Effective Interventions for Struggling Readers in Irish schools

Who is this Pack for?
This is a resource pack for teachers, particularly learning support, resource and special education teachers in Irish primary, post-primary and special schools. The resource pack has been developed by psychologists from NEPS to support teachers in their work with struggling readers. The aim of the pack is to help teachers by sharing information about evidence-based approaches to teaching children to read.

The material here covers the age range 6 years to 18 years. It also encompasses all children with reading difficulties, including those who have specific learning difficulties (dyslexia) as well as those who have made generally poor progress in reading and may or may not have additional general learning difficulties. The research here can also be applied to children from disadvantaged communities and to children for whom English is not a first language. While the full range of literacy involves more than just reading, the focus here is particularly on reading skills: the ability to decode and understand text.
How do I Use the Pack?

The pack shares research findings over the last 15 years about the effective teaching of reading. It is divided into the following sections:

- Section 2-The sources of evidence on which this review is based
- Section 3-Elements of effective reading instruction
- Section 4-Approaches to enhance progress for struggling readers
- Section 5-Effective reading instructors
- Section 6-Measuring progress and understanding rates of progress
- Section 7-Evidence-based interventions trialled in Ireland

Throughout this resource pack, the implications of research for teachers are highlighted in yellow textboxes. If you do not want to read through the background research, you can move quickly from box to box, picking up key messages about effective teaching of reading.

2. Sources of Evidence- Key Texts and References

We already know a great deal about teaching reading to children generally, and increasingly there is a knowledge base about how to help children who struggle with reading. However, the task here is to collate research evidence from a range of sources and suggest how this evidence can be applied to the daily practice of teachers in Ireland.

The synthesis of research findings reported here, are drawn from twelve studies, all completed within the last 15 years. These studies were characterised by rigorous methodological approaches.

In order that teachers can evaluate the significance of the key studies, details about the authors, their affiliations (and funding, if relevant), the aims and scope of each study and the sources of information and selection criteria used are set out in the Table 1, below. While these are the key studies considered in this paper, occasional reference is also made to supplementary studies, where additional information may be relevant.
<table>
<thead>
<tr>
<th>Author Date of Publication</th>
<th>Study commissioned by/ published by</th>
<th>Scope/ Aim of Study</th>
<th>Sources of evidence &amp; Criteria for inclusion</th>
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<tr>
<td>Snowling &amp; Hulme (2011)</td>
<td>Review was prepared with support of Wellcome Programme Grant</td>
<td>Reviews evidence concerning the nature, causes of, and treatments for children's reading difficulties. Sound theory should inform interventions, which in turn should be evaluated by randomised controlled trials.</td>
<td>Focuses on randomised controlled trials, summarises research from 10 studies between 1992-2011</td>
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<td>Kennedy (2010)</td>
<td>Dr Kennedy is a lecturer in reading at St Patrick's College. This study formed her doctoral research</td>
<td>Report on a two year intervention designed to improve literacy levels in a disadvantaged urban primary school.</td>
<td>This study is reports on outcomes for 56 students, whose teachers received sustained, intensive, on-site professional development in the area of literacy.</td>
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<td>Singleton (2009)</td>
<td>Review commissioned by the 'No to Failure' project and funded by the Department for Children, Schools and Families</td>
<td>‘Summaries published research evidence of the impact of specialist teaching on progress and outcomes for children aged 5 to 18 with dyslexia/ specific learning difficulties’ (p6).</td>
<td>Research that is consistent with existing scientific evidence, theory and practice and with is supported by evidence from well-constructed quasi-experimental studies. Studies must include outcome measures reported</td>
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<td>Authors</td>
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<tr>
<td>Slavin, Cheung, Groff, Lake (2008)</td>
<td>Authors affiliated to John Hopkins University, Hong Kong Institute of Education, University of Pennsylvania</td>
<td>A best-evidence synthesis, evaluating reading programs for students in grades 7-12.</td>
<td>Studies must be reported in English. Must make use of control groups with random assignment or rigorous matching and control of pre-test differences. Quantitative measures of reading performance must be reported using standardised measures. Interventions must be of at least 12 weeks duration. Interventions must involve at least two teachers and 15 students in each treatment group.</td>
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<tr>
<td>Scammacca Vaughn, Roberts, Wanzek, Torgesen (2007)</td>
<td>Publication created for Centre on Instruction, RMC Research Corporation, with Florida Centre for Reading research, Horizon research Inc, RG Research Group, Texas Institute for Measurement, Evaluation and Statistics, Vaughn Gross Centre for Reading and Language Arts</td>
<td>‘The report summarises relevant high-quality research studies and synthesises their findings to determine the relative effectiveness of interventions for struggling early readers’. (p1)</td>
<td>Studies published between 1995-2005. Must address needs of students with ‘learning disability’ or ‘at risk’ of reading failure. Intervention must be provided over 100 sessions or more. Published in peer reviewed journals in English. Covering K to 3rd grade. Involving school-based interventions. Reading outcome measurements must allow for effect sizes to be calculated. Including treatment and comparison groups.</td>
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<tr>
<td>Brooks (2007)</td>
<td>National Foundation for Educational Research. Published by Department for Children, Schools</td>
<td>Explores literacy schemes which have been used to boost reading. 48 schemes are evaluated.</td>
<td>Restricted to schemes in use in the UK. Studies must include standardised data which allows for the calculation of either effect sizes or ratio gains.</td>
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<td>Author(s)</td>
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<td>MacKay (2007)</td>
<td>West Dunbartonshire Council</td>
<td>A ten year study using quasi-experimental design which aimed to eradicate illiteracy from the West Dunbartonshire local authority</td>
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<td></td>
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<td>Involved over 6,000 students in the age range 5 to 17 each year.</td>
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<td>Data collected pre and post intervention standard scores and incorporated comparison groups, with pre-intervention cohorts acting as controls.</td>
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<td>National Reading Panel (2000)</td>
<td>Convened by National Institute of Child Health</td>
<td>'A national panel to assess the status of research-based knowledge including the effectiveness of various approaches to teaching children to read' (p1)</td>
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<td>and Human Development, in consultation with</td>
<td>100,000 studies were screened for inclusion Data was supplemented by regional public hearings</td>
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<td>Secretary of Education, at the request of US</td>
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<td>Congress</td>
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<tr>
<td>Vaughn, Gersten, Chard (2000)</td>
<td>Authors are affiliated to the University of</td>
<td>A meta-analysis which summarises the critical findings of research syntheses funded by the Office of Special Education Programs and the National Centre for Learning Disabilities</td>
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<td></td>
<td>Texas and the Eugene Research Institute</td>
<td>4 key studies, supplemented by 3 others which inform conclusions</td>
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<td>These two papers report on Early Reading Research, a six year project 'investigating the most effective</td>
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<tr>
<td>Solity (2000) &amp; Solity, Deavers,</td>
<td>Solity affiliated to the University of Warwick</td>
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<td>Kerfoot,</td>
<td>and other authors with Essex County</td>
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<td>Crane and Cannon (2000)</td>
<td>Council</td>
<td>approaches to improving reading standards, ensuring that every child can reach age and skill appropriate targets in reading: and, preventing the occurrence of reading difficulties’ (p109)</td>
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| Swanson & Hoskyn (1998) | Authors affiliated with University of California | A meta-analysis of experimental studies that looked at the efficacy of interventions for children and adults with literacy difficulties  
Involved the systematic search of databases for work published between 1963-1997  
Over 2,900 abstracts considered, but ultimately only 180 studies met criteria |
|                        |         | Participants must have average IQ (85 or above)  
Participants pre-intervention reading ability should be at or below the 25th percentile  
Studies must use experimental design  
Have a control condition  
Provide enough information so that effect size can be calculated  
Involve interventions that are additional to normal classroom teaching  
Be published in English |

A word of caution!  
The quality of research varies greatly. As Brooks (1999) stated, it can vary ‘from the meticulous to the appalling’ (p51). Be cautious about interventions and programmes that are supported only by glowing ‘testimonials’. Read all research with a critical eye and look for rigorous standards in data collection.
3. Elements of Effective Reading Instruction

3.1 Elements of Effective Reading Instruction
In terms of the content of a reading curriculum, it is clear that the following elements should all form part of an effective programme (see NRP Report (2000), Scammaca et al (2007) and Singleton (2009)):

- Phonemic awareness and the teaching of phonics are essential
- Reading instruction should also include decoding and word studies, including the learning of a sight vocabulary
- Reading instruction should include the explicit teaching of comprehension strategies
- Reading instruction should be integrated with writing experiences
- Students should be offered a wide-range of reading materials and should have opportunities for both guided and independent reading

Beyond this core content, it is clear that those who struggle with literacy need enhanced teaching, and for many struggling readers, and particularly dyslexic readers, the phonic element is most important. Singleton (2009) emphasises the need for multi-sensory programmes that target phonic knowledge.
Teachers need to ensure that students are given a healthy, balanced diet of reading and literacy activities. However, it is not the remit of the learning support/resource teacher to deliver all elements cited above. Shared reading, the teaching of subject specific comprehension skills and vocabulary building may all be happening in the classroom or subject lesson. The task of the learning support teacher is to identify the area of greatest deficit or need. In our experience, for many students, this is in the area of phonic knowledge and word reading.

3.2 Systematic Interventions- Choosing your programme

In considering the needs of struggling readers, Feldman (2004) suggests selecting ‘a research-based, validated curriculum as the programme “anchor”’ (p1). It is not the intention of this paper to review individual intervention programmes, as this has been done systematically by Brooks (2007). Programmes suitable for very young children, may be wholly inappropriate for older readers. Additionally, interventions may need to target particular aspects of reading; one child may need help with reading comprehension (for example, an inference training programme) while another may need explicit teaching of particular phonics. Therefore, the interested teacher needs to seek out interventions relevant to their particular context and the individual needs of the student.

Teachers will find that evidence-based programmes give students the best chance of success. For a full and comprehensive review of programmes across the age range see the detailed work of Brooks (2007). Please note an up-dated version of this publication should be available in autumn 2012. Also, please look at the evidence-based programmes that are described in Section 5, below and that have proven to be successful in Irish schools, in recent years.
4. Approaches to enhance progress for struggling readers

4.1 Structured Teaching

When it comes to failing readers, ordinary class teaching is not enough and specialist interventions are required (see Brooks 2007, Singleton 2009). Structured specialised tuition for failing readers is more effective than eclectic approaches (Swanson and Hoskyn 1998).

Teaching needs to be structured, explicit and systematic. The NRP report (2000) repeatedly refers to the effectiveness of systematic approaches, particularly in the teaching of phonology. Singleton (2009) emphasises the need for ‘instruction that is systematic and intensive’ (p8). Singleton goes on to define systematic teaching more closely as, ‘structured, cumulative and sequential’ (p20).

Once an evidence-based programme is selected, it should be delivered meticulously. A highly structured, systematic approach has been found to be the most effective.
It has also been found that using a synthetic (rather than analytic) phonic approach is most effective (NRP, 2000, see also Macmillan 1997, McGuinness 1997, Solity et al 2000, Ehri, Nunes, Stahl and Willows 2001).

**What is the difference between synthetic and analytical phonics?**
These are two different approaches to teaching the sounds that letters make. The analytic approach tends to look at words at the whole word level and then in chunks; children learn to break words up; m-at, c-at, p-at etc. In the synthetic approach, children learn to read and spell by looking at each separate sound; c-a-t, p-i-n. The synthetic approach tends to emphasise the segmenting and blending of sounds early on in reading development, while the analytical approach tends to start with the whole word and break it down.

4.2 Small Group or 1:1 Tuition
Another consistent finding is that, for struggling readers, small group settings and individual tuition is more effective than larger groups (Swanson and Hoskyn, 1998, Vaughn, Gerten and Chard, 2000 and Scammaca et al, 2007). The largest size of an effective teaching group, has been found to be three students (Vaughn et al 2000). They also suggested that such small groups may be as effective as a one to one model, if the teacher was highly qualified. However, more recently, Singleton (2009) suggests that teaching can be effective in groups of up to four or five children, even when instruction was provided by non-teachers (as long as they were adequately trained). This then is an area of some dispute between researchers. There appears to be little evidence to date that in-class models of support are effective in teaching reading. Shinn et al (1997) found that an in-class model of support, was not effective in raising the achievement of failing readers. Not surprisingly, many of the highly effective intervention programmes reviewed by Brooks (2007) are delivered in one to one or small group settings. An exception that is worth mentioning, is the ARROW programme, a computer based intervention that appears to be effective with teaching groups of five, see Brooks (2007).
Some schools may need to rethink the arrangements for supporting children with literacy difficulties. At present, there is evidence that in-class support, and the teaching of literacy in groups of more than 4 or 5, are less effective approaches for the teaching of literacy. This is not in any way to imply that these approaches may not be very beneficial for children with other types of needs (such as those needing support with social skills or language development). However, for the moment, the evidence is that effective support for struggling readers usually involves one to one or small group tuition.

4.3 Frequency and Duration of Intervention

The frequency of teaching inputs is important to educational success. Scammacca et al (2007) argue for daily or near daily teaching sessions. Solity and his colleagues argued that practice of new skills should be distributed over time rather than massed into a particular time (see Solity et al, 2000). Therefore, daily practice of 10 minutes (practice distributed throughout the week) is more effective the one hour of practice delivered in a block (massed). Rose (2009) also supports the concept of ‘little and often’ (p14).

Additionally, it has been found that the duration of intervention is not necessarily associated with outcomes. In fact, interventions that are of short duration, but intensive, may offer the most efficient approach, (Vaughan et al 2000, Brooks 2007). Brooks cautions about the need to carefully monitor the effects of interventions that last longer than one term. Interestingly, Singleton (citing the work of Truch 2003) suggests that ‘the rate of gain may decelerate quite rapidly for intensive interventions after the first 12 hours of intervention’ (p50). Again, this suggests that intensive interventions may deliver effective remediation within a relatively short time span.

Short, intensive bursts of intervention, with daily, targeted support, appear to be more effective than longer term interventions. Therefore teachers may need to think of their work in half-term or 6 to 12 week blocks.
4.4 Teaching to the Point of Fluency
Additionally, it has been found that students need to be taught new skills to the point of fluency. Fluency here refers to both speed and accuracy. A difficulty for many children with emerging literacy skills is that the pace of teaching moves too quickly for them: they move on to new skills before emerging skills have been consolidated and developed to the point of fluency. Solity (2000) emphasises the significance of teaching skills to the point of fluency and draws on instructional psychology and precision teaching approaches to describe methods for achieving fluency.

The NRP point out that ‘fluency is often neglected in the classroom’ (p11), but found that strategies that increase fluency have a positive impact on reading.

Given what we know about the importance of achieving fluency in reading tasks, it is not surprising that Vaughn et al (2000) found that control of task difficulty (sequencing examples and problems to maintain high levels of student success) was a critical factor in successful interventions.

Teachers will want to ensure that students reach a point of fluency in learning, before moving on to the next steps. This means checking that they have achieved fluency and accuracy in the key skill area. Teachers will also want to offer learning activities where students can achieve high levels of success. We recommend that students should be achieving 95% success with accuracy and that learning should be revised weekly and monthly to ensure that it is retained.

4.5 Assessment and Monitoring
In selecting an appropriate intervention for a student, teachers need to be aware of the student’s key areas of deficit and select an intervention accordingly. One simple and helpful assessment is discriminating between word reading and reading comprehension. It is suggested here that all
struggling readers should be assessed on both measures, so that teachers can identify relative strengths and weaknesses.

**Children receiving additional support for literacy need to be carefully assessed and the intervention programme selected for them should target their area of need.**

It has also been found that the regular assessment and on-going monitoring of student literacy achievement is associated with positive outcomes, (Solity 2000). Shinn, Powell-Smith, Good III, and Baker (1997) noted,' …it has been noted repeatedly and persuasively that systematic evaluation of student achievement…significantly impacts student learning’ (p76). Additionally, the early identification of difficulties has been found to be important, Scammacca et al (2007), Singleton (2009).

**At the end of the block of intervention, the programme should be evaluated, through teacher reflection, student and parent feedback and importantly records of children’s progress (using pre and post intervention measures). This allows the teacher to measure response to intervention (RTI). In a very immediate way, this data should inform the individual teacher’s next steps in teaching.**

**4.6 Computer Assisted Learning**

The NRP (2000) noted that computer assisted learning has considerable potential, particularly word processing approaches, as reading and writing activities can be integrated. The provision of speech to computer –presented text was also considered ‘promising’. Slavin et al (2008) suggested that computer based learning was not so effective, unless it was combined with other methods. Singleton (2009) reported that computers can be used to enhance motivation, but that the impact of computer assisted learning varies from study to study and small-scale, carefully targeted programmes, particularly those with speech-feedback, can have a significant impact. The
message about the use of computers to assist literacy is that they need to be used judiciously, in focused and structured ways.

Computer-based interventions may have potential, but need to be carefully targeted.

4.7 Positive Declarations
There is some evidence that encouraging children to make positive declarations about their own literacy achievement can have a positive impact of reading success, although the evidence for this is largely based on work with young children (see McKay 2007). However, this approach may have considerable potential and it has the obvious advantage of being cost-free and easily implemented. It was a component in the successful action research study carried out by this researcher with Traveller children (see Nugent, 2010). For more information on the use of positive declarations, see Section 7.

Look at Figure 1 below. This shows the progress of two groups of children, who received similar reading tuition. This data is reproduced from MacKay (2006) and shows progress in reading between two groups of children in the first year of primary school. The only difference between the two groups is that one group made three daily positive declarations, while the other group did not. Declarations involved the teachers and child making bold statements about their enjoyment of reading and about their future levels of literacy achievement. The children made a minimum of three positive declarations about future reading achievement every day, over a period of 9 weeks. These could be individual, group of class declarations.

For example, children might say,

*I like books. Books are fun.*

*I’m going to be a good reader.*
I Love stories. I know all my words.

MacKay also found that those involved in making positive declarations benefitted in terms of achievement, but also in terms of positive attitudes to reading, motivation and confidence.

Figure1. Reading Progress of Two Groups, Early Primary, N=36

Declarations are free, take very little time and have the potential to make a significant difference to children’s reading skills.
• **We suggest that teachers might...**

  • Rethink your timetable
  • Choose key skill areas to develop
  • Focus on those key skills for the duration of the intervention
  • Offer daily teaching sessions (or even twice daily sessions)
  • Assess children carefully
  • Use pre and post measures to establish the current level of performance and to monitor progress
  • Emphasise short-term, intensive intervention (no longer than one term)
  • See children individually, in pairs or in groups of no more than 3
  • Use evidence-based interventions - See Brooks 2007
  • Use positive declarations daily
  • Monitor and review your work
5. Effective Reading Instructors

5.1 Teacher Training and Supporting Teachers

The importance of teacher training is another consistent finding of the research. This is not just about initial teacher training, but about the need to offer teachers on-going training and support. The NRP (2000) also reported that ‘in-service professional development produced significantly higher student achievement’ (p17). Slavin et al (2008) found that extensive professional development of teachers produced significant results. Not surprisingly, the first recommendation of the Rose Report (2009) was that there should be further investment in the training of specialist teachers to assist children with literacy difficulties.

Feldman (2004) recommends selecting knowledgeable and enthusiastic teachers to deliver interventions. For teachers to be knowledgeable, they need to be supported with high quality initial training, as well as on-going professional development. As Feldman suggests ‘Provide high quality, curriculum-specific professional development and on-going support to teachers. Like other professionals, they should not have to invent their tools’ (p1)

Additionally, there is research to indicate that the quality of the relationship between the student and the teacher, particularly in remedial settings, is a significant factor in programme outcomes. (See Barret & Varma, 1996). For example, an important feature of the successful Reading Recovery approach
(Clay 1993) is the development of the relationship between the child and the teacher.

**Teachers are central to the delivery of effective teaching of reading. They need to be well-trained (pre-service and in-service), well supported and to have positive relationships with the children with whom they are working.**

### 5.2 Non-Teachers Delivering Programmes

There is evidence that non-teachers (classroom assistants, parent and community volunteers etc) who are well trained and have on-going support have been found to deliver effective reading programmes (NRP 2000, McKay 2006, Scammacca et al 2007, Slavin et al 2008). Classroom assistants in particular have been found to be able to deliver reading interventions effectively. However, it is difficult to generalise from various studies as the qualifications, training, and supervision given to classroom assistants may vary considerably.

Non-teachers, such as SNAs and volunteers can deliver highly effective reading programmes, IF they are well trained and supported, and are following an evidence-based intervention.

### 5.3 Co-operative Learning and Peer Support

The concept that, for adolescent readers, co-operative learning was crucial found strong support in Slavin et al’s study (2008). A key finding was that, ‘This review found that most of the programs with good evidence of effectiveness have co-operative learning at their core. These programs all rely on a form of cooperative learning in which students work in small groups to help one another master reading skills...’ (p31).
One, well-documented area of cooperative learning, is Paired Reading. In evaluating interventions that are effective, Brooks (2007) notes that paired reading has been comprehensively evaluated in many studies. It is both cost-effective and accessible. Vaughn et al (2000) found that using a student with a disability as a cross age tutor is the most effective form of peer reading and peer reading is generally a highly effective intervention. Therefore, teachers may find it useful to deploy peers, both in co-operative learning endeavours and in peer tutoring approaches.

Teachers may wish to consider relatively low-cost interventions, such as peer reading programmes, as there is evidence that peers can be effective in raising reading standards, both through co-operative learning and through peer tuition.
6. Evidence-Based Interventions and Measuring Progress—What is Possible?

6.1 Measuring Progress
There is an increasing emphasis on evidence based interventions: interventions where there is research evidence to support the efficacy of the approach (see Brooks 2007, Scammacca et al 2007, Slavin et al 2008). Brooks also sets out various methods of measuring progress in reading and sets a standard by which literacy interventions for failing readers can be measured. His study reports on ratio gains.

Earlier editions of the review (1998 and 2002) used the rule of thumb that ratio gains of 1.4 or more represent gains that are ‘definitely more than standard progress and therefore educationally significant’ (p30). However, the 2007 edition drew further distinctions and the bar was set higher, in that ratio gains of more than 2 were now set as the standard to which to aspire, as ‘many schemes now produce impacts of this order or more’ (p30). This would imply that we should be aiming for our struggling readers to make two years progress in one year. Nonetheless, this level of success is often elusive.

What are ratio gains?
A ratio gain is how much progress a student makes in reading age, divided by the time spent between pre and post intervention. Of course, you would have to be using a test that gives age equivalent scores to calculate this. So, if a child makes one year’s progress in word reading over the course of one year, then the ratio gain is 12 months (progress) divided by 12 months (time spent) giving a ratio gain of 1.

Brooks (2007) suggests that which should be aiming for children to make ratio gains of 2. In effect, Brooks argues, ‘Good impact- sufficient to at least double the standard rate of progress- can be achieved and it is reasonable to expect it’. (p32).
6.2 What is Possible? -Evidence from West Dunbartonshire

MacKay (2007) in reporting on the ten year project in West Dunbartonshire, states that the report celebrates ‘the achievement of something that has never been done before: the eradication of illiteracy from an entire education authority’ (p1). This project, in the second most disadvantaged authority in Scotland, involved some 60,000 children, in 58 educational establishments, with 400 staff involved in delivering the effective interventions. The literacy initiative addressed not just the effective teaching of reading in the ordinary classroom, but the effective support of struggling readers. Consistent with the research cited above, the West Dunbartonshire initiative put emphasis on the explicit teaching of synthetic phonics. Additionally, evidence-based interventions were put in place for individual children who were struggling with reading, using the Toe by Toe approach (Cowling and Cowling 1993). At the end of the 10 year project, ‘only three pupils remained with Neale Analysis scores below the 9y 6m level of functional literacy’ (p31).

6.3 Reaching all Children

The delivery of evidence-based interventions has been found to be effective, even with populations who traditionally have struggled to attain literacy. For example, Nugent (2010) found that Traveller children, who typically have the lowest levels of academic achievement, made over a years’ progress in reading skills over a three month intervention period.

Therefore, there is evidence that using evidence-based approaches and effective intervention programmes can bring success to even those with significant reading difficulties. Solity (2000) argues that ‘the single most significant change needed to create a climate for success requires that all those working in the education system assume that all children can learn and reach age-appropriate targets when given the right teaching’. (p56).

There is good evidence that interventions that are well targeted and well-delivered may be effective with children from a range of backgrounds and with a range of abilities. The goal of eradicating illiteracy may be achievable!
Section 7 Evidence Based Interventions Trialled in Ireland

It is clear that we now have the research evidence to know what the content of effective reading instruction should be, what approaches are most effective in the teaching of reading to struggling readers and what can be achieved by the conscientious application of this knowledge. The following section outlines some success stories from Irish schools, where evidence-based interventions have been implemented and evaluated and found to be successful.

This is where you will find out about 5 different approaches that have been found to work in Irish schools.

* Acceleread/ Accelewrite (Clifford and Miles 1994)
* Peer Reading (see Topping 2000 for a discussion)
* Toe by Toe (Cowling & Cowling 1993)
* SNIP (a precision teaching package, Smart & Smart, undated)
* ARROW (ARROW 2008).
The Background to the Research

This section summarises findings from 4 years of action research projects, based on the Waterford Reading Projects. Similar projects were carried out in Navan and Galway, with equal success, but the data presented here is based on the Waterford studies.

In the Waterford Reading Projects, the psychology team presented up-to-date research evidence about named intervention programmes or approaches, so that teachers had an evidence based menu from which they could select a programme.

In order to make this manageable and accessible, a limited number of programmes were presented. They were largely programmes that were readily available in Ireland. However, teachers were also made aware of other interventions, which required additional training or funding or large scale organisation (such as Reading Recovery, ARROW, and Phono-Graphix). One of the developments that happened over the course of the projects was that when schools were made aware of the potential of the ARROW programme, a number of schools invested in that programme, which was, at that time, entirely new in Ireland. Ultimately five interventions were chosen by the vast majority (87%) of teacher participants:

- **Acceleread/ Accelewrite** (Clifford and Miles 1994)
- **Peer Reading** (see Topping 2000 for a discussion)
- **Toe by Toe** (Cowling & Cowling 1993)
- **SNIP** (a precision teaching package, see Binder and Watkins (1990) and Smart & Smart, undated)
- **ARROW** (ARROW 2008).

Other interventions were either not selected (often due to a lack of available training) or selected by very small numbers (and therefore did not provide adequate data for comparison purposes). Each project involved learning support/ resource teachers delivering an evidence-based intervention over a specified time frame (3 months) and collecting pre and post-intervention data.
In total there were five Waterford Reading Projects.
Project 1- 2006-2007, targeted primary aged children
Project 2- 2007-2008, targeted secondary aged children
Project 3-2008-2009, targeted both primary and secondary children
Traveller Project- 2008-2009, an associated initiative, requested by the local Visiting Teacher for Travellers in Waterford, who felt that the Traveller population would benefit from being targeted systematically.
Traveller Project II- 2009-2010 (as above)

Who took part in the projects?
Over the three years, 46 teachers participated in the action research, and data was collected for 221 students. Of these, valid pre and post-intervention data was collected for 200 students who followed the five most popular interventions. Students were in the age range 5 to 17 years. The mean age of participants at the start of intervention was 12 years. There were 126 boys and 63 girls participating, with 11 participants for whom gender was unspecified. Students had average reading scores at approximately the 13\textsuperscript{th} percentile at pre-intervention (standard score of 83).

Table 1. Number of Participants (students) in each Intervention

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<tr>
<th>Intervention</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceleread/ Accelewrite</td>
<td>43</td>
</tr>
<tr>
<td>Peer reading</td>
<td>54</td>
</tr>
<tr>
<td>Toe by toe</td>
<td>33</td>
</tr>
<tr>
<td>SNIP</td>
<td>21</td>
</tr>
<tr>
<td>ARROW</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
</tr>
</tbody>
</table>

Data was collected for 200 students in the age range 5 to 17 years. These students followed one of five intervention programmes for a period of 3 months (average 12 weeks teaching), delivered by learning support/resource teachers.
How much progress did they make?
At pre-intervention, students generally were performing below the 13th percentile, with mean word reading standard scores of 81 and mean comprehension standard scores of 83. At post-intervention, the mean standard score for word reading was 85 and for comprehension was 86 (see Table 2). Therefore, at the end of the 3 month intervention, the average participant was reading between the 16th and 18th percentile, within the low average range.

Another way of understanding these results is to transform these standard score results into age equivalents. It was found that over the course of a 3 month intervention, the average participant made gains of 12 months in both word reading and in reading comprehension (See Table 2). This represents a ratio gain of 4.

Table 2. Progress over 3 months of instruction, pre-and post intervention age equivalent test results, all participants

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Pre-intervention</th>
<th>Post Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word reading</td>
<td>200</td>
<td>8 years, 3 months</td>
<td>9 years, 3 months</td>
</tr>
<tr>
<td>Comprehension</td>
<td>188</td>
<td>8 years, 9 months</td>
<td>9 years, 9 months</td>
</tr>
</tbody>
</table>

The average participant made a year’s progress in word reading and a year’s progress in reading comprehension over the period of the intervention (12 weeks of tuition).
Were some interventions better than others?
Of course, you will want to know if any of the five interventions was significantly better than the others. One way of considering this is to look at standard score gains for each intervention graphically.

Figure 1. Comparison of interventions, based on standard score gains in word reading and comprehension.

What the above data is telling us is complex: It is not the case that any one intervention can be declared the most effective. It appears that SNIP can be a highly effective intervention in the area of word reading, but is less effective in the area of comprehension. This is perhaps not surprising, as this intervention is solely based on word reading tasks. Toe by Toe was impressive, in that it appeared to address both word reading and reading comprehension equally effectively.

No one intervention was clearly better than another. SNIP was best for teaching word reading, while Toe by Toe gave the best overall results, BUT, all of these interventions provided significant gains, which met Brook’s (2007) standard of ‘twice the usual rate of progress’.
Teaching Time and Learning Time

An important consideration in calculating the efficacy of any intervention programme is to look at the amount of time given by students to learning and the amount of teacher time required to deliver the programme. We collected information about how long each student attended tuition (calculated in hours and minutes) and about how many students were in the teaching group. This then allowed us to calculate how much teacher time was spent per student. However, it was not possible to estimate teacher time involved in peer reading, as the time involved in was not just contact time, but time spent organising. The teacher time spent per student is shown in Figure 3.

Figure 3. Graph comparing the amount of teacher time spent per student, for each intervention

*Note, teacher time for Paired Reading could not be calculated
We can see that ARROW and SNIP give good value in terms of teacher time. The average amount of teacher time used, per student, was 2 hours for ARROW and 3 hours for SNIP. One of the particular advantages of the ARROW programme is that it can be effectively delivered to groups—typically 5 students at a time. The SNIP programme was delivered in both a larger group setting (7 students) and individually, for very short periods of time (10 minutes) making this a very time efficient intervention for both students and teachers.

**SNIP and ARROW offer particularly good value in terms of the efficient use of teacher time. Peer reading is also known to be cost-effective in terms of teacher time.**

Let us now look at the time students spent learning. As Figure 4 shows, students in Acceleread/ Accelewrite, SNIP and ARROW spent broadly comparable amounts of time learning (between 6 and 8 hours), although those participating in peer reading spent significantly longer (13 hours).

**Figure 4. Graph comparing the amount of learning time spent, per student, for each intervention**
I want to know more about these interventions?
This section includes a brief summary of each intervention, with video footage of the intervention in action. Information about the evidence basis is also presented. Much of the data reported below is drawn from Brooks, (2007) *What Works for Pupils with Literacy Difficulties* (2007). This is supplemented with more recent (and sometimes as yet unpublished) research in Britain and Ireland.
Acceleread/ Accelewrite

Acceleread/ Accelewrite is a computer based programme, developed by Clifford and Miles (1994). It uses ‘talking’ word processors, and involves students reading text, memorising sentences, typing in the text and listening to the computer ‘read back’ what they have written. Students can self-correct errors. It is a highly structured programme and the recommended protocol is for individual tuition for 20 minutes, 5 days per week for 4 weeks.

Research reported by Brooks (2007) based on the Jersey Project, involved 61 students in 15 primary schools and 4 secondary schools. After 4 weeks of intervention, students made ratio gains of 8.3 in reading, with further increases reported over time. Brooks also reported on the Bristol study, which involved 60 children in 13 primary schools. After 8 weeks of intervention students made ratio gains of 2.3 in reading accuracy and 2.9 in comprehension.

Irish research, involving 13 pupils aged 11 to 13 years, who received between 11 and 17 sessions of Acceleread/ Accelewrite found that they made average gains of in 12 months progress reading and 7 months progress in comprehension (Tierney, 2005). Furthermore, a small-scale study by Devenney (2007) showed the potential for class teachers to deliver Acceleread/ Accelewrite, while continuing to teach the mainstream class group. Seven participants in this study, who completed a four week block of intervention, working on a computer within the classroom, under the supervision of the class teacher, made 9 months progress in reading, while a control group (those attending learning support) made no measurable progress.

See Acceleread/ Accelewrite in action in St Joseph’s Boys Senior National School, Dungarvan.
Peer Reading

Peer reading is a well known approach. Broadly speaking, those who need help with reading are matched with a non-professional who assists by reading to the learner, reading alongside the learner and then listening to the learner read in a graduated system of support. Procedures for correcting errors and giving frequent praise are specified. Peer reading is reportedly cost-effective in terms of teacher time, but needs on-going organisation, including the training if tutors, monitoring of progress, maintenance of the programme (for example monitoring attendance and trouble-shooting incompatible pairings). Logistical issues of time, space and suitable reading materials also need consideration.

Peer reading is one of the most comprehensively researched interventions available. Brooks (2007) reports on studies involving 2,372 children in 155 projects in 71 schools. Ratio gains of 3.3 in reading and 4.3 in comprehension were reported. As Topping (2000) noted, the general picture in published studies is that peer readers progress about 4.2 times ‘normal’ rates in reading accuracy, during the initial period of commitment. Further research in Ireland found that this approach was also effective with students with a mild general learning disability. In this study of cross-aged peer tutoring, data was collected for 30 ‘helpers’ and 18 ‘learners’, attending a special school. Those involved in peer tutoring made twice as much progress as control groups, with ‘helpers’ making 15 months progress in reading, while a control group made 7 months progress and ‘learners’ made 7 months progress, while a control group made 3 months progress (see Nugent, 2001). In a further study, Nugent and Devenny (2008) reported on a peer reading scheme in a secondary school in Ireland. Consistent with other findings, it was found that helpers make the most significant progress, making twice as much progress in reading over the course of the intervention, than did a comparison group.

See peer reading in action in Mount Sion Boys’ Secondary School, Waterford City
Toe by Toe

**Toe by Toe** is a highly structured programme that teaches phonics skills. The reading of non-words is a feature of this programme, and there is considerable emphasis on recording progress. It is suitable for children from the age of 6 years and has been used effectively in the prison service. It is an individualised approach and the recommended protocol is for 20 minutes of instruction, daily.

Published research includes a study of 24 secondary aged pupils. There were matched pairs in the control group (normal learning support) and the experimental group (Toe by Toe, taught individually, for 20 minutes per day, five days per week, for an average of 3 months). The results were reported in Literacy Today in 2004:

‘The results were definitive. The experimental group made average gains of three and a half years. The control group made average gains of five months.’ (McKay and Cowling (2004).

Furthermore, MacKay (2006) used the Toe by Toe intervention with 91 children who struggled with reading in 32 Scottish primary schools (part of the West Dunbartonshire Reading Initiative). After 6-7 months of intervention, the average participant made gains of 14 months in reading (representing a ratio gain of 2.3). Finally, Brooks (2007) reported on an unpublished study by Keith Taylor, which found that 21 participants in a primary school made gains of almost 4 years in reading, over an 18 month period of intervention (ratio gains are reported to be 2.7).

See Toe by Toe in action in, Waterford City
SNIP

SNIP is perhaps the least well-known of the intervention methods described here. It is grounded in the theory of precision teaching and instructional psychology and was developed by Carol and Phil Smart. It is suitable for children in the upper part of primary school or early secondary school and aims to develop their sight vocabulary, particularly of essential curriculum words. Students are taught lists of sight words, which they practice daily, for five minutes, until they attain fluency. SNIP is freely available to download.

On their website, the authors claimed, ‘Using this pack we have achieved measurable gains of three years in an academic year with some of our pupils’ (Smart and Smart). Although this claim does not constitute reliable evidence, nonetheless the efficacy of precision teaching methods is well-documented (See Binder and Watkins 1990).

See SNIP (precision teaching) in action in School, Waterford City
ARROW stands for Aural- Read- Respond- Oral- Write. It is a programme developed by Colin Lane (2008). It works on the principle that hearing one's own voice is a psychological key to much language comprehension. The system involves children recording and playing back their own voices reading, using laptop computers and headphones and a structured system of examples and exercises. The program displays a piece of text at the appropriate level (anything from a single letter to a short paragraph). The child hears it spoken, then repeats it aloud, and records it, then plays it back. At the end of the process, the child writes down the piece of text. The programme has a range of protocols, typically 30 minutes per day, for a total of 10 hours tuition. One adult is able to supervise a number of children (typically 5), as long as each child has access to a computer.

Brooks (2007) evaluated a large range of literacy interventions and, in relation to ARROW he noted, ‘The ratio gains show that this amount of progress…was remarkable, if not spectacular’ (p133). In the study cited by Brooks, 91 children made average gains of 7 months in reading and 6 months in spelling after just 1.5 week's of intervention.

Lane also reported on further data (2008) involving 445 children in 20 schools. Typically, after 2-3 hours of ARROW training, children made average gains of 9.5 months in reading age. Those who undertook longer programmes (8 to 10 hours of ARROW tuition) made gains of 14 months in reading age.

See peer reading in action in Mount Sion Boys’ Secondary School, Waterford City
Selecting an Intervention

The five interventions reviewed here appear to be effective, but there are many other evidence-based interventions available, for example, Phonographix, Reading Recovery and Inference Training (for comprehension skills). Brooks (2007) provides a most comprehensive review. Teachers need to select interventions, taking account of a range of factors. The following structure may be helpful in guiding decision making:

- What interventions are readily available to me? (Resources and training)
- Which of these interventions is suited to student’s the age group?
- Does the intervention appear to target the student’s greatest level of need? (phonological knowledge, word reading, comprehension)
- Are there particular reasons why a student might respond better to one approach rather than another? (Preference for work on computer/ novelty value etc)
- Can the learning support timetable offer the type of structure required by this intervention?

Some new approaches can be implemented at very low cost (SNIP), without any time delay, while other approaches may require longer-term investment and training (ARROW). It is suggested here that teachers aim to build a repertoire of effective interventions, so that they can be responsive to individual needs. This is not the same as adopting an eclectic approach, where multiple elements of different programmes are combined, which has been found to be less effective. Rather, the teacher systematically delivers an evidence-based intervention and after review, either continues with this programme or offers an alternative evidence-based approach for a further block of time. It is certainly the case that students (and teachers) may tire of particular approaches after an intensive block of intervention, and may be more responsive to novel approach after a period of time.
Resources to Support Evidence-Based Interventions

**Assessing Literacy Difficulties**, list of up-to-date standardised tests for reading and spelling

**Interventions**, list of evidence based interventions, with contact details and costs, including information about free downloads

**Precision Teaching Guidance**
- A Rough Guide to Teaching a Sight Vocabulary
- Sample from SNIP (free download)
- First 100 Words Checklist
- Second 100 Words Checklist
- The Phonic Checklist

**Reading Partners Guidance** (cross-age peer tutoring)
- A Rough Guide to Reading Partners, with supporting templates

**Guidance on the use of declarations**
Assessing Literacy Difficulties

Reading
There are many ways of testing reading, including word reading, sentence completion and close exercises. Word reading tests, by their nature are individually administered, while group tests, used at screening, usually depend on some element of comprehension. Teachers should be aware that some students can perform well on a reading comprehension task, but still have significant difficulty with reading accuracy and fluency.

Group Administered Tests
Standardised on Irish population, in 2002-2003, with total of 10,000 pupils. Has four levels, spanning first to sixth class Published by CJ Fallon.

Drumcondra Primary Reading Test- revised (2007)
Re-standardised in 2006. Tests both reading vocabulary and reading comprehension, with six levels corresponding to first to sixth class.

Sentence Completion Forms A & B are suitable for students aged 6 to 12.03. Sentence Completion Forms C & D and Context Comprehension Forms X & Y are standardised for students aged 9:0 to 15:03, Group administration.

Published by Hodder & Stoughton Age range 7:6 to 12:7, a group test of reading comprehension.

Individual and Diagnostic Tests
The Adult Reading Test (2004) is suitable for the age range 16 – 55 years. It is a test that needs to be individually administered. It has UK norms and is published by the Psychological Corporation.

The Wide Achievement Tests (WRAT 4 2005) includes word reading, reading comprehension and spelling tests. It is suitable for the complete age range and uses US norms. This individually administered test also includes a maths assessment.
The Neale Analysis of Reading Ability (NARA II 1997) has been widely used, but is of limited utility in secondary schools as it is only standardised up to the age of 12 years, 11 months. It offers a comprehensive assessment of reading rate, accuracy and comprehension. This test uses British norms.

The Diagnostic Reading Analysis (2006) published by Hodder covers the age range 7 to 16 years and is particularly suitable for testing less able students. It is individually administered and covers reading accuracy, comprehension, fluency and rate of reading. This test may be particularly helpful in considering RACE applications.

Finally, there is also Wechsler Individual Achievement Test for use by teachers. This WIAT for Teachers II (2006) can be used across the age range and has both US and UK norms. It is an individual assessment which covers the following areas: word reading, reading comprehension, reading speed, reading rate and spelling.

**Spelling**
A test of spelling skills can be very helpful in identifying those who may be at risk of dyslexia. Teachers should pay special attention to those students who appear to be significantly underperforming relative to their general level of ability. Many schools found the Single Word Spelling Test, (SWST 2003) nfer-nelson (standardised up to age 14) useful but this is going out of print.

The British Spelling Test Series, (1996), nfer-nelson, is a suitable alternative. It is standardised from ages 5 to 15 years, 11 months and can be group or individually administered. It takes 30-40 minutes and uses UK norms.

Graded Word Spelling Test (Vernon)
Standardised in 1998 Ages 6-16

WRAT (see above)
Other tests of literacy

Informal Dictation
It may also be helpful to ask students to complete a short piece of dictation. Such a test can yield useful information about a range of skills, including: rate of writing, handwriting legibility, listening skills and spelling skills. While standardised results are not available, an experienced teacher should be able to identify students who have weaker skills in key areas. These students may need further diagnostic testing.

There is also the Detailed Assessment of Speed of Handwriting Test (DASH 2007, Harcourt Assessment) which can be group administered and is standardised from ages 9 to 16 years, 11 months. It takes 30 minutes and involves five short subtests, including a 10 minute free writing activity.

www.patoss-dyslexia.org Click on the ‘Handwriting Speed Assessment’ link in the left hand column

The Hedderley Sentence Completion Test, from www.dyslexia-inst.org.uk/pdffiles/Sentnece.pdf
Interventions

Here we include not just information about interventions describe in the resource pack, but information about other, evidence-based interventions that are currently available in Ireland.

**Jolly Phonics**
The basic book, with photocopiable master sheets, is widely available and costs €35 approx. The Phonic Handbook (1992) by Sue Lloyd, Published by Jolly Learning

A whole range of supporting materials are available from Jolly Learning, including a ‘starter kit’ from ST£154, www.jollylearning.co.uk

**Acceleread Accelewrite** is available in Ireland through software providers. It can also be purchased on line through dyslexia.com

Approx. €139 for CD and manual, including colour cards. Additional colour cards can be printed from the CD.

**Toe by Toe** is available in Ireland from the named distributor and now also from a range of educational suppliers. The named distributor is:

Helen Ruane
Bliary Lodge
Moydrum
Athlone
Co Westmeath
Email readandtalk@eircom.net
Telephone 0906 474906

€45 for a single copy, €225 for a pack of 6

Payments (cheques) should be payable to Helen Ruane Book A/C (Not Toe by Toe). It can also be purchased directly through the website: toe-by-toe.co.uk

**Literacy Acceleration**
The Literacy Acceleration Teachers’ Pack of Resources can be purchased for ST£29, plus VAT from:
AWLED Consultancy Ltd
PO Box 33
Newquay
Cornwall
TR71YP

Can be ordered on line through website awled.co.uk

It contains
- A description of the programme and how to teach it
- A guide for teaching phonics, plus resources
- The spelling programme and details how to use it
- Templates for certificates

Phono-Graphix
Approx €45

Also see website, readamerica.net which has details of training courses. An on-line training certified training course, with a full materials kit costs €591. There are also 4 day courses run in venues in England (Bath and Essex).

Reading Partners/ Peer Reading
Extensive information about this approach can be found through the Centre for Paired Learning at the University of Dundee
www.dundee.ac/psychology/TRWresources


Precision Teaching Approaches
Taskmaster blank playing cards, Catalogue No T428, ST£5.95
Phone 44 (0) 116 270 4286  or contact taskmasteronline.co.uk

SNIP Precision Teaching Pack (credit Carol and Phil Smart)
www.snip-newsletter.co.uk This is a free download.

You can make your own word probe sheets using the free material from John Taylor's Freebies, johnandgwyn.co.uk
Briefly, these are the steps you need to follow once you get online
1. Enter site
2. Choose ‘A precision Teaching Probe Sheet Generator’.
3. Choose whichever version suits you best (I prefer the larger print version).
4. Choose the number of words you want on the sheet, by pressing the number on the bottom of the page (eg 6, will allow a total of 6 words on the sheet).
5. Insert the 6 words on the grid. You only have to do this once and then the grid will allocate the words in a random pattern throughout the rest of the sheet.

There are also extensive resources freely available on theschoolbell.com. Once on this site look at the material labelled Dolch Kit. It allows you to make really attractive booklets with sight words set out in 11 lists.

**Reading Recovery**
You need to complete intensive training to be a recognised Reading Recovery Teacher. Information available from Reading Recovery National Network (covers Britain and Ireland) based in the Institute of Education, London Readingrecovery.org.uk
www.ioe.ac.uk/readingrecovery

See also [www.metc.ie/reading_recovery1.htm](http://www.metc.ie/reading_recovery1.htm) for information about reading recovery in Ireland.

**ARROW**
See the website self-voice.com where there is information about research findings and the training programme. Staff need specialist training and this will cost in the region of €2,500 per school.

Dr Colin Lane can be contacted on drcolinlane@yahoo.co.uk
Also see [www.arrowtuition.co.uk](http://www.arrowtuition.co.uk)
Phone 00 44 1278 652863

**Resources for Developing Reading Comprehension**
There is a very useful article on how to teach reading comprehension strategies. It is entitled, Interventions for Students with Learning Disabilities (in the US the term ‘learning disabilities’ broadly corresponds with our terms ‘specific learning difficulty’ or ‘dyslexia’). However, I think the strategies outlined could be used with a wide range of students, although more suited to upper primary and secondary level. This is a free download from the US National Dissemination Centre for Children with Disabilities.


The NBSS (National Behaviour Support Service) have produced excellent materials on comprehension strategies for post primary schools. Comprehension and Learning Strategies for all Subjects- Teacher Resource 2009 Contact nbss@ecnavan.ie
A Rough Guide to Teaching a Sight Vocabulary-

Using precision teaching methods and flashcards

A Guide for Teachers and Parents
A Rough Guide to Teaching a Sight Vocabulary
(using precision teaching methods)

This is about building a sight-vocabulary using a visual method. That is learning to read words by looking at them and remembering them, rather than sounding them out.

**TEN STEPS TO SUCCESS**

**Step 1**
The first step is to check how many words the child can read ‘on sight’! That is, words which the child can quickly and confidently read. If the child is unsure, guessing or needs time to sound out, it is best to consider that the reading of that word requires more practice.

**Step 2**
All these words can be ticked off the list. Leave unknown words without a mark for the time being. The total ticked off when you start is the baseline. You can decide on a target or goal e.g. ‘To learn another 20 words in the next 6 week’ etc.

**Step 3**
Chose between 3 and 5 words to learn at a time for the ‘unknown’ group. It is not a good idea to choose words that look or sound alike- this makes learning harder. So don’t chose ‘in’, ‘it’ and ‘is’ at the same time.

**Step 4**
Write the 3-5 words on a flashcard, one word per card, writing only on one side. Then ask the child to copy the word on another card, so that you now have 2 flashcards with the same word on it. Take care to write each word in careful print. Do not join up. Do not use capital letters. Make sure the child copies accurately. If the child’s writing is very poor, make both cards yourself.

**Step 5**
At this point, it can be useful (and fun) to play memory pairs. This simply involves you and the child turning over 2 cards at a time and trying to match the words. The child does not have to read the words, simply recognise when a pair have been matched. However, the adult can casually read each word as it is turned over to reinforce the learning. It will build the child’s confidence is s/he can win this game.

**Step 6**
Now shuffle the cards and place one in front of the child, pointing to it and saying;‘This words says ..................... ‘have’.
The child should then repeat the sentence (pointing with one finger to the word) along with you, in other words you both speak at the same time. Finally, the child should point to the card and say the word themselves.

Therefore, the word has been named a total of 3 times, and of course, since there are 2 copies of each word in the pack, there is plenty of practice.

Repeat this, 2 or 3 times, shuffling before each round. It may seem tedious but it is the essential teaching part of the programme.

**Step 7**
You should find that gradually the child is able to say the word almost before you do. It can be useful, after a few runs through your pack to say, ‘this word says………..’ leaving a longish pause. If the child knows, well and good. If they are unsure, supply the word yourself and continue with the procedure. This means that the child is never in the position of getting things wrong and losing confidence.

**Step 8**
When you feel reasonably sure that your child knows the words, gather up the cards and set them out in your hand as if playing poker.

**Pick-a-Card-Any-Card**
In this game, the child picks a card and tries to read it. If she/he succeeds then you hand over the pair which the child has ‘won’. If she/he struggles, tell him/her the word, but take the card and put it back in the pack. Perhaps say, ‘You’ll have to try again for that one’. Eventually, the child should be able to win all the cards.

**Step 9**
The next step is recording words learnt and checking. Write each word taught in the left hand column of the word probe sheet. Present the flashcards in rapid succession, expecting the child to read each one quickly and confidently. If the child can work though the “pack” then finally ask the child to read the word on the probe list. If this is now also correct you can tick if off.

**Step 10**
At the beginning of each session, ask the child to read the words learnt previously. Only give a tick if the child can read the word quickly and confidently. If the word has been forgotten, it needs to be included in the next teaching session. This list contains 15 words and when starting a new page, transfer the last 5 words to the new list. It is well worth rehearsing every word on the word-check sheet at every session to ensure the child does not forget words.
Word Probe Sheet

Name of child: ________________________________

Baseline: ________________ Date: ______________

Target: ________________ Date: ______________

<table>
<thead>
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<th>Words:</th>
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Precision Teaching Approaches, Resources

Taskmaster blank playing cards, Catalogue NO T428, ST£5.95
Phone 44 (0) 116 270 4286 or contact taskmasteronline.co.uk

SNIP Precision Teaching Pack (credit Carol and Phil Smart)
www.snip-newsletter.co.uk This is a free download.

You can make your own word probe sheets using the free material from John Taylor’s Freebies, johnandgwyn.co.uk
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There are also extensive resources freely available on theschoolbell.com.
Once on this site look at the material labelled Dolch kit. It allows you to make really attractive booklets with sight words set out in 11 lists.
A Rough Guide to Reading Partners

A cross-age, peer-tutoring approach

Guidance for Teachers
A Rough Guide to Reading Partners-
A cross-age, peer tutoring approach


Introduction
Schools continue to be concerned to meet the needs of students with reading difficulties and identifying and implementing effective interventions is a key issue. Peer tutoring is known to be effective form of learning, highly cost effective, easily established and durable in its organisation, (see Topping and Ehly 1998). It has a well-established history of success (see Goodlad, 1996). There are extensive, large sample, controlled experiments which record excellent gains for participants in paired reading programmes (see Brooks 2002). Topping (2001) reports,

The general picture in published studies is that paired readers progress at about 4.2 times the ‘normal’ rates in reading accuracy during the initial period of commitment. Follow-up studies indicate that gains are sustained and do not ‘wash out’ over time.

In relation to the development of reading skills, peer tutoring has been found to improve the reading ability of both the tutee and the tutor, (Winter 1996, Topping 1998). There is also extensive evidence of improved social behaviours for both tutees and tutors, including more positive attitudes to other students, better school attendance and improved self-esteem and social confidence. These gains are also seen when students involved in peer tutoring have learning difficulties, whether they participate as tutees or a tutors (Nugent 2001). This article provides a rough guide to organising such a system in schools.

The Reading Partner Scheme
The programme set out here is described as a Reading Partners Scheme. It is a cross-aged peer tutoring approach, in that the tutor would normally be at least two years older than the tutee. It is possible to run such a programme in
mainstream primary or secondary schools, or indeed in a special school setting. Schools are encouraged to select children with literacy difficulties to participate in the scheme both as tutors and tutees. The emphasis is on the importance of the partnership being egalitarian. Although the terms tutor and tutee are preferred in the academic literature, I prefer the terms helper and learner, as students can easily understand these terms.

Participation in a reading Partners Scheme should have a number of benefits;

- increased reading skill of learners and of helpers
- increasing confidence and self-esteem of helpers
- creating a positive attitude to reading for both parties

Managing a Reading Partner Scheme

Research suggests that, compared to other reading intervention projects, peer tutoring is more cost effective and not unduly demanding of resources, including staff resources, Topping and Ehly (1998). Nonetheless it would be naive to expect such a project to be established without time and commitment from a co-ordinating individual, and from classroom teachers and school leadership. In order for a Reading Partners scheme to be successful, a named teacher must have overall responsibility for co-ordinating the programme, and this will need some time allocation. This can be a learning support/ resource teacher or can be another member of the school staff who can give some time and energy to the project.

Who should participate in such a scheme?

Reading interventions normally target those who need additional help with reading and the Reading Partner Scheme certainly targets this group, but may also embrace other children. Schools may choose to target struggling readers, both as readers and as helpers, while others may be invited to participate in order to build their self-esteem or their social skills. Generally, identifying those who need extra help with reading can be done through the schools’ own screening and through information from the class teachers, learning support/ resource teacher. Results of standardised reading tests can
be helpful in clarifying levels of need. Participation in a reading partner scheme may be particularly suitable for children at classroom support level (Support for ALL) or school support level (Support for SOME).

Attendance is a key issue and if a child has poor attendance, there needs to be some contingency in place to address the needs of the partner. For example, there could be a substitute helper/learner available. Some children with very poor attendance may not be suitable for this approach, as it is unfair to committed individuals to have an unreliable partner.

Models of partnerships that can operate successfully include:
- Sixth class helpers working with younger learners
- Transition years students working with first years
- Older special school pupils working with younger special school pupils

**Selecting Helpers**
Students can be selected by learning support teachers, nominated by class teachers or can volunteer. It easier to work with students who had volunteered for the scheme, or at the very least, had given consent for teachers to nominate them. In some settings (for example secondary schools) students can be asked to complete an application form to be allowed to train and operate as a reading partner. Transition year students may be able to use the scheme to obtain credit for the Gaisce awards. This is an extra incentive for participation and attendance.

It is important to note that helpers may have reading skills that would be considered delayed in comparison to the mainstream population, and some may even be weak in comparison to their own classroom peers. For example a fourteen-year old helper may only have a reading age of nine years. In fact this does not prove to be a difficulty if the helper and learner are carefully matched, with the learner having significantly weaker skills and the helper having at least enough expertise to be helpful to the learner.
When selecting ‘helpers’ it can be very beneficial for the helper group to include some children with advanced reading skills and/or high social status. This avoids the possibility that participation as a helper is seen as a negative stigma (the scheme is perceived as being for weak readers). This kind of mix confers a certain status on the scheme and is very important in the psychology of participation. A very successful way to engage weaker older readers in the scheme is to ‘reframe’ their difficulties. For example, while acknowledging that their own reading skills might not be perfect, it is an opportunity to value the work they have done. Perhaps say something along the lines of, ‘You have made so much progress…are doing so well… and of course, you know what it’s like for younger kids when reading is tricky… so you will be really understanding…’ This puts the helper in a positive role. It can be particularly beneficial to sixth class weak readers who may be ready to ‘graduate’ from a learning support setting and who need to build their confidence before transfer to secondary school. Participation in a reading partners scheme as a helper can have many social benefits for helpers. As Topping (1988) says, ‘The tutors develop a sense of pride and accomplishment, and learn trust and responsibility’ (p3).

**Matching Partners**

There is some initial work in managing the logistics of matching partners. When matching partnerships, it is important to consider both chronological and reading ages. Ideally, there should be at least a two year gap on both, and often times the gap can be considerably greater. In fact, anecdotal evidence suggests that learners preferred their partners to be a number of years older, perhaps because this age difference legitimises the difference in reading ability. Same sex reading partners seemed to work best socially. There may also be factors of personality or social issues to be considered.

**A Time, a Place and a Book**

Reading partners need to have access to a range of books, including fiction and non-fiction and books with high interest and low reading age. These might be available in the learner’s classroom, in the school library or in a resource/learning support room.
Partnerships should ideally meet three times per week or more. Meetings can happen during lunchtime, at designated times in the school day (such as immediately after lunch) or after school. Each meeting will need approximately 20 minutes. The model chosen in any one school will depend on the age and maturity of participants, constraints of the time table and availability of suitable space.

A satisfying block of time for partners to meet might be for one term (approximately 3 months). This time-frame allows for a relationship to build up between the partners, but does not create an unlimited commitment. Autumn and Spring terms tend to work best, as the summer term can be disrupted by trips and visits and the alternative temptations available in good weather!

Training of Reading Partner Helpers
Many researchers into peer tutoring make the point that training is vital if peer tutoring is to be successful. (See Goodlad and Hirst 1990, Foot, Morgan and Shute 1990). This training can be done in a single session, delivered by a teacher in the school and does not usually require more than forty minutes. A typical training session might follow the outline below;

- Nominated helpers are invited in a group to a training session.
- They were complimented on their ability to read and praised for their progress over the years.
- Students were also encouraged to reflect on what it had been like to learn to read.
- The scheme is briefly outlined and students are told very clearly that participation in the scheme involves a commitment, and their consent is sought before further training progresses.
- The three key tasks are then explained; to remember to go to appointed meeting place at the right time, to listen to a child read, to be friendly.
- The strategy of Pause, Prompt, Praise (outlined below) is explained.
- The process of using these strategies can be role played by adults.
- Helpers then have the opportunity to practice the skill
Pause, Prompt, Praise is a simple approach suitable for use by peer tutors (see Wheldall 1995). The procedure involves the following simple steps:

- the child encounters an unfamiliar word;
- instead of stepping in immediately and giving the word, the teacher/tutor waits a few seconds for the child to work it out;
- if the child is not successful, the teacher/tutor prompts the child by suggesting he or she perhaps guess from the meaning of the passage, or attend to the initial letter, or read on to the end of the sentence, etc.;
- when the child cannot get the word after brief prompting, the teacher/tutor quickly supplies the word;
- the child is also praised for self-correcting while reading

This initial training only needs about twenty minutes. At this point the matched learners can be invited to join the training. Responsibilities for the learner include remembering meeting times, coming to the appointed place, selecting a book and keeping a record of each session (if the learner is very young, the helper may have this responsibility). The readability of the book chosen is primarily a matter for learner selection. In the event that the book proves 'too hard' during a session, helpers are advised to read it to the learner and, at the end of the session, ask the teacher/co-ordinator to supply an ‘easier’ book for next time.

During the second part of the training session these learner responsibilities are described. Both partners complete their first record form together. This gives them a chance to learn each other’s names, identify the place where the partnership will meet and make a note of the meeting days. There is also time for a brief trial reading partner session, closely supervised by the attending adults.

Finally, the incentive of earning a certificate can be introduced to the group. The Reading Partners Certificates can be earned by partnerships that have met successfully over a number of times during the term. Some schools like to offer a hierarchy of awards, for example:

- A certificate for partnerships meeting ten times
- A certificate for partnerships meeting twenty times
- A certificate for completion of the Reading Partners Scheme

Monitoring the Reading Partner Scheme
Some amount of monitoring and trouble shooting is needed to maintain an effective reading partner scheme. The most common difficulty is absenteeism of one of the partners, but difficulties may also arise in relation to the selection of books at an appropriate level, the availability of suitable places to meet or personality clashes. It has been found that some ongoing feedback to helpers is helpful in sustaining commitment.

The co-ordinator (and possibility class teachers, depending on the context) needs to take on responsibilities such as remembering to encourage helpers to keep appointments, helping learners to select appropriate books and accommodating partnerships in the classrooms. The reading records, which are the primary source of evidence of attendance, need to be monitored and collected periodically. Certificates need to be awarded as needed. Whenever possible, it is helpful to integrate such a scheme into structures already in place in the school. For example, the reading partner certificates and prizes, can be included in the termly/annual prize giving assemblies.

In some schemes, the reading partners’ co-ordinator may bring partners to visit the local library as part of the scheme or plan a celebration/party for participants after completion of the scheme.

Conclusion
Peer reading is an effective form of literacy intervention for students in many educational settings. It is easily established and cost effective. For many participants, not only are there impressive gains in literacy skills, there are also other gains, such as improved self-esteem, attendance and social skills. It is hoped that this Rough Guide will encourage teachers to implement such a programme in their own schools.
References


Reading Partners

Your reading partner is ____________________________

You will be meeting in ______________________________

Your meeting times are_____________________________
Reading Partner Record Form

For Week Beginning Monday_____________

Names ________________ and ___________________

<table>
<thead>
<tr>
<th>Day/ Date</th>
<th>Book/Page</th>
<th>Comment</th>
<th>Today was…</th>
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Help words
- good
- very
- tried
- lovely
- hard
- worked
- enjoyed
- funny
- boring
- effort
- excellent
- reading
Reading Partner Certificate

Awarded to

________________________________________

In recognition of hard work, co-operation and reliability in the Reading Partner Scheme

________________________________________  ______________________________
Date                                               Signed
Guidance on the Use of Positive Declarations

As you will be aware, psychological research has shown that making bold positive declarations about future reading achievement can have a significant impact on both reading ability and attitude to reading (see McKay 2006).

The following is some guidance for you about how to implement this practice in your own classroom.

The expectation is that each child will make a minimum of 3 positive declarations per day about future reading achievement and the enjoyment of books/reading. Declarations can be general or specific and can be done individually, in groups or as a whole class group.

Declarations typically begin with the phrase, *I will*...They should be about future reading achievement or enjoyment.

*I will become a good reader.*
*I will be able to read all the words in my word box.*
*I love books.*
*I will read lots of books this term.*
*Reading is fun.*

Please feel free to use any of these sample declarations, to generate your own ideas or to encourage the children to propose their own suggestions.

Typically, this kind of intervention runs for about one term. The weekly self-monitoring sheet below may be helpful to you.
Positive Declarations

Weekly Teacher Self-Monitoring Record Sheet

Class _______  Week Beginning __________________________

<table>
<thead>
<tr>
<th>Day</th>
<th>Time of Day</th>
<th>Affirmations used</th>
<th>Individual I Group G Whole Class W</th>
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<tbody>
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<td>Monday</td>
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<td>Friday</td>
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<tr>
<td>Other comments/ Additional activities introduced</td>
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</table>

Signed ________________________________

Time of day: this helps you monitor that affirmations are used three times a day, spread throughout the school day

Sample affirmations: no need to write out each and every affirmation, but just give an example or two to check for variety

Individual, group or whole class: Note whether the affirmations were done collectively or not, if the affirmations are done in a mixed way, for example, some group and some whole class, note G +W etc
References

ARROW (2008), C. Lane. Somerset: Arrow Tuition Ltd.


National Reading Panel (2000). Teaching Children to Read: An Evidence Based Assessment of the Scientific Research Literature on Reading and It’s Implications for Reading Instruction. Washington: National Institute of Child Health and Human Development: US Government Printing Office.


