Part 1. Description

<table>
<thead>
<tr>
<th>Name / Title of intervention</th>
<th>Paired Reading</th>
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<tr>
<td><strong>1. Abstract</strong></td>
<td>Paired Reading, a freely available cross-ability tutoring method, is a procedure for the tutoring of reading by non-professionals, for example, parents or peers. It was designed by Roger Morgan to meet two basic criteria: first, general applicability through inherent flexibility and a capacity to adapt to individual and changing reading performance, and second, sufficient simplicity to be used effectively by a child’s own parents at home with a minimum of professional training and supervision. It first appeared in the literature in the mid-seventies (Morgan, 1976) and has been in use in various forms ever since, particularly in Scotland. Paired Reading has been used widely in the UK since the late 1970s and is one of the practices advertised and recommended by the National Literacy Trust. A number of studies of the practice have been carried out in the decades since its introduction. A recent large-scale study examined it as a potential means for raising reading attainment, particularly among boys and students of lower socio-economic status in a Local Authority in Scotland. This study approximates to, but is not exactly, a randomised controlled trial. It was an attempt to scale up previous small peer tutoring projects, while investing only modestly in continuing professional development for teachers. This is reported in the ‘Evaluation’ section at 19 and 20 below.</td>
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<td><strong>2. Nation</strong></td>
<td>Scotland (and England)</td>
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<td><strong>3. Website</strong></td>
<td><a href="http://www.literacytrust.org.uk/assets/0001/1015/Paired_reading_scheme_toolkit.pdf">http://www.literacytrust.org.uk/assets/0001/1015/Paired_reading_scheme_toolkit.pdf</a></td>
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<td><a href="http://www.dundee.ac.uk/eswce/research/resources/thinkingreadingwriting/#d.en.158378">http://www.dundee.ac.uk/eswce/research/resources/thinkingreadingwriting/#d.en.158378</a></td>
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<td>4. Lead organisation</td>
<td>School of Education, University of Dundee, Scotland</td>
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<td>5. Main partners</td>
<td>Generally: National Literacy Trust</td>
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<td>6. Period of activity</td>
<td>Late 1970s to present.</td>
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<td>7. Language(s)</td>
<td>English</td>
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<td>8. Conceptual basis of the good practice examples</td>
<td>Weak readers tend to suffer from ‘learned helplessness’ and a low self-concept of their ability: they have lower initial estimates of success, less persistence, greater attribution of failures to lack of ability, greater attribution of successes to factors beyond personal control, and greater reduction in expectancy of success after the experience of failure (Butkowsky and Willows, 1980). Paired reading helps such readers believe they can read and gives them extensive experience of reading. It also reduces stress by giving support within a maximum period of 4-5 seconds.</td>
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<td>There is also some fairly strong evidence that weak and novice readers are usually less able, and consequently less willing, to use a wide range of strategies in reading, including the psycholinguistic, and they may tend to depend heavily on a single, often phonic, approach (Hutson et al., 1980). Paradoxically, there is associated evidence that teachers tend to reinforce this over-dependence, not only by over-teaching analytic decoding skills and encouraging readers to process very small units of information consecutively, but also by interrupting weak readers to give phonic prompts far more often, in proportion to mistakes made, than they do with competent readers. This constant interruption further reduces the contextual clues available to the reader. Types of teacher interruption behaviour also differ as a function of reading ability level (Allington, 1980).</td>
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<td>In contrast, Paired Reading (PR) is clear and straightforward and emphasises flow, context and extracting meaning (although it is compatible with ‘sounding out’ providing this can be done quickly; Topping and Lindsay 1992a). It increases individual attention and amount of reading practice. Children pursue their own interests and are likely to enjoy this, but challenge is important. There is no failure – it is impossible not to get a word right within four seconds. It is flexible – the amount of support</td>
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adapts to the current degree of tutee tiredness, amount of confidence, difficulty of the books, and so on. Modelling of articulation and expressiveness is included. It is democratic – tutees control half the process, tutors the other half – and thus likely to enhance engagement and raise confidence.

The use of texts of the tutee’s own choice is based on evidence of the superior effect of individualized reading over core reading schemes (Tunnel and Jacobs, 1989; Eldredge and Butterfield, 1986)

Tutoring procedures are most effective when thoroughly scaffolded (Sharpley and Sharples 1981; Cohen et al. 1982; Topping and Ehly 1998). Untrained tutoring behaviours tend to be primitive (e.g. Person and Graesser 1999), characterised by infrequent correction of errors and inappropriate giving of positive feedback. Roscoe and Chi (2007) suggested that analyses of actual behaviours are important in enhancing the effectiveness of tutoring. The PR technique is structured, but that does not mean all participants follow the structure.

9. Objectives
To raise reading attainment, particularly among boys and students of lower socio-economic status.

10. Target group(s)
Over past decades, Paired Reading has been used with struggling readers aged from 6 to adult. It has been much used with children from lower socio-economic backgrounds.

Originally developed as a technique for low ability readers, it has been widely used with readers of all abilities throughout the primary school. At secondary school it is more used with students with reading difficulty, and at the adult level almost exclusively so.

11. Number of people involved
It is not easy to assess what proportion of the UK school population has been involved over the years. The study outlined at 19 and 20 below involved all the children of the ages of 8 and 10 years, in one Local Authority in Scotland (Fife). There have been previous projects in Scotland that involved a great many schools. Many other schools in other parts of the UK have also used Paired Reading during this time.

12. Methods for recruiting participants (target group)
Generally schools have been made aware of Paired Reading through their Local Authorities, the National Literacy Trust and various publications.

In the case of the study reported at 19 and 20 below, an
13. Professionals involved

Teachers, but, apart from initial training of tutors, those principally involved have been parents or fellow pupils of the target students.

14. Role of each professional

Consultants or advisers often work with schools to provide initial training for teachers and to support the school with a new project. However, many schools develop Paired Reading on their own initiative. Teachers are the principal profession involved, and are responsible for planning, operating and evaluating projects.

15. Main activities

Tuition is undertaken using a book of the child’s choice, suitable for his or her interests and chronological age rather than being restricted to his or her reading age. Sessions begin with both more and less proficient readers reading simultaneously and aloud, the tutor (the more proficient reader) thus providing a continuous prompt or model for the tutee (the less proficient reader).

When the tutee is sufficiently confident to read a few words or a passage alone, he or she signals this by knocking on the table. The tutor praises this, stops reading with the tutee and the tutee continues reading aloud alone. While the tutee is reading alone correctly, the tutor reinforces the correct reading by frequent praise or feedback, using positive comments suitable for the individual child.

When the tutee becomes ‘stuck’ or makes a mistake while reading alone (this is pointed out by the tutor if the child does not realise that a mistake has been made), the tutor allows approximately 4 seconds for further attempts. If the tutee is unable to resolve the problem in this time, the tutor supplies the correct word, the tutee repeats it with the tutor, and simultaneous reading is resumed again until the tutee ‘knocks’ (Morgan and Gavin, 1988).

16. Implementation process

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<th>Planning</th>
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<td>Operating</td>
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<tr>
<td>Considering extension or follow-up of this project</td>
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<td>Evaluating</td>
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<td>Extending into new projects</td>
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### 17. Resources and materials

This project involves no extra resources, apart from time and expertise involved in the initial training of teachers and tutors.

Typically books already in use in the school are made available. Sometimes schools request additional collections of books from the Library Service.

The training and information resources are all freely available at: [http://www.dundee.ac.uk/ewsce/research/resources/thinkingreadingwriting/#d.en.158378](http://www.dundee.ac.uk/ewsce/research/resources/thinkingreadingwriting/#d.en.158378)

### 18. Financing

The peer tutoring programme typically operates within schools and uses no funds other than the time of the teacher and access to books already available.

The parent tutoring programme typically operates as an outreach programme from schools and uses these resources, plus in addition some time for home visiting if it felt that the project needs that kind of support. Home visiting can be done by teachers, but also by other kinds of professionals or by volunteer parents who are graduates of previous projects.

Teachers do require some initial training and if this takes place during the school day there is the issue of providing supply cover (temporary teaching staff) for their classes, which rapidly becomes expensive. Accordingly, schools typically plan such training well in advance so it fits within their existing pattern of professional development days.

Of course there is an opportunity cost in that the teachers would be doing something else if they were not doing Paired Reading.

Where any decisions about budgets are needed, the individual school head teacher typically makes that decision. In larger projects (e.g. the Fife project mentioned above) there was some money to pay for consultants who visited schools to provide further support, but this is unusual.

### 19. Evaluation

A two-year study of Paired Reading was undertaken in one local education authority in Scotland (Fife). The relative effectiveness of cross-age versus same-age tutoring, light versus intensive intervention, and reading versus reading and mathematics tutoring were investigated.

The participants were pupils at eighty-seven primary schools of overall average socio-economic status, ability and gender in one council in Scotland. There were few ethnic minority students.
Proportions of students with special needs were low. Children were eight and 10 years old as the intervention started. Macro-evaluation n 1/4 3520. Micro-evaluation Year 1 15 schools n 1/4 592, Year 2 a different 15 schools n 1/4 591, compared with a comparison group of five schools n 1/4 240.

Almost all the primary schools in the local authority participated and were randomly allocated to condition. A macro-evaluation tested and retested over a two-year period using Performance Indicators in Primary Schools. A micro-evaluation tested and retested within each year using norm-referenced tests of reading comprehension. Macro-evaluation was with multi-level modelling, micro-evaluation with descriptive statistics and effect sizes, analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA).

There are implications for practice and for future research. Consequently, in this study, observational process measures were used to check to what extent pairs were actually using the technique. Previous attempts in small-scale PR studies to establish links between implementation integrity and attainment gains have found none (Topping and Lindsay 1992b). This may be because the method works in many different ways through many different pathways for different children. It was hoped that this large-scale study might enable links to be found.

### 20. Results of the evaluation

The following results are from the second year of the trial.

Mean pre-test scores were equivalent for intervention, teacher-tested and control groups. The intervention group fell from pre-test to post-test, the teacher-tested group fell slightly less, but the control group fell considerably more. The pre–post intervention-control difference was statistically significant in favour of the intervention group: F(1,702) 1/4 92.097, p 5 0.001, 3/4 1/4 0.341.

Considering light versus intensive, the effect of condition was not significant (F(1,491) 1/4 2.128, p 1/4 0.145, 3/4 1/4 0.063), although the intensive condition change was superior.

Considering cross-age versus same-age tutoring, the effect of condition was not significant (F(1,491) 1/4 0.641, p 1/4 0.424, 3/4 1/4 0.032), although the cross-age condition was slightly superior.

Considering socio-economic status, the effect of condition was significant (F(1,447) 1/4 4.220, p 5 0.001, 3/4 1/4 0.319); lower
socio-economic status students performed better.

Considering reading ability, the effect of condition was significant ($F(1,334) = 25.559, p < 0.001, \theta^2 = 0.620$); less able children gained more and vice versa.

The macro-evaluation suggested that cross-age tutoring had significant effects in reading over the longer period for both younger and older students (ES about 0.2), but same-age tutoring did not. The effect was also evident on vocabulary for both and non-verbal ability for younger students. For all students, light or intensive tutoring made no difference. For younger students tutoring in one subject was more effective on reading, but tutoring in both reading and mathematics had an effect on non-verbal skills for younger students and on reading (and perhaps vocabulary) for older students.

In the micro-evaluation, students involved in peer tutoring in reading were superior in pre-post reading attainment to a control condition. Of course, there is the problem that post-test results were generally below pre-test results, but this decline was largest for the controls. It can be hypothesised that this finding was associated with a peculiar test fatigue effect. Light and intensive tutoring was again equivalent in outcome. The reading plus mathematics tutoring condition did better in both years. Students with low socio-economic status and low reading ability did better.

### 21. Benefit incidence

As stated above, in terms of socio-economic status, the effect of condition was significant ($F(1,447) = 4.220, p < 0.001, \theta^2 = 0.319$); lower socio-economic status students performed better.

In terms of reading ability, the effect of condition was significant ($F(1,334) = 25.559, p < 0.001, \theta^2 = 0.620$); less able children gained more and vice versa.

However, the programme does not designate more resources to socio-economically disadvantaged populations, except in parent tutoring projects where socio-economically disadvantaged populations are likely to be considered more in need of home visiting, which is relatively expensive unless parent volunteers are used.

### 22. Anything else we think you should know

The method of this project has also been adopted and further disseminated in Germany. More precisely, it has become popular in all German speaking countries. In Germany, major supporters of this method are Prof. Cornelia Rosebrock (Goethe University...
Frankfurt) and Dr. Daniel Nix (PhD at Goethe University Frankfurt).

Publications are available in German;


Rosebrock, Cornelia; Nix, Daniel; Rieckmann, Carola & Gold, Andreas (2011): **Leseflüssigkeit fördern. Lautleseverfahren für die Primar- und Sekundarstufe**. Seelze: Klett Kallmeyer.
23. SWOT analyses

**Strength**
A flexible low-cost method which particularly benefits socio-economically disadvantaged participants without any extra cost and is also relevant to a variety of special needs.

**Weakness**
Requires teachers to be less preoccupied with direct instruction and more preoccupied with background organisation and coaching – therefore needs some role change for some teachers.

**Opportunity**
Could be widely used in parent-tutored and peer-tutored formats, but preferably not both at the same time.

**Threat**
Teachers without proper training do not always deliver the method with good implementation integrity.

24. Political impact and policies

Paired Reading has been widely recommended by advisory and quasi-governmental bodies. It was endorsed by Bill Clinton during his time in office as President of the USA. It is widely accepted by the schools inspectorate. It has not led to government funding as it does not require funding.

Paired Reading is widely used in a great many countries, including the US and Canada, Australia and New Zealand (as one might expect), but also in South Africa and rural Brazil, for instance, where the context is very different. Little modification has been required other than translation of the resources.

25. Your personal evaluation

Paired Reading is an extremely well-evaluated intervention of known effectiveness. It requires relatively little cost to implement, although it does require some teacher effort. It is an example of “good practice”.

Future developments need to be on the research side. A randomised controlled trial of parent involvement is needed as current studies are all small scale (although very numerous).
26. Anything else you think we should know ...

References


Topping, K. J. (2001). Thinking Reading Writing: A
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<td>Topping, K. and Lindsay, G. (1992) The structure and development of the paired reading technique. Journal of Research in Reading 15, 2, pp. 120-136</td>
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