase the effectiveness of small group tuition. Have those leading the small group tuition been trained in the programme they are delivering?
Summer schools

What is it?

Summer schools are lessons or classes during the summer holidays, commonly run as catch-up or enrichment programmes. Some summer schools do not have an academic focus and concentrate on sports or other non-academic activities.

How effective is it as a reading catch-up approach?

The effects of summer schools on older, struggling readers are reasonably consistent, and show an average impact of about three months’ additional progress.

The evidence indicates that intensive, well-resourced summer schools, usually with small classes or involving small group tuition by trained and experienced teachers, can have higher impacts and improve pupils’ reading skills by as much as four months. However, summer schools without a clear academic component are not usually associated with learning gains.

Other variables seem to make less difference on average, such as whether the teacher is one of the student’s usual teachers.

How secure is the evidence?

Overall, the evidence base looking at the impact of summer schools as a catch-up intervention is limited. There are a number of meta-analyses, which find broadly similar effects, but are mostly based on studies in the USA. A large number of evaluations do not include an assessment of academic impact.

Two recent randomised controlled trials of summer schools at the transition from primary to secondary school have been funded by the EEF. Though these studies showed overall impacts which were consistent with existing evidence, both experienced problems with recruitment and retention of students, weakening their individual contributions to the evidence base.

What are the costs?

The cost of summer schools as a reading catch-up approach is estimated as very high.

The cost of the Future Foundations summer school (see p.6) was estimated at £1,370 per pupil. This estimate includes administration, resources and activities (estimated at £350 per pupil), salary costs and training (£835) and food and transport (£185). Estimates were based on 256 pupils attending a school on a single site.

Discussion starters

1. Summer school provision that aims to improve learning needs to have an academic component. Does your summer school include intensive tutoring (one to one or small group)?
2. Summer schools are relatively expensive. Have you considered alternative approaches delivered during the school year which may provide similar benefits for a lower cost?
3. Maintaining high attendance at summer schools can be a challenge. If you are running a summer school, what steps might you take to engage pupils and their families?
Conclusions

1. The educational chances of pupils who begin secondary school without having achieved Level 4 in reading are very poor. In 2013, 75,000 children began secondary school without a Level 4 in reading. If these pupils perform similarly to those who did not achieve Level 4 in English overall in 2008, approximately 1 in 10 will achieve 5A*-C, including English and Maths at GCSE.

2. Due to the size of the gap, helping struggling readers catch-up with their peers in Year 6 is very challenging. It is highly unlikely that any single approach will be sufficient to close it. This emphasises the importance of using evidence to identify the most promising approaches and underlines the value of effective intervention in Key Stage 1 and the early years.

3. The effectiveness of any reading catch-up approach is related to the pupil’s current reading level, so it is important that staff have skill and training in diagnostic assessment, as well as in delivering any particular intervention. Assessment should help identify whether problems are predominantly related to word recognition, vocabulary knowledge, comprehension or a combination of the above.

4. Both one to one and small group tuition can help pupils catch up. One to one has a slightly higher average impact and a more secure evidence base, but in some cases small group tuition can be as effective. Given its lower cost, schools could consider trialling small group tuition as a first option, before moving to one to one tuition if small group tuition is ineffective.

5. On average, reading comprehension approaches appear to be more effective for low attaining older readers than phonics or oral language approaches. However, supporting struggling readers is likely to require a concerted effort across the curriculum, and a combination of approaches. It may be that children who have not succeeded using phonics previously will benefit from approaches which place a greater emphasis on meaning and context. Where phonics is used, age-appropriate materials delivered by trained professionals appear to be most effective.

6. Summer schools can improve reading ability but their effectiveness will be limited by the quality of teaching which takes place. In addition, it is possible that other approaches delivered in school may be more cost-effective.

7. For all approaches on-going evaluation is essential. Not every approach will work with every child. Schools should evaluate to identify whether an approach is working and how it might be improved in the future.
Further reading


References


2. In 2013 the Department for Education announced that schools would no longer be required to use national curriculum levels.

3. Figures provided by the Department for Education. With thanks to Kylie Hill and Jo Hutchinson.

4. Ibid.

5. Ibid.


Acknowledgements

With thanks to Andy Cawthera, Peter Henderson, Lee Elliot Major, James Richardson, Jonathan Sharples, Robert Slavin and David Waugh for guidance and comments on previous drafts, and to Rebecca Clegg for help with formatting and design.
You may re-use this document/publication (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence v2.0.

To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned. The views expressed in this report are the authors’ and do not necessarily reflect those of the Department for Education.

This document is available for download at www.educationendowmentfoundation.org.uk.