Abstract

Some children appear to find it hard to retain information. Reading difficulties for some of these children mean that they approach words they have met repeatedly as if they had not seen them before. Children approach difficult reading tasks in different ways, some use picture cues, reread or read-on to work out the word semantically while others sound out the word phonologically and others try to recognise the word orthographically. While all of these skills are appropriate and work effectively for many children there seems to be a number of children who are unable to retrieve commonly used words from their memory bank. If a child has no memory of a particular common word, the reading flow is interrupted each time the child endeavours to read that word. The hypothesis for this study is that by slow and articulate modelling of a word needed by a child with reading difficulties, and through the child’s vocal and subvocal rehearsal, phonological, tactile and orthographical method of working on the required word, the retrieval of a particular word will be remembered and become automatic.

For this study three children, all of whom are currently in Year 2, were selected as subjects. The children were assessed to find their point of need and from this a program was implemented. The children were withdrawn from class for a period of ten sessions. Each session was conducted for a period of twenty minutes to half an hour and was administered over a period of ten days. Testing was carried out before, during and after the intervention. The initial word tests used to determine the individual child’s needs were the Basic Sight Vocabulary Test adopted from the Reading Freedom (Calder, 2000), the ACER Word Identification Test and the Sutherland Phonological Awareness Test Data collection.

The data shown is taken from pre and post tests, observational data and running records taken during the teaching sessions. The three students improved in their ability to recall the words that had been targeted and the flow of reading was less interrupted by the inability of the child to remember those words. It was evident that the learning took place at different rates and the improvement over the different tasks was varied. The attitudes of the children affected outcomes.
The implications of this study show that children can be taught words they require over a relatively short period of time providing the teaching is focussed and succinct. For the researcher, writing appropriate texts each day for each child for the duration of this project was labour intensive but this process could be modified if suitable commercially produced books were used. This intervention should take place as early as possible in the child’s school learning environment, preferably in the Prep. Year if such a problem is diagnosed.

Introduction

Memory and language disorders have shown that language plays a critical role in memory and that memory plays a critical role in language. Therefore it is difficult to separate language intervention from memory intervention. Activities done for the sake of improving language should impact on memory development just as activities done for the sake of improving memory should have an impact on language development (Gillam, 1998. p. 212).

From observation and testing done by the researcher, and the children’s class teachers, it has been suggested that the language deficits in the selected children are affected by their capacity to process and store information. An intervention program was decided upon which would improve their language deficits by improving their ability to readily retrieve information from memory. It was envisaged that if such a programme were successful with these children and, if they could rapidly improve through this intervention, that then this could be applied to other children with perceived similar needs but, more importantly, that it would give these children ready access to a method which they could apply to future learning.

Bishop (1992, in Gillam, 1998 p. 47) suggested that

the amount of material to be integrated and the time available for completing these operations will determine the success that children with language impairment experience, rather than the type of mental representations required by a given task (e.g. phonological representations versus visual images). The human information processing system has limited cognitive resources that can be allocated to different tasks. When task demands exceed the available resources, both storage and processing suffer.

Since the problem is the children’s inability to readily and more automatically retrieve the commonly-used words which they need frequently, but were finding so difficult to retrieve, and, as a by-product, for an improvement in their self-efficacy as language learners, it was decided to target one word per day.
Comprehension and language production relies on a child’s ability to “maintain and integrate linguistic information within working memory” (Gillam, 1998, p. 48). Baddeley (1986) stated that optimal retrieval will depend on what retrieval cues are available and optimum retrieval will be influenced on how this has been encoded, whether semantically or visually, and how well the purpose for retrieval matches the encoding. Interestingly, Craik and Levy (1970) believe that although retrieval cues are critical, semantic cues are most effective, more so than phonological or visual, over long delays.

Although it is uncertain whether the children’s problems are short-term memory, long-term memory or inability to use R.A.N., the intervention is intended to give the child strategies to assist them to remember the needed words and be able to retrieve these words automatically, read and write them in isolation, and within texts. Given that there was a divergence of opinion (Craik & Levy, 1970; Baddeley, 1986; Gillam, 1998) about the most effective method of encoding, it was decided to ensure that children were exposed to encoding via semantic, visual and phonological means.

Baddeley (1986) believes that between visual or phonological cues it is thought that visual processing is less effective than phonological. Further, Baddeley (1986) states that the phonological, that is the subject’s speech production and the subject’s speech perception processes, are most important in immediate memory tasks and these studies have been replicated many times (Baddeley, 1986). There is considerable evidence to suggest that auditory presentation does give rise to a particularly durable memory trace which resists disruption by visual material whereas material that is presented visually appears to be readily disrupted by subsequent auditory material (Broadbent, Vines & Broadbent, 1978). Murray (1965) found that performance was enhanced when articulation was practised and that the reverse was true if articulation was prevented. The length of the word also affected its correct repetition. It is thought that representation by the experimenter or rehearsal by the subject will refresh the trace and arrest the process of decay if the task is a short one.

Baddeley (1986) suggests that an already integrated item, such as a word, with repeated representation may improve its accessibility. Atkinson and Shiffrin (1968) stated that the more rehearsal that an individual engages in, the greater the likelihood that the information will be transferred from short term memory to permanent store (Neath, Brown, Poirier & Fortin, 1999). However, while it is thought that auditory presentation does provide direct
access to the phonological store, it does not guarantee rehearsal. If it did then the overall level of performance should not be impaired by articulatory suppression but the study showed that decrement did take place (Baddeley Lewis & Vallar, 1984). Further, Besner & Davelaar, 1982) maintain that evidence has been found that articulatory suppression does not always prevent phonological encoding. They concluded that print subserves two different functions in the reading process. The first is used for lexical processing which is not prevented by suppression. The second phonological code is prevented by suppression and functions as a durable storage medium for retaining serial order information which aids in verbatim recall and comprehension. Baddeley et al. (1984) suggested that there are two separate phonological storage systems which they described as the “inner voice” and the “inner ear”. The “inner voice” assumed to be the articulatory loop system, required either subvocal speech or an auditory input for items to be encoded, while the “inner ear” assuming involved some form of acoustic image. It is thought to be independent of articulation but capable of setting up a phonological representation although not a very robust one.

Phonological working memory, the ability to process and hold verbal information in immediate attention, relates to spoken language development and reading. Similarly, phonological awareness, the ability to consciously reflect on and manipulate the sound components of language relates to early reading and spelling achievements (Lundberg, Frost & Petersen, 1988; Torgesen, Morgan & Davis, 1992). Phonological awareness will affect early literacy development as well as certain aspects of phonological working memory.

The above studies show the importance of phonological encoding and verbal rehearsal, whether vocal or subvocal, to maximise language learning. Representation by the experimenter or rehearsal by the subject refreshes the trace and arrests the decay process. To learn a new word one must hold the phonemic sequence in short-term memory long enough and in enough detail for it to become embedded as a stable lexical unit in long-term memory (Gillam, 1998, p. 11).

Further, in studies done by Sussman (1993), Tallal (1990), Tallal, Stark and Mellitts (1985), it was found that some children with language disorders have difficulty with perception of rapidly produced sounds and with rapid cognitive processing (Johnston & Ellis Weismer, 1983; Siniger, Klutzky & Kirchner, 1989). Ellis Weismer (1985) suggested
that if clinicians slowed their rates of speech, this provided learners with more time for processing, encoding, storage and retrieval (Ellis Weismer, 1985).

Therefore, the researcher modelled slow and careful articulation, using cued articulation if necessary, requiring the child to carefully imitate. This was done several times throughout each lesson with each new target word daily but words previously taught were also reinforced daily.

Ellis Weismer, Hesketh, Hollar and Neylon (1994) suggested that emphatic stress on the target word helped to direct children’s limited resources to the new information, improving their ability to recall the words better than words that had been produced with regular stress. It was found that children’s selective attention to new information to be learned was helped by emphatic stress. Increased selective attention appeared to influence children’s encoding, recall and report functions (Gillam, 1998). This was easily incorporated into the lessons with the teacher verbally modelling stress on the target word in the sentences that were written each day and with the child then rereading those sentences, verbally stressing the day’s target word.

Fazio (1996) conducted experiments to teach an eight-line poem to Second Grade children and this proved to be a lengthy process which involved a great deal of modelling by the experimenter and rehearsal by the children. For children without SLI to repeat the poem with less than three prompts took 40 repetitions while the SLI group took on average 54 repetitions. Although the researcher did not incorporate the words being taught into poetry, Fazio’s (1996) outcomes do highlight the necessity for constant multiple rehearsals to ensure memorization. To take account of the necessity of repetition, the target word was presented many times within the first lesson, but it was reinforced several times in subsequent lessons through word practice, tracing and specifically written texts.

Distinctiveness of encodings, or processing of stimulus-specific characteristics, has shown to improve memory. In a study by Moscovitch and Craik (1976) the benefit of unique cues relative to shared cues was greater for deeper levels of encoding. They concluded that deeper encoding establishes a higher calling on potential memory performance and that the extent to which this potential is realized depends on the speciality of the cue-target relation. Craik and Tulving (1975) suggest that items more elaborately encoded seem to
be better recalled and therefore the degree of elaboration is a further determinant of long-term retention.

For each word presented to each child in the Action Research Project, the child was asked to suggest a cue which would assist the child to remember the word that had been presented and this was noted by the researcher in the lesson and the child was asked within the lesson how that particular word was going to be remembered by them (Munro, 2003).

Action is another important aid to remembering words (Munro, 2003). This was reinforced each day by the child being blindfolded and tracing over the sandpaper letters for the new target word, and also for the previously learnt words and with this action the child had to say what the letters were and what word they spelt out.

Although research has been conducted by educationalists to try to improve memory retention the researcher felt it necessary to discover what psychologists’ research has shown because they have conducted extensive research in this area. It must be stated that much of the research conducted relates to brain-damaged patients, alzheimer sufferers, accident victims or people who have had memory loss due to ill-health, such as stroke, whereas research with children tends to concentrate on children with severe learning difficulties. Although the researcher acknowledges limitations to the literature studied for this project, very little of what has been studied purports to “mainstream” children. However, some of the methods psychologists have used to aid their clients have been incorporated into this action research project in order to assist children to improve their memory retrieval strategies.

The present study aims to extend earlier research and has been developed to assist these children to incorporate these frequently used words into their reading and spelling so that their response is more automatic and their concentration to decipher those words does not disrupt the process of their reading of prose.

**Hypothesis**

Prediction: Teaching young children who have reading difficulties by slow and articulate modelling of a word needed by the child, and through the child’s vocal and subvocal rehearsal, phonological, tactile and orthographical method of working on the required
word, leads to the retrieval of a particular word being remembered and becoming automatic.
Method

Design

The study uses a case study OXO design. Each of the three students tested form a separate case study. The pre-testing, the ACER Word Identification Test and the Basic Sight Vocabulary Test from Reading Freedom (2000), ascertained the frequently used words needed by each child, while the Sutherland Phonological Awareness Test provided information about what the children knew about words. Such target words were then taught in isolation, but also within specifically written texts. It was envisaged that the methods used would enhance memory retention for those words that each child found difficult. The justification for using the Reading Freedom Test was that it targeted many high frequency words that the children would need in their everyday reading and divided them into lists which provided manageable tasks to give each of the children.

Basic sight words make up one-half of everything literate adults read, and approximately two-thirds of the material beginning readers encounter” (Reading Freedom, Teacher Resource Book, Hunter Calder, p. 9.)

Once these tests had been undertaken a lesson plan was devised. The same method for each child was employed and this was influenced by method “I5 - When it is Hard to Remember” by Clay (2000) but the words targeted were those needed by each child.

The Sutherland Test was administered as prescribed, as was the ACER Test. The ACER test was discontinued when the researcher felt that the child had reached “frustrational” stage and the same approach was adopted with the Reading Freedom Test.

Participants

For this study three children, all of whom are currently in Year 2, have been chosen because the strategies taught to their peers have not assisted them to readily recognise words they repeatedly meet in their reading. Two of the children included in the study had received Reading Recovery during Year 1, while the third child was excluded because of other children’s perceived needs. The ages of each child are outlined below:
Case Study 1  8 years and 4 months
Case Study 2  7 years and 9 months
Case Study 3  7 years and 11 months

**Procedure and Materials**

The procedure for this study is detailed below:

- Initially the child was asked to write several words on the blackboard. No indication was given to the child whether these words were spelt correctly or not. These words were chosen on the basis of words that the child had had difficulty with in the initial tests and words which were causing problems on the daily running records. Each day’s initial list grew as it included the words taught over the period of the study and to check on a child’s recollection of an incorrectly read word.

- Following the writing of the words, the child was then given a book to read which had been specifically written targeting some of each child’s problem words. The teacher took a running record of the child’s reading.

- After this, a specific word was taught. To do this the child was given magnetic letters and asked to spell the word. If the child were unable to do the task the teacher would then show the child the word spelt correctly.

- The child would then be asked in what meaningful way could this word be remembered and that cue was recorded by the teacher.

- The word would then be disarranged and the child asked to put the letters in order again.

- When the child could do this independently, the child would then be asked to write the word on the blackboard, on a magic slate, and in sand. On each occasion the teacher would ask the child how this word was going to be remembered.

- The child was then blindfolded and traced words which had been written in sandpaper. The child would say what the letters were as they traced them and what words were spelt out by the letters.

- Following this the teacher would write five sentences with the new target word included and the child would read each sentence immediately after the teacher wrote it saying how this word was to be remembered.
After this the child would then reread the five sentences without help and when the target word was reached in the sentence, it was verbally emphasised.

The next day the child was always asked to write the word/s that had been taught with other words which were to be targeted. The word taught yesterday and the day’s targeted word always were included in the new text.

The next section discusses the pilot study for this investigation.

**Pilot Study**

A pilot study is an important component in the data collection process (Yin, 1994). In this study, two pilot studies were conducted in order to uncover any inadequacies in the initial research design (Yin, 1994; Malhotra, 1996). Two average students were chosen and the above tests with one exception were followed. Instead of the ACER Test, a school list of 100 of the most commonly used words’ list was used. Although this provided appropriate information it did not give a point of comparison with the child’s peers and it was considered that this would be a valuable insight to the child’s beginning point. On the basis of the pilot programme this was altered to give more meaningful information about the child.

The procedure, as shown above, was followed. The nature of the pilot studies was brief, three lessons for each child, and no long-term benefit could be ascertained. The results were encouraging and the words taught were remembered and retained over the course of the pilot study.

Following the success of the pilot study permission was then sought from the three parents of the children selected for the Action Research Project. Two of the children returned their forms almost immediately while the third child took about ten days to return the form. This meant that all three children did not start together and that the children, Case Studies 1 and 2, started before the third child. This meant that additional lessons were done with these two children but they have not been documented. The third child commenced once his permission form had been received.

**Limitations of this Study**
This study was limited to three children who were known to have difficulties in retrieving commonly used words in their writing and reading.

The maximum time allowed for each lesson was thirty minutes and therefore the lesson was designed to fit into this time frame. Although it was felt by the researcher that it would have been beneficial to incorporate words that allowed for onset and rime, there was insufficient time to do this within the time frame for the daily lesson, and also within the time frame allowed for this research.

The next section details the results of the case studies: 1, 2 and 3. For each case study 10 lessons have been documented.
Results

Daily Analysis of Daily Records

The three charts below show the daily running record information. However, the words shown on the charts only indicate where the errors related to words already taught to the children or the day’s target word. More detailed records of the problem words are shown in Appendix A.

Lesson 1 for each case study targeted a word but a book was not done, therefore, there was no running record for that day.

Codes shown in tables: S/c – self-correction, N/a – non-attempt

Case Study 1

<table>
<thead>
<tr>
<th>LESSION NO.</th>
<th>ACCURACY</th>
<th>%</th>
<th>SELF-CORRECTIONS</th>
<th>TAUGHT AND TARGETED WORDS – CORRECT, SELF-CORRECTED, ERRORS AND NON-ATTEMPTS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1:37</td>
<td>0.96</td>
<td>1:1</td>
<td>&quot;Saw&quot; correct or s/c. target word -&quot;went&quot; for &quot;want&quot; twice.</td>
</tr>
<tr>
<td>3</td>
<td>1:69</td>
<td>0.96</td>
<td>1:3</td>
<td>“Saw - correct, s/c &quot;want&quot; for &quot;wanted&quot;, &quot;went&quot; for &quot;want&quot;, target word “new” – n/a.</td>
</tr>
<tr>
<td>4</td>
<td>1:29</td>
<td>0.96</td>
<td>1:3</td>
<td>S/c &quot;,&quot;went&quot; for &quot;wanted&quot;, error -&quot;want&quot; for &quot;went&quot;, &quot;one&quot; for &quot;saws&quot;. Target word – correct.</td>
</tr>
<tr>
<td>5</td>
<td>1:13</td>
<td>0.92</td>
<td>1:10</td>
<td>S/c &quot;want&quot; for &quot;went&quot;. Error - &quot;went&quot; for &quot;want&quot;. Target word – error “does” for “dies” and “down” for “does”.</td>
</tr>
<tr>
<td>6</td>
<td>1:25</td>
<td>0.96</td>
<td>1:3</td>
<td>Correct in all presented words and target word.</td>
</tr>
<tr>
<td>7</td>
<td>1:21</td>
<td>0.95</td>
<td>1:3</td>
<td>Correct in all presented words, Target word - error -&quot;or&quot; for &quot;our&quot; and n/a &quot;our&quot;.</td>
</tr>
<tr>
<td>8</td>
<td>1:26</td>
<td>0.96</td>
<td>1:4</td>
<td>Error - &quot;ow&quot; for &quot;our&quot; and &quot;das&quot; for &quot;does&quot;. Target word – error “her” for “your”</td>
</tr>
<tr>
<td>9</td>
<td>1:38</td>
<td>0.97</td>
<td>Nil s/c</td>
<td>No errors in words taught or target word.</td>
</tr>
<tr>
<td>10</td>
<td>1:28</td>
<td>0.96</td>
<td>1:4</td>
<td>S/c &quot;saw&quot; for &quot;sold&quot;, error - &quot;said yes&quot; for &quot;does&quot;, “&quot;went” for “want&quot;.</td>
</tr>
</tbody>
</table>

As can be seen above the child read with a high degree of accuracy, and self-corrected reasonably well, with the exception of Lesson Number 5, which was a more difficult text. The child read strongly for meaning and where only a visual
cue was used at least the first letter nearly always matched the printed word. The text was read quite strongly with fluency and phrasing. The target word quite often presented problems within the text. Only twice, over the period of ten lessons, were words that had been taught, or the targeted word, not attempted.

As can be seen above the child in Case Study 2 has significant reading problems. It should be noted, however, that towards the end of the programme the child nearly always made an attempt at a word and rarely made no attempt. The attempts were meaning or visually based and were significantly better than they had been in the past. The fluency of the reading has improved but because the child has to work so hard to decipher words it is not well phrased. The child has some letter confusions, e.g. “b” for “d” and vice versa, which presented some problems. However, a significant improvement was that the child showed some awareness that what was read did not

### Case Study 2

<table>
<thead>
<tr>
<th>LESSION NO.</th>
<th>ACCURACY</th>
<th>%</th>
<th>SELF-CORRECTIONS</th>
<th>TAUGHT AND TARGETED WORDS – CORRECT, SELF-CORRECTED, ERRORS AND NON-ATTEMPTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1:24</td>
<td>93</td>
<td>1:2</td>
<td>S/c “saw” for “sat” and “was” for “saw” – twice. Error in target word - “came” for “come” – twice.</td>
</tr>
<tr>
<td>3</td>
<td>1:6</td>
<td>83</td>
<td>1:10</td>
<td>Correct in all presented words. Target word error - “down” for “by”</td>
</tr>
<tr>
<td>4</td>
<td>1:16</td>
<td>93</td>
<td>1:4</td>
<td>Correct in all presented words and in target word “will”.</td>
</tr>
<tr>
<td>5</td>
<td>1:6</td>
<td>83</td>
<td>1:26</td>
<td>S/c “will” for “when”. Error “saw” for “sat”. Target word error - “cuddle” for “call” – twice, “cuddled” for “called” – three times.</td>
</tr>
<tr>
<td>6</td>
<td>1:7</td>
<td>85.5</td>
<td>1:5</td>
<td>S/c “was”, error “saw” for “was”. Correct in target word.</td>
</tr>
<tr>
<td>7</td>
<td>1:7</td>
<td>85.5</td>
<td>1:8</td>
<td>S/c “came” for “come” and “called” for “calling”. Error – “come” for “go”. Target word error – “win” for “when” and “whenout” for “without”.</td>
</tr>
<tr>
<td>8</td>
<td>1:6</td>
<td>83</td>
<td>1:11</td>
<td>S/c “but” for “by”. Errors – “then” for “when”, “called” for “could”, “calling” for “crying”, “will” for “think”, “will” for “were” – twice and N/a “then”. Target word error – “who” for “why”.</td>
</tr>
<tr>
<td>9</td>
<td>1:9</td>
<td>89</td>
<td>1:5</td>
<td>S/c “with” for “will”, “come” for “came”. Errors – “went” for “want” and “with” for “that”. Nil target word errors.</td>
</tr>
<tr>
<td>10</td>
<td>1:12</td>
<td>91</td>
<td>1:3</td>
<td>Errors – “with” for “out”, “by” for “because”, “will” for “wish”, “when” for “then” and N/a “then”. No target word errors.</td>
</tr>
</tbody>
</table>
sound right and made an effort to correct it, even if the attempt was unsuccessful. Earlier reading saw the child reading any word whether it was appropriate or not just to move on. The child is not strong grammatically and this aspect still presents some problems in that tenses when they are read are not consistent and this is not often noticed by the child. However, towards the end of the programme there seemed to be a slight improvement in this aspect.

Case Study 3

<table>
<thead>
<tr>
<th>LESSION NO.</th>
<th>ACCURACY</th>
<th>%</th>
<th>SELF-CORRECTIONS</th>
<th>TAUGHT AND TARGETED WORDS – CORRECT, SELF-CORRECTED, ERRORS AND NON-ATTEMPTS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1:13</td>
<td>92</td>
<td>1:5</td>
<td>Correct in presented words.</td>
</tr>
<tr>
<td>3</td>
<td>1:18</td>
<td>94</td>
<td>1:4</td>
<td>No errors in presented words “said” and “new”.</td>
</tr>
<tr>
<td>4</td>
<td>1:12</td>
<td>92</td>
<td>1:3</td>
<td>Errors “new” for “now” – twice, “was” for “saw”. Error in target word “there’s” for “these”</td>
</tr>
<tr>
<td>5</td>
<td>1:16</td>
<td>93</td>
<td>1:3</td>
<td>S/c – “was” for “saw”. Error in target word “I” for “who”.</td>
</tr>
<tr>
<td>6</td>
<td>1:29</td>
<td>96</td>
<td>1:2</td>
<td>S/c – “was” for “saw”. Error – “this” for “these” – twice.</td>
</tr>
<tr>
<td>7</td>
<td>1:25</td>
<td>96</td>
<td>1:6</td>
<td>Error “was” for “saw” and correct in target word.</td>
</tr>
<tr>
<td>8</td>
<td>1:13</td>
<td>92</td>
<td>1:4</td>
<td>S/c “was” for “saw”, error “new” for “now”. Errors in target word – “wore” and “went” for “were”.</td>
</tr>
<tr>
<td>9</td>
<td>1:15</td>
<td>93</td>
<td>1:6.5</td>
<td>S/c “new” for “now”. Error “was” for “saw”. Error in target word “well” for “will”.</td>
</tr>
<tr>
<td>10</td>
<td>1:52</td>
<td>98</td>
<td>1:4</td>
<td>All presented words correct.</td>
</tr>
</tbody>
</table>

The child in Case Study 3 had some difficulties with word reversals, for example “saw” for “was” and vice versa. Integrated cues were often used, however there was a leaning to visual cues. Word errors inevitably started with the same beginning letter as the word in the text and a number of words matched in the final letter/s as well. The child displayed a very low rate of non-attempts throughout the programme. Correcting or self-correcting in the reading of some of the words taught, for example, “saw” and “was”, was done at reasonably slow pace.
Pre & Post Results

SUTHERLAND PHONOLOGICAL AWARENESS TEST

In the pre-test the child had little difficulty. In the segmentation “s/eat” for “s-ea-t” was said. In the non-word reading “fose” for “fouse” and “repadal” for “ripadal” was said. In the non-word spelling “sbed” for “speg” and “macudordors” for “makidos” was written.

In the post-test no problems with segmentation were experienced, responses to the non-word reading was the same for “fouse” and “repadal” for “ripadal”. Non-word spelling words were all acceptable.

The actual scores displayed on the graph above show that the pre-test was 1 point below 1 standard deviation above the mean for Year 2, while the post-test showed a 2 points above 1 standard deviation above the mean for Year 2.
As shown in the pretest the child’s score was 1 standard deviation below the mean at a First Class level. There was a zero score for syllable counting, phonemic level segmentation, CC blends - deleting first phoneme, and CCV blends – deleting second phoneme and a low score for Phonemic Level (CVC)- deletion of initial phoneme. 2 was scored for non-word reading with the problem words being “tav” for “taf”, “sob” for “spob” “scrab” for “scrad”, “fogs” for “fouse” and “ragsk” for “ripadal”. 2 was scored for non-word spelling with the problem words being “sege” for “sped”, “vix” for “visc”, “fom” for “strom”, “das” for “bouse” and “makdos” and “makidos”.

There was considerable improvement in the post testing where the child’s score indicates a point below 1 standard deviation below the mean for a Second Class level. The problems were still at the Phonemic Level (Blends) where a score of 1 was achieved for Segmentation, but a nil score for deleting the first phoneme and second phoneme. Problem words in non-reading were “spod” for “spob”, “scad” for “scrad” “fast” for “fouse” and “prowl” for “ripadal”. In the non-word spelling, problem words were “seg” for “speg”, “shom” for “strom”. “bas” for “bouse” and “mackdos” for “makidos”.
As shown in the graph, the pre-test score was 3 points below the mean for Second class. The score was 44 out of a maximum of 58.

In the Rhyme Production in Section A – Syllabic and Subsyllabic Level, there was difficulty rhyming a word with “four and sore”. In B – Phonemic Level (CVC), in Segmentation, “s/eat” was done for “s/eal/t” and “m/ug” for “m/u/g”. Greater difficulty was displayed in C. Phonemic Level (Blends) where there was a score of 2 for each section. In Segmentation, “tr/i/p” for “tr/i/p” and “b/o/n/d” for “b/o/n/d”. In Deleting First Phoneme “ate” was done for “plate” and “ing” for “swing”. In Deleting Second Phoneme, “ale” was done for “stale” and “og” for “frog”. In Non-word Reading the child read “mask” for “mesk”, “scarred” for “scrad”, “farce” for “fouse” and “fapal/rapal” for ‘ripadal”. In the Non-word Spelling, the child initially wrote “aa” for “af” but self-corrected, “balse” for “bouse” and “makados” for “makidos”.

In the post test, as shown on the graph, the child scored 5l out of a maximum of 58 which was 4 points above the mean for Second Class. A perfect score was achieved in A., while in B. Phonemic Level (CVC) the child said “g/o/w” for “g/o”. In C. Phonemic Level (Blends), Segmentation “tr/i/p” was read for “tr/i/p” and “b/on/d” read for “b/o/n/d/” and in Deleting Second Phoneme “fig” was read for “fog”. In non-word reading “mas” was read for “mesk” and “ripple” was read for “ripadal”. In the non-word spelling “ath” was written for “af”, “bowse” for “bouse” which is acceptable, and “makedos” for “makidos” which is also acceptable.
In the ACER Word Identification Test, the child attempted 70 words, starting at “can” and finishing at “messenger”. Exactly the same words were presented for the pre and post tests. In the pre test there was considerable hesitation over a number of words and although this was not timed exactly it was less evident in the post testing. As shown in the graph, 48 was scored in the pre test (equivalent to early Grade 2) and 58 in the post test (equivalent to mid Grade 2). In the pre test 7 words were unattempted, in the post test all words were attempted. Appendix B sets out the problem words and the child’s attempts.
In the ACER test the child attempted 52 words, starting at “can” and finishing at “chair”. Exactly the same words were presented for the pre and post tests. There was considerable hesitation over many words in the pre-test and although this was not timed, hesitations were less obvious in the post-testing. As shown on the graph, in the pre-test the score was 28, (early Grade 1) while in the post-test the score was 40 (late Grade 1). There were six non-attempts in the pre-test while there was only one in the post-test. See Appendix B for the problem words experienced and the attempts made by the child.

![Case Study 3 ACER Word Identification Test](image)

In the ACER test the child attempted 70 words, starting at “can” and finishing at “messenger”. Exactly the same test was administered for both the pre and post tests. In the pre-test the child scored 33 and which is in the mid Grade 1 range whereas the post-test has shown an early Grade 2 range with a score of 44. See Appendix B for the problems words experienced by this child. In the pre-test there were 26 non-attempts, while in the post-test there were only 4.
The child attempted the first seven lists of words, shown in Chapter 7: Tests, Checklists and Teacher Record Sheets, 164 words in total. There was an improvement in the number of words read as shown in the graph above. Appendix C shows the problem words attempted by the child. In the pretest five words were not attempted whereas in the post test all words were attempted.
The child attempted the first three lists of the Basic Sight Vocabulary Test shown in Chapter 7: Tests, Checklists and Teacher Record Sheets, 72 words in total. There was an improvement in the number of words read as indicated in the graph above. Appendix B. shows the problem words and the attempts made by the child. In the initial test there were three non-attempts by the child in the pre-test while all words were attempted in the post-test.

The child attempted the first seven lists of the Basic Sight Vocabulary Test shown in Chapter 7: Tests, Checklists and Teacher Record Sheets, 164 words in total. There was an improvement in the number of words read as indicated in the graph above. Appendix B. shows the problem words and the attempts made by the child. There was only one non-attempt in the pre-test and none in the post-test. There were eight self-corrections in the pre-test and four in the post-test.
Discussion

The children, Case Studies 1 and 2, had been involved in the Reading Recovery in 2002 and were taught by the Researcher so there was a rapport that had been established and the children had made great gains during the 2002 programme so their attitude to working with the same person was very positive. The third child, Case Study 3, had no such rapport with the researcher and the attitude was not such a positive one and a rather hostile attitude was displayed to being removed from class. It took several lessons to establish a rapport with the child before a positive attitude was shown.

In Case Study 1, the child readily integrated or self-corrected many of the words taught into the reading. There was, however, a slower adaptation into writing these same words correctly in the word lists at the beginning of lessons. Over time and with repeated presentations this did improve.

The child in Case Study 2 showed a significant improvement in the word lists done at the beginning of each lesson and the self-correction of these words in the reading became stronger as the lessons progressed although it took time for the words to become established in the reading. Because the child had such a small bank of established words the reading process was laborious.

In Case Study 3, the child found it difficult to write the words correctly in the word lists at the first attempt and this was true also for some of these words whilst reading texts. This was particularly true for those words he read as reversals like “saw” and “was”. Words, where the initial and final letters matched, for example, “new” for “now” and “will” for “well”, also presented problems. The style of reading is rather stilted and the phrasing needs improving.

The child in Case Study 2 appeared to make the biggest gains during the intervention and this was unexpected because this child was substantially weaker in Language than the other two children. The researcher believes that this may be the result of the Children in Case Studies 1 and 3 having entrenched so firmly in their memories the incorrect spelling of some of the words presented throughout this Study that the Researcher had to assist the children to “unlearn” these words before they could “relearn” them correctly. Given that
the Case Study 3 child was reticent about participation in the Study that problem was probably compounded. The Case Study 2 child had substantially less word knowledge in place and it could be that there was less “unlearning” to do than for the other two children.

As indicated above, two of the children continued beyond the ten lessons although they have not been documented here and, in fact, all the children received substantially more than ten lessons. It was evident when the programme ceased with the researcher that words taught early in the programme had become quite automatic in the writing and the reading for all the participants in the study.

The tracing of the sandpaper letters had two bonus effects apart from those anticipated. It was expected that this activity would help the children visualise the words and the letters that made up the words. However, the children had some letter confusions and the tracing and saying the letter name or sound appeared to rectify this problem to some degree. Also the children displayed some very poor letter formation in their writing and because the teacher guided their finger whilst tracing and therefore encouraged correct letter formation, this was transferred to their writing.

It was also interesting to note that the children had a term break during the intervention programme and the break in the lessons did not appear to upset the words that had been taught prior to the holidays.

One further point that should be noted is the texts were written to specifically target the words that had been taught to each child but there were no illustrations to accompany the texts and therefore there was no pictorial assistance for unknown words.

In addition the effectiveness of the cues was highlighted when, if a child was stuck on a word, the researcher could remind the child of the chosen cue and the child wrote the word correctly in nearly every instance where this was done.

**Implications for Teaching Practice**

The implications of this study show that children can be taught words they require over a relatively short period of time providing the teaching is focussed
and succinct. For the researcher this project has been labour intensive but this process could be modified to use targeted suitable commercially-produced books. This intervention should take place as early as possible in the child’s school learning environment, preferably in the Prep. Year if such a problem is diagnosed.

As the emphasis of this study has been to teach children the commonly used words that they need and, as evidence shows that the way we encode information can determine how well we remember it, it is imperative that the implications referred to in the Literature Review for quality learning to take place should be prioritised from the outset and retrieval strategies taught. There should be no place for proactive interference. Children need to be taught the why, when and how of verbal rehearsal and how to use it as this will enhance Short Term Memory and directly relates to the operation of Working Memory. Organisation is another factor that underlies developmental increases in memory. Teaching children to chunk words in sentences, for example, into phrases or clauses may make rehearsal more manageable. Teaching children to paraphrase may assist children to make large amounts of written material into more manageable units.

Various factors contribute to memory development including greater processing resources, better knowledge as reflected in more complex schemata and better metamemory. Sometimes these strategies evolve on their own as a person makes links between what they are experiencing and what they remember but often they need to be taught.

Admittedly many of the “high frequency”, “commonly-used” or “helping” words do not follow regular spelling patterns, but at the same time many do. It has been suggested by Bryant, Bradley, Maclean & Crossland, 1989, that knowledge of rhyme and alliteration help children understand that reading is based in part on the alphabetic principle that letters represent spoken language at the phonemic level and that these tasks precede reading and more difficult phonological tasks. It is also understood that alphabetic writing represents the sounds of spoken language as well as the meaning (Adams, 1990). As it is thought that there is a relationship between sound sensitivity and reading performance perhaps these words, that are so essential for the child in their early reading ability, could be
presented in informal linguistic routines such as nursery rhymes, finger plays and songs which would be most appropriate for the child in Prep. Many of these words could be further enhanced by the use of onset and rime.

It was decided that this programme had been beneficial for these children and the researcher was asked to show an Aide, working with children at this level, how to conduct this programme and this has continued on for them and other children with similar needs. The preparation of specialized texts has not continued. All of the children have shown a marked development in their reading abilities and are now reading at text levels considerably above those at which they were reading prior to the commencement of the intervention. Another improvement that has been noted, particularly with the Case Study 2 child, is the independence that is shown when completing language tasks.

**Directions for Future Research**

The scope and nature of the research only involved a limited number of words and number of subjects – that of three students. Potential areas for research opportunities remain for investigating a greater number of words and a larger number of subjects.

The results of this study demonstrate the benefits of implementing memory strategies to aid language retention. Although the study focussed on relatively few commonly-used words in isolation and selected reading, future research could investigate the benefits of this explicit teaching if this method of teaching strategies to retain language was targeted in the Prep. Year to see how this impacted on prose reading and writing in the following year.
References


Craik F. I V, & Tulving E, (1975). Depth of Processing and the Retention of Words in Episodic Memory, 


learning, Poster presented at the annual convention of the America Speech-Hearing 

Association, New Orleans, U.S.A.


content areas for assessment and intervention. *Topic in Language Disorders*, 17 (1), 


Aspec Publishers Inc., MA, USA, p. 212.


*Journal of Speech and Hearing Research*, 26, pp. 397 – 403.


Publications.


## Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Daily Running Records</td>
</tr>
<tr>
<td>Appendix B</td>
<td>ACER Word Identification Test</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Reading Freedom – Basic Sight Vocabulary Test</td>
</tr>
</tbody>
</table>
Appendix A - Daily Running Records

Case Study 1

Lesson 1

No running record was done for the first lesson.

Word to be targeted “saw”

Child recorded spelling as: soor/sor/soar.

The child was given the magnetic letters, to make the word “saw”. The child’s image for remembering “saw” was a picture of a cutting saw. The child then remade the words several times. It was then written on the blackboard, on the magic slate, and in the sand and after each time the child was asked how the word was going to be remembered.

The child was then blindfolded and asked to say the letters that were traced over and at the end asked to say the word that had been traced and how it was going to be remembered.

Five sentences were then written and the child read each one as it was written and said how it was to be remembered.

1. I saw a cat.
2. The saw cut me.
3. I saw the dog’s paw.
4. I saw the boy at school and he saw me.
5. My mum and dad saw my friend down the street.

The child then reread the sentences, verbally emphasising the word.

Lesson 2

Child was asked to write the words “saw”, “want”, “new”, “than”, “school”, “has”, “of”, “time” and “our”. All were written correctly except the following: “sor” for “saw”, “whant” for “want”, “scholl” for “school”, “noo” for “new” and “owe” for “our”. The target word was “want”.

The child then read the specifically written book “The Cat” which incorporated “saw” “want”, and “school”.

29
“Saw” was read correctly in each instance except one where “say” was read and then self-corrected. “want” was self-corrected once, “wanted” was read correctly and “went” for “want” was read in two other instances. Accuracy was 1:37 or 96% with self-corrections at 1:1.

Using the supplied magnetic letters, the word “want” was read and it was decided that “stamping the foot” was going to be the way that word was to be remembered. The word was remade several times, then written on the blackboard, on the magic slate and in the sand, each time followed with the child saying how this word was going to be remembered.

The child was then blindfolded and the word traced over with the child naming the letters and finally saying what the word was. The words “saw” and “want” were included.

Five sentences were then written, with the child reading it at the completion of each sentence and saying how that word was going to be remembered.

1. I want a bike.
2. I want a pen.
3. My friend wants to play with me.
4. She wanted me to come to play.
5. I want to come to play.

The child then reread all five sentences, verbally emphasising the targeted word in each instance.

Lesson 3
Child was asked to write the words “want”, “new”, “time”, “what”, “came”, “same”, “saw”, “good”, and “our”. All words were written correctly except the following: “naow” for “new”, “goed” for “good”, and “wot/whot” for “what”.

The child then read the book “My Dog” which was specifically written to emphasise the words already taught and targeting the new word “new”. The child read “want” for “wanted” and “went” for “want” but both were self-corrected. “which” or “new” were not attempted.

Accuracy was 1:69 or 98% and self-corrections 1:2.
The magnetic letters for “new” were supplied and the child made the words several times. The cue for remembering “new” was that the family had recently purchased a new car. The child then wrote the word on the blackboard, on the magic slate and in the sand and stated each time how the word was going to be remembered.

The child was then blindfolded and traced over the sandpaper letters, saying each letter and what word the letters spelt. The words previously taught and the target word were included.

Five sentences incorporating the target word were then written by the teacher with the child reading them immediately after each sentence was written and stating how that word was going to be remembered.

1. We’ve got a new car.
2. I was new in Prep.
3. We have a new boy in our class.
4. I want to have a new book.
5. The elephant had a new baby elephant at the zoo.

The child then reread all five sentences, verbally emphasising the word “new” each time.

Lesson 4
The words written on the blackboard by the child were: “saw”, “new”, “good”, “time”, “came”, “same”, “what”. The child correctly recorded “saw”, “want”, “time”, “came”, and “same”.
For “new” the child wrote “naow”, for “good”, “goed”; and for “what”, “wot/whot”.

The child read the story “The Kitchen Table” which incorporated the words previously taught, and the target word.

The following were read but self-corrected: “went” for “wanted”, “by” for “be” and “sort of” for “sorts”. The words “night” and “found” had to be told to the child. The following words were incorrectly read “about” for “able”, “ta” for “tools”, “ins” for “ones”, “one” for “saws” and “sho” for “showed” and “want” for “went”.

Accuracy was 1:29 or 96% accuracy and self-correction at 1:3.
The child was then given the magnetic letters for the word “good”. The child reassembled the word “good” several times and the cue for this word was to put the hands together as if in prayer.

The word “good” was written on the blackboard, on the magic slate, and in the sand stating on each occasion how the word was going to be remembered.

The child was then blindfolded and the sandpaper letters traced. The letters and then the words spelt were identified by the child as they were traced. Previously learnt words and the new word were traced.

The teacher then wrote five sentences incorporating “good” in each. The child read each sentence immediately after it was written and said how it was to be remembered.

1. This child is always good.
2. He is a good footballer.
3. He is good at Maths.
4. He is not good for Mum.
5. “Please be good”, said Mum.

All five sentences were reread with the child verbally emphasising the targeted word.

Lesson 5

The words written on the blackboard were: “new”, “good” (the child started with “ga”, then self-corrected), “saw”, “scool” for “school”, “whent” for “want” but self-corrected and “dus” for “does”.

The child then read the book, “The New Book” which incorporated the target word and the words previously taught. The child read “went” for “want” and “Harry Potter” was not attempted. The following words were incorrectly read: “want” for “went”; “fast” for “first”; “ride” for “read”; “found” for “find”, “talk” for “take” but all were self-corrected. The following were read incorrectly: “save” for “sure”; “how” for “who”; “went” for “wrote”; “for” for “of”; “does” for “dies”; “swans” for “sounds”; “down” for “does”. The following were not attempted: “asked” or “copy”. The child then read “no-one” for “know” and “this” for “these”.
Accuracy was 1:13 or 92% and self-correction 1:10.

The target word “does” was introduced which the child said would be remembered by “do” + “es”. The child was then given the magnetic letters to make the word which was remade several times, then “does” was written on the blackboard, in the sand, and on the magic slate, each time stating how this word was going to be remembered.

The child was then blindfolded and the letters traced, the child stating what letter was being traced and then what word the letters spelt. This was done for words previously taught and the new word.

The teacher then wrote five sentences, the child reading the sentence immediately after each sentence was written and stating how this word was to be remembered. The sentences were:
1. She does like me.
2. Does he like milk?
3. He does like neat work.
4. He does his best all the time.
5. Does your mum like cooking?

The child then read all five sentences, verbally emphasising the target word.

**Lesson 6**

The child was asked to write the following words on the blackboard: “saw”, “good”, “new”, “get”, “want”, “than”, “our”, “does” and “school”.

The words accurately recorded were “saw”, “good” “new”, “get”, “want” and “than”. “ow” was recorded for “our”, “das” for “does” and ‘scholl” for “school”.

The child then read the book “Who does?” specifically written to incorporate the words already taught and the target word “than”.

The problem words were: “Tusda” for “Tuesday”; “cookies” for “cakes”; “nonsense” for “nuisance”; “bical” for “bicycle”, “elboat” for “elephant”, “mossie” for “mouse” and “must” for “most”; self-corrections were: “for” for “of”, “old” for “older”, “grand” for “grandma”, “elways” for “always”.

33
Accuracy was 1:25 or 96% and self-corrections were 1:3.

The child then made the word using magnetic letters and the cue was X-box. The child then wrote the word on the blackboard, on the magic slate and in the sand, saying the cue each time.

The child was then blindfolded and said the letter names and what the letters spelt. All previously learnt words and the new word were done.

Five sentences were then written with the child reading each sentence as it was written and how it was to be remembered. The sentences were:

1. I am better than my sister at the X-box.
2. I am better than my friend at football.
3. I am better than you at spelling.
4. I am better than the X-box.
5. I can eat more than you.

The child then reread the sentences, verbally emphasising the target word.

**Lesson 7**

The child was asked to write the following words on the blackboard: “saw”, “good”, “new”, “want”, “does”, “than”, “for”, “of”, “most”, “our”, “find”, “found” and “your”.

The words written correctly on the blackboard were: “saw”, “good”, “new”, “want”, “does”, “than”, “for”, “of”, and “most”. Troublesome words were “owa” for “our”, “fined” for “find”, and “fowned” for “found”.

The child read the specifically written book “Come to play” which incorporated the words already taught and other target words.

The child incorrectly read “down” for “in”, “will” for “would”, “enting” for “eating”, “on” for “in”, “cream” for “creams” and “face” for “faces”. Words not attempted were “ask”, “Chris” and “our”. Self-corrections were: “get” for “got”; “or” for “our”; “could” for “call”; “on” for “in”.

Accuracy was 1:21 or 95% and self-corrections were 1:3.
The child was then given the magnetic letters for “our”. The cue for remembering this word was “belonging to us”. The child made the word several times on the magnetic board, then wrote this word on the whiteboard, blackboard, on the magic slate and in the sand, saying each time what the cue was to remember the targeted word.

The child was then blindfolded and the sandpaper letters traced with the child saying the letters and the word that the letters spelt out. This included all the previously learnt words and the target word.

The teacher then wrote five sentences with the child reading the sentence after it was written and stating what the cue for the target word was. The sentences were:

1. These are our books.
2. Come to our place to play.
3. This is our house.
4. This is our holiday.
5. Our place is down this street.

The child then reread the five sentences verbally emphasising the target word.

Lesson 8
The child was asked to write the following words on the blackboard, “saw”, “new”, “our”, “saw”, “does”, “good”, “get”, “our”, and “your”.

Correctly spelt words were: “saw”, “get”, “want”, “new”, “good”. Incorrectly spelt words were: “ow” for “our”, “das” for “does”, “yoir” for “your” and “scholl” for “school”.

The child read a specifically written book “The Lost Book”. The child self-corrected on the words “birthdays”, “outside”, “well”. Incorrectly read words were: “now” for “know”, “like” for “look”, “her” for “your”, “this” for “these”, “opposite” for “outside” and “pleased” was not attempted. Accuracy was 1:26 or 96% and self-corrections were 1:4.

The child was then given the magnetic letters for “your” and the word was made several times. The cue for remembering was “belonging to you” and “you + r”.
The child then wrote the word on the blackboard, on the magic slate and in the sand saying each time what the cue for remembering was.

The child was then blindfolded and traced over letters, naming the letters and saying the word that had been spelt. This included all the words taught and the new word.

Five sentences were then written by the teacher. The child read the sentences immediately after each sentence was written and saying what the cue to remember was.

The sentences were:
1. Is this your book?
2. I like your bike.
3. I saw your mum down the street.
4. I saw your shoes outside.
5. Your mum and dad came to our place for tea.

The child then reread the five sentences emphasising the target word in each sentence.

Lesson 9
The child was asked to write the following words on the blackboard: “new”, “want”, “saw”, “good”, “does”, “than”, “our”, “your”, “call”, “know”, “go” and “well”.

Correctly spelt words were: “new”, “want”, “saw”, “good”, “does”, “than”, “our”, “go” and “well”. Spelt incorrectly were: “find” for “found”, “yoir” for “your”, “cal” for “call” and “now” for “know”.

The child then read the specifically written book “Friends” which incorporated previously learnt and the target word “know”.

The child stumbled on “know” but read it correctly; “when” was read for “with”, “meld” was read for “made” and “cully” for “cubby”.

The reading accuracy was 1:38 or 97%. There were no self-corrections.

The child was then given the magnetic letters for “know”. The cue for remembering was
“k no w”. He then wrote the word on the blackboard, on the magic slate and in the sand saying each time what the cue for remembering was.

The child was then blindfolded and traced over and named the sandpaper letters and said each word traced. All words previously taught and the new word were included.

The teacher then wrote five sentences with the child reading the sentence immediately it was written and saying what the cue was for remembering that word. The sentences were:

1. I know how to ride a bike.
2. Do you know where mum is?
3. I know you are watching a film.
4. Tell me what you know about the broken toy.
5. Do you know how many children are in your class?

The child then reread the sentences verbally emphasising the target word each time.

Lesson 10

The child was asked to write the following words on the blackboard: “because”, “new”, “want”, “who”, “saw”, “with”, “good”, “well”, “does”, “look”, “than”, “like”, “our”, “for”, “your”, “know”, and “found”. The words correctly recorded were: “new”, “saw”, “with”, “well”, “than”, “for”, “your”, “found”, and “than”. Self-corrections were: “wont” for “want”, “dus/dos/dows” for “does” and “no” for “know”. Incorrect responses were: “becase” for “because”, “ho” for “who”, “loock” for “look”, “licke” for “like”.

The child then read the specifically written book “Looking for a House”. The child read “said yes” for “does”, “looked” for “liked”, “sit” for “suit”, “want” for “went”. The following were self-corrections: “saw” for “sold”, “was” for “would”. No attempt was made to read “find”, “right”, and “anyone”.

The reading accuracy was 1:28 or 96% and self-corrections were 1:4.

The word targeted was “found”. The child was then given the magnetic letters for “found” and the word was made several times reinforcing the cue “I found a hound”. The child then wrote the word on the blackboard, on the magic slate and in the sand saying after each time what the cue was to remember the word.
The child was then blindfolded and traced over sandpaper letters saying what each letter was and then what word had been spelt. This included all the words taught and the new word “found”.

Five sentences were then written. They were:

1. I found a house.
2. I found a hound.
3. Did you know he found some money?
4. I found the lost boy.
5. I found my lost toy.

The child read the sentences after each one was written, saying what the cue was for remembering the word.

The child then read all five sentences, verbally emphasising the word “found” in each sentence.

Case Study 2

Lesson 1

No running record was done for the first lesson.

The child was asked to write the word “saw” on the blackboard. The child wrote “sowr”.

The child was then given the magnetic letters for the word “saw” which was done a number of times. The child’s cue for remembering the word was a picture of a saw.

The child then wrote the word “saw” on the blackboard, in the sand and on the magic slate each time stating how this word was to be remembered.

The child was then blindfolded and the letters traced and naming the letter and at the end saying what the letters spelt.

The teacher then wrote five sentences. They were:

1. I saw a cat.
2. I saw a dog.
3. I saw mum.
4. I saw dad.
5. I saw a cat’s paw.

The child read these sentences as they were written and what the cue was for remembering this word.

The child then reread all five sentences, verbally emphasising the word “saw” in each of the sentences.

Lesson 2

The child was asked to write the words “saw”, “by” and “come” on the blackboard.

The child correctly wrote, “saw” and wrote “baw” for “by” and “came/cume” for “come”.

The child then read the specifically written text “The Fat Cat” to target the word “saw” and the day’s target word “come”.

The self-corrections were: “what” for “will”, “came” for “come”, “saw” for “sat”, “was” for “saw”, “m-a-t” for “mat”, and “fox” for “fat”. Words read incorrectly were: “came” for “come” times two, “h” for “here”, “fox” for “food”, “are” for “ate”, “they” for “that” and “stinked” for “stayed”.

The child read with 1:14 or 93% accuracy with self-corrections at 1:2.

Using the supplied magnetic letters the child then made the word “come” and the cue was to be to beckon with the hand. The child remade the word a number of times using the letters.

The word was then written on the blackboard, on the magic slate and in the sand, stating on each occasion what the cue was for remembering that word.

The child was then blindfolded and the words traced over with the child saying the letter names and what word was spelt. This was done for “saw” and “come”.

The teacher wrote six sentences with the child reading the sentence at its completion and stating how the word was to be remembered. The sentences were:

1. I come to school.
2. I come home.
3. I come to Mum.
4. I come to the shops.
5. I come to Glen.
6. The baby comes to me.

The child reread all the sentences verbally emphasising the targeted word.

**Lesson 3**

The child was asked to write the words, “by”, “call”, “saw”, “come” “why” and “with”. The words written correctly were: “by”, “will”, “saw” and “come”. Incorrectly written words were: “cole” for “call” and “wiy” for “with”.

The specifically written text “Come to Play” was read which targeted the previously taught words and the target word “by”.

Self-corrections were: “it” for “if”, “Emily” for “Emily’s”, “yellow” for “yelled”, and “went” for “will”. Words read incorrectly were: “I’m” for “I’ll”, “my” for “me”, “away” for “after”, “when” for “we”, “where” for “were”, “will” for “with”, “got” for “dot”, “me” for “we”, “doll” for “dolls”, “down” for “by”, “met” for “meet”, “onesee” for “outside”, “su” for “us”, “they” for “then”, “get” for “by”, “I” for “I’ve”, and “missed/lost” for “lots”.

The following words were sounded out but the correct word was not said: “bood” for “good”, “dest” for “best”, “put”, “meet” and “Ann”. The following words were not attempted: “call”, “says”, “meet”, “after”, “dolls”, “Gran”, “thing”, “me”, “out”, “soon”, and “called”.

The child read with an accuracy of 1:6 or 83% and self-corrected 1:10.

The child was then given the magnetic letters for the word “by”. The cue for remembering “by” was a wave of the hand. The child then remade the word a number of times and then wrote the word on the blackboard, on the magic slate and in the sand, each time saying what the cue was for remembering the word.

The child was then blindfolded and traced over the sandpaper letters, saying the name of each letter and what word the letters spelt. The words previously taught words and the target word were included.
Five sentences were then written by the teacher they were:

1. I saw her by the tree.
2. The cat is by the mat.
3. “Sit by me,” said mum.
4. “Come by my house,” she said.
5. I saw her by the car.

The child read each sentence as it was written stating the cue for remembering the target word.

The child then reread all five sentences, verbally emphasising the target word.

**Lesson 4**

The child was asked to write the following words on the blackboard: “saw”, “come”, “by”, “house”, “call”, “will” and “with”. The first three words were correctly written although there was hesitation in writing the “e” on “come”. “Home” was written for “house”, “cole” for “call”, “wil” for “will” and “wif” for “with”.

The child then read the specifically written book “Sam’s Party” which incorporated previously learnt words and the target word. Self-corrections were: “the” for “he”, and non-attempt for “your” but eventually self-corrected. Incorrectly read words were: “it” for “if”, “see” for “his”, “home” for “house” times two, “w-a” for “way”, and “where” for “when”. Words not attempted were: “how”, “will”, and “seven”.

Accuracy was scored at 1:16 or 93% and self-corrections were 1:4.

Magnetic letters were then supplied for the child to write the word “will”. The cue for remembering this word was to nod the head. The word was remade a number of times and it was then written on the blackboard, on the magic slate and in the sand with the child stating each time how this word was to be remembered.

The child was then blindfolded and the sandpaper letters traced over. The child had to name the letters and the words spelt. This included previously taught words and the new word.

The teacher then wrote five sentences. They were:

1. I will play.
2. “Will you come to my house?”
3. The dog will bite me.
4. Emily will go to Sam’s party.
5. Will the boat go?

The child read each of these sentences immediately after they were written stating how the word “will” was to be remembered.

The child then read all five sentences verbally emphasising the target word.

Lesson 5

The child was asked to write the following words on the blackboard: “come”, “house”, “by”, “saw”, “will” and “call”. The child correctly recorded “come”, “by”, “saw”, and “will”. Incorrectly written words were: “col” for “call” and “home” for “house”.

The child then read the specifically written book “Grandma’s Visit” which incorporated previously taught words and the target word.

Self-corrected word was “will” for “when”. Incorrectly read words were: “cuddle” for “call”, “good” for “glad”, “lost” for “lots”, “off” for “of”, “saw” for “sat”, “cuddled” for “call”, “her” for “here”, “cuddled” for “called”, “hurt” for “here”, “get/by” for “be”, “snon” for “soon”, “cuddled/camed” for “called”, “back” for “out”, “tart” for “tea”, “get” for “be” and “get” for “got”. Non attempts were: “say”, “train” times two, “out: started” and “meet”.

The accuracy rate was 1:6 or 83% and self-corrections 1:26.

The child was then given the magnetic letters for the word “call” and the cue was hands cupped around the mouth. The child remade the word a number of times and then wrote the word on the blackboard, on the magic slate and in the sand, stating on each occasion what the cue was for remembering the word.

The child was then blindfolded and traced over the sandpapered letters saying the names of the letters and the words spelt by the letters. The previously taught words and the new word were included.
The teacher then wrote five sentences, which the child read at the completion of each stating what the cue was for remembering the word. The sentences were:

1. “Call my mum,” said Emily
2. “Did you call me?”
3. I will call my dog.
4. Emily will call her dad.
5. Glen will call Anthony next.

The child then reread all five of the sentences verbally emphasising the target word.

**Lesson 6**

The child was asked to write the following words on the blackboard: “come”, “will”, “saw”, “by”, “call”, “with” and “when”. The child correctly wrote the first four words. She incorrectly wrote “co/cal” for “call”, “wif” for “with” and “wen” for “when”.

The child then read the specifically written text “The bad girl”.

Self-corrections were: “get” for “not”, “did” for “do”, “do” for “was”, and “gev” for “gave”.

Words read incorrectly were: “caused” for “cross”, “went” for “want”, “deers” for “dress”, “saw” for “was”, “for” for “from”, “bad” for “did”, “get” for “not”, “that” for “there”, “get” for “be”, “god” for “good”, “where” for “when”, “stord” for “sorry”, and “but” for “late”.

Words not attempted were: “now”, “late”, “be”, “more”, “myself” and “there”.

The accuracy was 1:7 or 85.5%. Self-corrections were 1:5.

The child was then given the magnetic letters for the word “with”. The cue for remembering was “shoes with socks”. The child remade the word a number of times and then wrote the word on the blackboard, on the magic slate and in the sand, each time saying what the cue for remembering that word was.

The child was then blindfolded and the sandpaper letters traced over. The child named the letters and the words they spelt.

The teacher then wrote five sentences which the child read immediately after each was written stating what the cue was for remembering the word. The sentences were:
1. I came to school with mum.
2. I have socks with my shoes.
3. Mum came with dad to see me.
4. I saw Rachel with my dog.
5. She had milk with her cereal.

The child then reread the sentences verbally emphasising the target word.

Lesson 7
The child was asked to write on the blackboard the following words: “call”, “will”, “with”, “by”, “saw”, “come”, “who”, “when” and “where”.

The child wrote the first six words correctly. Incorrect responses were “huw” for “who”, “wen” for “when” and “wher” for “were”.

The child then read the specifically written text “The Little Boy’s Dog”.
Self-corrections on the text were: “came” for “come”, “with” for “when”, “my” for “we”, and “called” for “calling”. Incorrectly read words were: “patting” for “past”, “och” for “our”, “home” for “house” times two, “sud” for “suddenly”, “lud” for “loud”, “over” for “out”, “will” for “where”, “don’t” for “do”, “oj” for “over”, “come” for “go”, “sawn” for “soon”, “away” for “after”, “win” for “when”, “get” for “got”, “pat” for “picked”, “tim” for “time”, “saw” for “was”, “down” for “does”, “mystreet” for “myself”, “whenout” for “without”, “lad” for “lead”, “saw” for “was”, “sled” for “pleased” and “andy” for “any”. Non-attempt was: “outside”.
Accuracy was 1:7 or 85.5% and self-corrections were 1:8.

Magnetic letters for the word “when” were given to the child and the cue for remembering the word was “there’s a hen in “when”. The child made the word a number of times and then wrote the word on the blackboard, on the magic slate and in the sand, saying on each occasion how that word was going to be remembered.

The child was then blindfolded and the letters traced over with the child saying the name of the letters and the words that were traced. This included previously taught words and the new word.
The teacher then wrote five sentences with the child reading each as it was written and saying what the cue for remembering that word was. The sentences were:

1. When I came to school I was late.
2. When I get you, you’ll be “it”.
3. “Come when I call you.”
4. When will it be time to go?
5. When I get dressed it will be time to go.

The child then reread all five sentences verbally emphasising the target word.

Lesson 8
The child was asked to write the following words on the blackboard: “will”, “by”, “call”, “saw”, “come”, “who”, “call”, “were”, “with” and “was”. The child correctly recorded all the words except the following: “hwe” for “who”, “werr” for “were”, and “wi” for “with”. “Wos” was written for “was” and was self-corrected.

The child then read the specifically written book “The Zoo”. The child self-corrected “my” for “we”, “we” for “my” and “but” for “by”. The following words were read incorrectly: “then” for “when”, “holding” for “holidays”, “lost” for “lots”, “called” for “could”, “by” for “but”, “dad” for “did”, “shouted” for “started”, “corj” for “cry”, “who” for “why”, “calling” for “crying”, “will” for “think”, “toid” for “told”, “toyk” for “took”, “held” for “hand”, “offi” for “office”, “little” for “lady”, “it” for “if”, “podging” for “quickly”, “told” for “thanked”, “will” for “were”, “running” for “run”, “not” for “now” and “will” for “were”. Non-attempted words were: “then”, “worried”, “loudspeaker”, “were” and “name”.

Accuracy was 1:6 or 83%. Self-corrections were 1:11.

The child was then given the magnetic letters for the word “who”. The cue for remembering the word was “Yoo hoo”. The child then remade the word a number of times. “Who” was then written on the blackboard, on the magic slate and in the sand with the child stating on each occasion how that word was going to be remembered.

The child was then blindfolded and the sandpaper letters were traced over with the child naming the letters and the words they spelt. All previously learnt words and the target word were included.
The teacher then wrote five sentences with the child reading each sentence immediately after it was written and stating what the cue was for remembering the target word. The sentences were:

1. “Who are you?”
2. Who is knocking on my door?
3. Do you know who this is?
4. Who do you know at school?
5. Find who this book belongs to.

The child then reread each of the sentences verbally emphasising the target word.

**Lesson 9**

The words the child was asked to write on the blackboard were: “saw”, “come”, “by”, “will”, “were”, “house”, “does”, “any”, “with”, “call”, “when” and “who”. All words were correctly written except the following: “werr” for “were”, “haume” for “house”, “bus” for “does”, “eneae” for “any”, and “wh” for “who”, “wehen” for “when” but this was self-corrected.

The child was then asked to read the specifically written text “Our House” which incorporated words already taught, the target word and other words thought to be needed.

She self-corrected “with” for “will”, “now” for “next”, and “come” for “came”. She incorrectly read the following words: “wonderful” for “white”, “lot” for “lovely”, “selled” for “sold”, “hading” for “here, “wats” for “what’s”, “suck/sunk” for “such”, “elephant” for “everything”, “went” for “want”, “with” for “that”, “great” for “beautiful” and “plate/part” for “park”. Words not attempted were “move” and “nice”.

Accuracy was 1:9 or 89% and self-corrected 1:5.

The child was then given the magnetic letters for “were”. The cue for remembering was “w” + “er” + “e”. The child remade the word a number of times and then wrote the word on the blackboard, on the magic slate and in the sand, saying each time what the cue was for remembering that word.
The child was then blindfolded and the sandpaper letters traced over. The child said the names of the letters and the words they spelt. Previously taught words and the new target word were included.

The teacher then wrote five sentences. They were:

1. We were happy today.
2. They were playing ball.
3. The children were late for school.
4. The kids were lost at the zoo.
5. We were going on holidays to the beach.

The child read the sentence immediately after it was written stating the way in which the target word was going to be remembered.

The child then reread all the sentences verbally emphasising the target word in each sentence.

**Lesson 10**

The child was asked to write the following words on the blackboard: “saw”, “come”, “by”, “house”, “will”, “with”, “call”, “when”, “who”, “were” and “then”. All words were recorded correctly except the following: “wif” for “with”, “home” for “house” and “ven” for “then”.

The child was then asked to read the specifically written text “My New Doll”.

Self-corrections were “it” for “if”, “l” for “last”, “did” for “dad”, “havd” for “had”, “lovely” for “lucky”, “w-a-s” for “was”, “home” for “house” and “some” for “are”. Words read incorrectly were: “with” for “our”, “bid” for “did”, “by” for “because”, “ben” for “been”, “will/with” for “wish”, “tooke” for “took”, “I” for “she”, “out” for “our”, “party” for “place”, “when” for “then”, “see” for “say” and “you” for “out”. Unattempted words were: “new”, “mine” and “then”.

The accuracy was 1:12 or 91% and self-corrections were 1:3.

The child was given the magnetic letters for “house” and the cue for remembering it was a picture of a house. The child remade the words a number of times and then wrote the
word on the blackboard, the magic slate and in the sand, saying the cue for remembering the word.

The child was then blindfolded and traced over the sandpaper letters, saying the name for the letters and the words they spelt. This included previously taught words and the new word.

Five sentences were then written by the teacher. They were:

1. I have a new house.
2. My house is red.
3. Is your house near my house?
4. There is a mouse in my house.
5. Would you like to come to my house?

The child read the sentences immediately after they were written saying the cue for how the target word was going to be remembered.

The child then reread all five sentences verbally emphasising the target word in each sentence.

Further lessons were done with the child, following the same format, where the following words were targeted: “then”, “we”, “did” and “ask”.

Case Study 3

Lesson 1

On the first lesson, no running record was done.

The child was asked to write the following words on the blackboard: “after”, “new”, “these”, “were”, “went”, “us” and “said”. He correctly wrote the words except for the following: “now” for “new”, “tese” for “these” and “sed” for “said”.

The child was then given the magnetic letters for the target word “new”. The cue for remembering the word was that “ew” says “oo”. The child then remade the word
number of times, the word was written on the blackboard, on the magic slate and in the sand, stating each time what the cue was for remembering that word.

The child was then blindfolded and the sandpaper letters traced over. The child said what each of the letters was and what the word was that it spelt.

The teacher then wrote five sentences which the child read immediately they were written, saying what the cue was for remembering this word. The sentences were:

1. I’ve got a new bike.
2. The new bird flew away.
3. There is a new boy at school.
4. He saw my new bike.
5. Sally got a new pen for her birthday.

The child then reread all five sentences, verbally emphasising the target word.

**Lesson 2**

The child was asked to write the following words on the blackboard: “new”, “said”, “us”, “went”, “after” and “was”. All words were written correctly except for the following: “no” for “new” and “arefter” for “after” but these were self-corrected immediately. Incorrectly recorded was “seite/sed” for “said”.

The child then read the specifically written book, “My Dog”, which was targeting the previously taught word and the word to be targeted.

He self-corrected the following words: “it” for “this”, “went” and “want” and “you” for “I”. The following words were incorrectly read: “went” for “want”, “was” for “saw” times five, “brother” for “better”, “went” for “wanted”, “us” for “as”, “finders” for “friends” and “wasn’t” for “wants”.

49
Unattempted words were: “want” and “walk”. Accuracy was 1:13 or 92% and self-corrections 1:5.

The child was then given the magnetic letters for the word “said”. The child’s cue for remembering the word was that “ai” says “e”. The child remade the words a number of times, then wrote the word on the blackboard, on the magic slate and in the sand, saying on each occasion how this word was going to be remembered.

The child was then blindfolded and traced over the sandpaper letters saying what the letters were and the words they spelt. This included previously taught words and the target word.

The teacher then wrote five sentences, with the child reading the sentence immediately after it was written and saying what the cue was for remembering the target word. The sentences were:

1. “I have a dog,” said Tom.
3. “This is my Mum,” said Patrick.
4. “You are a bad boy,” said Dad.
5. “This is my book,” said the teacher.

The child then reread the five sentences, verbally emphasizing the target word.

Lesson 3
The child was asked to write the following words on the blackboard: “went”, “new”, “said”, and “was”. He wrote them correctly except for “said” which he recorded as “sed”.

The child then read the specifically written book, “Our Day at the Beach”. The following words were self-corrected: “war” for “who’s”, “star” for “still” and “want” for
“went”. Incorrectly read words were: “lit/light” for “late”, “happy” for “hungry”, “happy” for “hungry”, “think” for “thick”, “then” for “when”, “bes” for “boat” and “slept” for “slept”, “feeling” was not attempted.
Accuracy was 1:18 or 94% and self-corrections 1:4.

The child was then given the magnetic letters for “was”. The cue to remember the word was that “a” says “o”. The child then remade the words a number of times, then the word was written on the blackboard, on the magic slate and in the sand and the child said the cue for remembering the target word.

The teacher then wrote the following sentences, with the child reading them immediately after each was written and saying what the cue was for remembering this word. The sentences were:

1. I was walking the dog.
2. I was late to school.
3. I was tired on Sunday.
4. I was good for Mum.
5. I was sick yesterday.

The child then reread the sentences verbally emphasising the target word.

**Lesson 4**
The child was asked to write the following words on the blackboard: “went”, “was”, “said”, “new”, “these” and “ran”. All words were recorded correctly except the following: “wos” for “was” and “thes” for “these” and “rane” for “ran”.

The child then read the specifically written book “My New Boots”.


Self-corrected words were: “footy” for “football”, “tre/tree” for “try”, “mum” for “man”, “pulled” for “paid” and “them” for “these”. Incorrectly read words were: “there’s” for “these” times two, “there” for “they”, “wouldn’t” for “would”, “shop” for “shops”, “new” for “now”, “was” for “saw”, “wall/will” for “well”, “will” for “well”, “new” for “now” and “do” for “dad”.

Accuracy was 1:12 or 92% and self-corrections 1:3.5.

The child was then given the magnetic letters for the target word: “these”. The cue for remembering the word is “the” + “se” on it. The child then remade the word several times and wrote the words on the blackboard, on the magic slate and in the sand, saying on each occasion the cue for remembering the word.

The child was then blindfolded and traced over sandpaper letters. The child said what the letters were and the words that were spelt out. These included previously taught words and the new word.

The teacher then wrote five sentences. These were:

1. I saw these boots I like.
2. These are my books.
3. I like these children.
4. Are these your pencils?
5. I like these balls the best.

The child read the sentences immediately after each was written and saying what the cue was for remembering the target word.

The child then reread all five sentences, verbally emphasising the target word.
Lesson 5

The child was asked to write the following words on the blackboard: “was”, “who”, “these”, “new”, “said”, “were”, “saw”, “they” and “our”. All words were correctly recorded except the following:

“si” for “said” and “thay” for “they” but these were immediately self-corrected. Incorrect responses were: “thes” for “these” and “sor” for “saw”.

The child then read the specifically written text “Our Party” which incorporated the word to be taught and previously taught words.

The following words were self-corrected: “I” for “who”, “wen” for “an”, “would” for “wanted”, “was” for “saw” and “show” for “should”. Incorrectly read words were: “come” for “came”, “row/replee” for “reply”, “n” for “no”, “itala” for “idea”, “it” for “if”, “haven’t” for “hadn’t”, “about” for “overseas”, “storey” for “stay”, “loving” for “living” and “come” for “came”.

Unattempted word was “guess”.

Accuracy was 1:16 or 93% and self-corrections 1:3.

The child was then given the magnetic letters for the word “who”. The cue for remembering was “fingers around the mouth”. The child remade the word a number of times, then wrote the word on the blackboard, on the magic slate and in the sand, saying on each occasion what the cue was for remembering the word.

The child was then blindfolded and the sandpaper letters traced over. The child said what
letters were and what words they spelt. This included previously taught words and the new word.

The teacher then wrote five sentences on the blackboard with the child reading the sentence immediately it was written and stating what the cue was for remembering the target word.

The sentences were:
1. Who are you?
2. Do you know who I am?
3. Who do these belong to?
4. Who spotted the dog?
5. I know who you are.

The child then reread all five sentences, verbally emphasising the target word.

**Lesson 6**
The child was asked to write the following words on the blackboard: “said”, “new”, “was”, “these”, “who”, “saw”, “come”, “stay”, “well” and “now”.

All the words were correctly recorded except the following: “ho” for “who” but was immediately self-corrected. Incorrectly recorded were “whes” for “was”, “thes” for “these”, “com” for “come”, “stey” for “stay”, “wall” for “well” and “nuo” for “now”.

The child read the specifically written text “My New Bike”. Self-corrected words were “was” for “saw”, “bike” for “bikes”, “there” for “they” and “are” for “were”. Incorrectly read words were: “went” for “want, “this” for “these”, “had” for “has”, “this” for “these”, “dad” for “did” and “first” for “best”.

Accuracy was 1:29 or 96% and self-correction 1:2.

The child was supplied with the magnetic letters for “saw”. The cue for remembering was jigsaw.
The child remade the word a number of times, then the word was written on the blackboard, on the magic slate and in the sand, each time the child stated what the cue was for remembering that word.

The child was then blindfolded and the sandpaper letters traced over with the child saying what the letters were and the words that were spelt. This incorporated the words previously taught and the new word.

The teacher then wrote five sentences. They were:

1. I saw my best friend.
2. Dad saw me on my bike down the street.
3. I can use a jigsaw.
5. I saw my mum at the shops.

The child read the sentences immediately after each one was written saying what the cue was for remembering the target word.

The child then reread the sentences, verbally emphasising the target word.

Lesson 7
The child was asked to write the following words on the blackboard: “said”, “new”, “was”, “these”, “who”, “saw”, “now”, “come”, “stay”, and “were”. All were correctly recorded except the following: “wos” for “was”, “ho” for “who”, which were self-corrected. Incorrectly recorded words were: “sta” for “stay” and “wer/wher” for “were”.

The child then read the specifically written text “Our Car”.
“Yell” for “yelled” was self-corrected. Incorrectly read words were: “ti” for “tidy”, “was” for “saw”,

55
The child was then given the magnetic letters for the word “now”. The child said the cue for remembering this word was “ow” says “Ow!” The child then remade the word several times and then wrote the word on the blackboard, on the magic slate and in the sand, saying each time what the cue was for remembering the word.

The child was then blindfolded and the sandpaper letters traced with the child saying what the letters were and what words were spelt. These included previously taught words and the new word.

The teacher then wrote five sentences. They were:

1. Come here now!
2. It is time to go home now.
3. Now you can come to my place.
4. It is time you were home by now.
5. Now call your mum to see if she can come.

The child read each of the sentences as they were written stating what the cue was.

The child then reread all the sentences verbally emphasising the target word.

Lesson 8

The child was asked to write the following words on the blackboard: “said”, “come”, “new”, “was”, “these”, “were”, “who”, “now”, “stay” and “well”. All were recorded accurately, except for the following: “came” for “come” “wos” for “was” and “ho” then the “w” put in its correct place last for “who” were self-corrected. Incorrectly recorded was “woll” for “well”.

The child then read the specifically written text “My New Pens”.

“where” for “were”, “comes” for “came” and “yawn” for “everyone”.

Accuracy was 1:25 or 96% and self-corrections 1:6.
Self-corrections were: “wore” for “were”, “pen” for “paper”, “was” for “saw”, “and” for “I”. Words incorrectly read were: “went” for “were”, “a” for “the”, “shop” for “shops”, “new” for “now”, “let” for “late”, “should” for “showed: “draw” for “drew”, “will” for “well” times two, “pictures” for “picture”, “well” for “wall” and “new” for “now”. An insertion was “my”. Accuracy was 1:13 or 92% and 1:4 self-corrections.

The child was then given the magnetic letters for “were”. The cue was the finger closed near the mouth and opening out. The child remade the word a number of times and then wrote the word on the blackboard, on the magic slate and in the sand stating each time what the cue is.

The child was then blindfolded and the sandpaper letters traced. The child said what the letters were and the words that were spelt.

The teacher then wrote five sentences. They were:

1. We were playing outside.
2. We were good today.
3. Do you think we were doing good work?
4. We were eating our dinner late last night.
5. We were riding our bikes.

The child read each sentence as it was written saying the cue for how the target word was to be remembered.

The child then reread all five sentences, verbally emphasising the target word.

Lesson 9

The child was asked to write the following words on the blackboard: “said”, “was”, “these”, “new”, “were”, “well”, “who”, “now”, “room” and “soon”. All were written correctly except the following:

“rom” for “room” and “son” for “soon”.

The child was asked to read the specifically written text “Feeling Sick”.

57
The child self-corrected the following words: “what” for “at” and “new” for “now”.

Incorrectly read words were: “was” for “saw”, “bell” for “able”, “here/him” for “he”, “pillars” for “pills”, “woll” for “will”, “bought” for “better”, “didn’t” for “don’t”, “well” for “will”, “hoped” for “hope” and “myfaulty” for “myself”. Accuracy was 1:15 or 93% and self-corrections 1:6.5.

The child was given the magnetic letters for the word “well”. The cue for remembering was “Ding, dong, dell. Pussy’s in the well.” The child remade the words several times and then wrote the word on the blackboard, on the magic slate and in the sand, stating each time how that word was going to be remembered.

The child was then blindfolded and the sandpaper letters traced. The child said what the letters were and the words that had been spelt.

The teacher then wrote five sentences. They were:
1. I don’t think Patrick is well today.
2. Do you feel well?
3. The cat fell in the well.
4. He did is school work well.
5. Mum did not feel well today.

The child read each of these sentences immediately after it was written saying what the cue was for remembering the target word.

The child then reread all five sentences verbally emphasising the target word.
Lesson 10
The child was asked to write the following words: “said”, “was”, “these”, “new”, “saw”, “now”, “were”, “who”, “well”, “this”, and “room”. All were recorded accurately except “who” whose letters are written “ho” and then the “w” added in the right place and “rom” for “room”.

The child then read the specifically written text “Mum’s Sick”. Self-correction was “I’m” for “Mum” and incorrectly read words were: “t-e” for “tea” and “dish” for “dishes”. “Heavy” was not attempted.
Accuracy was 1:52 or 98% and self-corrections 1:4.

The child was then given the magnetic letters for “room”. The child’s cue to remember this word was “my room”. The child remade the word a number of time and then wrote the word on the blackboard, on the magic slate and in the sand, saying each time how this word was to be remembered.

The child was then blindfolded and the sandpaper letters traced with the child saying what the letters were and the words that were spelt out.

The teacher then wrote the following sentences with the child reading each sentence immediately after it was written and saying the cue for remembering this word:

1. This is my room.
2. This room is his bedroom.
3. This is our classroom.
4. Is this your bedroom?
5. This is the room that has just been built.

The child then reread all of the sentences verbally emphasising the target word.
Appendix B - ACER Word Identification Test

Case Study 1

*Only problem words listed.*

<table>
<thead>
<tr>
<th>Word list</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whip</td>
<td>Whis     s/c</td>
<td></td>
</tr>
<tr>
<td>Honey</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Caterpillar</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Tap</td>
<td>tape</td>
<td></td>
</tr>
<tr>
<td>Horse</td>
<td>was</td>
<td>hose</td>
</tr>
<tr>
<td>Mark</td>
<td>walk</td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td>Kara</td>
<td></td>
</tr>
<tr>
<td>Frightened</td>
<td>n/a</td>
<td>frittened</td>
</tr>
<tr>
<td>Enough</td>
<td>n/a</td>
<td>enowg</td>
</tr>
<tr>
<td>Glad</td>
<td>good</td>
<td></td>
</tr>
<tr>
<td>Hoot</td>
<td>hot</td>
<td></td>
</tr>
<tr>
<td>Appear</td>
<td>abhor</td>
<td>apper</td>
</tr>
<tr>
<td>Doll</td>
<td>doorl</td>
<td></td>
</tr>
<tr>
<td>Went</td>
<td>when s/c</td>
<td></td>
</tr>
<tr>
<td>Seat</td>
<td>sat</td>
<td>set</td>
</tr>
<tr>
<td>Naughty</td>
<td>n/a</td>
<td>nowthy</td>
</tr>
<tr>
<td>Bargain</td>
<td>bergin s/c</td>
<td></td>
</tr>
<tr>
<td>Steadily</td>
<td>abhor</td>
<td></td>
</tr>
<tr>
<td>Boat</td>
<td>but</td>
<td>boot s/c</td>
</tr>
<tr>
<td>Sheel</td>
<td>will</td>
<td></td>
</tr>
<tr>
<td>Uncle</td>
<td>ankle</td>
<td></td>
</tr>
<tr>
<td>Cottage</td>
<td>cotaig</td>
<td>cottagg</td>
</tr>
<tr>
<td>Coach</td>
<td>corch/couch</td>
<td></td>
</tr>
<tr>
<td>Caught</td>
<td>n/a</td>
<td>cathe</td>
</tr>
<tr>
<td>Galloped</td>
<td>gulped</td>
<td>golopped</td>
</tr>
<tr>
<td>Messenger</td>
<td>messenger s/c</td>
<td>mexican</td>
</tr>
</tbody>
</table>

S/c – self corrections
N/A – non-attempt
Blank space in a column next to a problem word indicates correct response.

### Case Study 2

**ACER Word Identification Test**

*Only problem words listed.*

<table>
<thead>
<tr>
<th>List Word</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doll</td>
<td>ball</td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td>meet</td>
<td></td>
</tr>
<tr>
<td>Hen</td>
<td></td>
<td>her s/c</td>
</tr>
<tr>
<td>Top</td>
<td>toy</td>
<td></td>
</tr>
<tr>
<td>My</td>
<td>me s/c</td>
<td>we s/c</td>
</tr>
<tr>
<td>Next</td>
<td>next</td>
<td></td>
</tr>
<tr>
<td>So</td>
<td>some</td>
<td></td>
</tr>
<tr>
<td>Jump</td>
<td>drum</td>
<td></td>
</tr>
<tr>
<td>Bucket</td>
<td>bunk</td>
<td></td>
</tr>
<tr>
<td>Drink</td>
<td>bink</td>
<td></td>
</tr>
<tr>
<td>Horse</td>
<td>home</td>
<td>house</td>
</tr>
<tr>
<td>Boat</td>
<td>bat</td>
<td>bat</td>
</tr>
<tr>
<td>Mark</td>
<td></td>
<td>make</td>
</tr>
<tr>
<td>String</td>
<td>swimming</td>
<td>swimming</td>
</tr>
<tr>
<td>Seat</td>
<td>sad</td>
<td></td>
</tr>
<tr>
<td>Wheel</td>
<td>fell</td>
<td>well</td>
</tr>
<tr>
<td>Stay</td>
<td>sat</td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td>ap/alp</td>
<td></td>
</tr>
<tr>
<td>Handle</td>
<td>n/a</td>
<td>hand</td>
</tr>
<tr>
<td>Uncle</td>
<td>n/a</td>
<td>hulk</td>
</tr>
<tr>
<td>Brother</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td>n/a</td>
<td>papper</td>
</tr>
<tr>
<td>Yesterday</td>
<td>hourday/yesday</td>
<td></td>
</tr>
<tr>
<td>Cottage</td>
<td>n/a</td>
<td>cottagg</td>
</tr>
<tr>
<td>Valley</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Chair</td>
<td>chris</td>
<td>chow</td>
</tr>
</tbody>
</table>

S/c – self corrections
N/a – non attempts
Blank space next to problem words indicates correct response by the child.

**Case Study 3**

**ACER Word Identification Test**

*Only problem words listed.*

<table>
<thead>
<tr>
<th>List Word</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap</td>
<td>top</td>
<td></td>
</tr>
<tr>
<td>Doll</td>
<td>dow s/c</td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td>meet</td>
<td>meet</td>
</tr>
<tr>
<td>Hen</td>
<td>who s/c</td>
<td></td>
</tr>
<tr>
<td>Bucket</td>
<td>beet</td>
<td>buck s/c</td>
</tr>
<tr>
<td>This</td>
<td>with s/c</td>
<td></td>
</tr>
<tr>
<td>Whip</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Glad</td>
<td>guard</td>
<td>gland</td>
</tr>
<tr>
<td>Horse</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Boat</td>
<td>bout</td>
<td>but</td>
</tr>
<tr>
<td>String</td>
<td>starting</td>
<td>sing/sting</td>
</tr>
<tr>
<td>Seat</td>
<td>n/a</td>
<td>set</td>
</tr>
<tr>
<td>Wheel</td>
<td>n/a</td>
<td>while</td>
</tr>
<tr>
<td>apple</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Hoot</td>
<td>hot s/c</td>
<td>hot s/c</td>
</tr>
<tr>
<td>Handle</td>
<td>n/a</td>
<td>hand</td>
</tr>
<tr>
<td>Uncle</td>
<td>an</td>
<td>yuk</td>
</tr>
<tr>
<td>Brother</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td>n/a</td>
<td>puppa</td>
</tr>
<tr>
<td>Cottage</td>
<td>n/a</td>
<td>cortey</td>
</tr>
<tr>
<td>Valley</td>
<td>very</td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Underneath</td>
<td>n/a</td>
<td>anyone</td>
</tr>
<tr>
<td>Doctor</td>
<td>doc</td>
<td></td>
</tr>
<tr>
<td>Coach</td>
<td>n/a</td>
<td>coch/catch</td>
</tr>
<tr>
<td>Honey</td>
<td>n/a</td>
<td>hoy/hey</td>
</tr>
<tr>
<td>Shoulder</td>
<td>n/a</td>
<td>stalllder</td>
</tr>
<tr>
<td>Appear</td>
<td>appar</td>
<td>appeer</td>
</tr>
<tr>
<td>Naughty</td>
<td>n/a</td>
<td>nanty</td>
</tr>
<tr>
<td>Word</td>
<td>Correction</td>
<td>Attempted</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Caught</td>
<td>n/a</td>
<td>cart</td>
</tr>
<tr>
<td>Rooster</td>
<td>n/a</td>
<td>rest s/c</td>
</tr>
<tr>
<td>Frightened</td>
<td>n/a</td>
<td>Creighton</td>
</tr>
<tr>
<td>Struggled</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Bargain</td>
<td>n/a</td>
<td>big</td>
</tr>
<tr>
<td>Galloped</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Caterpillar</td>
<td>n/a</td>
<td>compris</td>
</tr>
<tr>
<td>Enough</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Towel</td>
<td>n/a</td>
<td>truly</td>
</tr>
<tr>
<td>Steadily</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Messenger</td>
<td>n/a</td>
<td>massive</td>
</tr>
</tbody>
</table>

S/c means self-correction.
N/a means not attempted.
Blank space next to problem word means that the word was read correctly.
## Appendix C - Reading Freedom – Basic Sight Vocabulary Test

### Case Study 1

*Only problem words listed.*

<table>
<thead>
<tr>
<th>List Words</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can</td>
<td>an</td>
<td></td>
</tr>
<tr>
<td>Run</td>
<td></td>
<td>fun s/c</td>
</tr>
<tr>
<td>Saw</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Watch</td>
<td></td>
<td>which s/c</td>
</tr>
<tr>
<td>We</td>
<td>me s/c</td>
<td></td>
</tr>
<tr>
<td>Came</td>
<td></td>
<td>come s/c</td>
</tr>
<tr>
<td>Ever</td>
<td></td>
<td>over</td>
</tr>
<tr>
<td>Give</td>
<td>n/a gev</td>
<td>gIve s/c</td>
</tr>
<tr>
<td>Who</td>
<td>why</td>
<td></td>
</tr>
<tr>
<td>Know</td>
<td>now s/c</td>
<td></td>
</tr>
<tr>
<td>Many</td>
<td></td>
<td>mAney</td>
</tr>
<tr>
<td>New</td>
<td>now</td>
<td></td>
</tr>
<tr>
<td>Over</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Round</td>
<td>rund</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>strool</td>
<td></td>
</tr>
<tr>
<td>So</td>
<td>sos</td>
<td></td>
</tr>
<tr>
<td>Ten</td>
<td>teen s/c</td>
<td></td>
</tr>
<tr>
<td>Ate</td>
<td></td>
<td>eat</td>
</tr>
<tr>
<td>Cannot</td>
<td>can’t</td>
<td></td>
</tr>
<tr>
<td>Could</td>
<td>cold</td>
<td>called</td>
</tr>
<tr>
<td>Does</td>
<td>down</td>
<td></td>
</tr>
<tr>
<td>Found</td>
<td>fund</td>
<td></td>
</tr>
<tr>
<td>Long</td>
<td>lone</td>
<td></td>
</tr>
<tr>
<td>Bring</td>
<td>bringing s/c</td>
<td></td>
</tr>
<tr>
<td>Done</td>
<td>d-o-n-e s/c</td>
<td>dOne s/c</td>
</tr>
<tr>
<td>Once</td>
<td></td>
<td>on</td>
</tr>
<tr>
<td>Open</td>
<td>upon</td>
<td></td>
</tr>
<tr>
<td>Our</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>
Case Study 2

Reading Freedom – Basic Sight Vocabulary Test

Only problem words listed.

<table>
<thead>
<tr>
<th>List words</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Come</td>
<td>came</td>
<td></td>
</tr>
<tr>
<td>Funny</td>
<td>funny</td>
<td>fast s/c</td>
</tr>
<tr>
<td>Is</td>
<td>said s/c</td>
<td></td>
</tr>
<tr>
<td>Jump</td>
<td>drum</td>
<td></td>
</tr>
<tr>
<td>My</td>
<td>we</td>
<td></td>
</tr>
<tr>
<td>Of</td>
<td>off</td>
<td>off s/c</td>
</tr>
<tr>
<td>Says</td>
<td></td>
<td>say s/c</td>
</tr>
<tr>
<td>For</td>
<td>o s/c</td>
<td></td>
</tr>
<tr>
<td>Here</td>
<td></td>
<td>her</td>
</tr>
<tr>
<td>Saw</td>
<td>s/ouch</td>
<td></td>
</tr>
<tr>
<td>watch</td>
<td>s/o wack</td>
<td>waitress</td>
</tr>
<tr>
<td>Am</td>
<td>mam</td>
<td></td>
</tr>
<tr>
<td>Around</td>
<td>n/a</td>
<td>awake</td>
</tr>
<tr>
<td>By</td>
<td>be</td>
<td></td>
</tr>
<tr>
<td>Call</td>
<td>s/o c-a-ll</td>
<td></td>
</tr>
<tr>
<td>Came</td>
<td></td>
<td>come s/c</td>
</tr>
<tr>
<td>Do</td>
<td>go</td>
<td></td>
</tr>
<tr>
<td>Eat</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Fast</td>
<td>f/r</td>
<td></td>
</tr>
<tr>
<td>Make</td>
<td>milk</td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td>walk</td>
<td></td>
</tr>
<tr>
<td>Will</td>
<td>with</td>
<td></td>
</tr>
</tbody>
</table>
S/o – sounded out
S/c – self-corrected
N/a – non-attempt
Blank space in column next to problem word indicates correct response by child.

**Case Study 3**

**Basic Sight Vocabulary Test**

*Only problem words listed.*

<table>
<thead>
<tr>
<th>List words</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of</td>
<td></td>
<td>off</td>
</tr>
<tr>
<td>Says</td>
<td></td>
<td>size</td>
</tr>
<tr>
<td>At</td>
<td>that s/c</td>
<td></td>
</tr>
<tr>
<td>Here</td>
<td>her</td>
<td>were</td>
</tr>
<tr>
<td>Man</td>
<td>men</td>
<td></td>
</tr>
<tr>
<td>On</td>
<td>in s/c</td>
<td>no</td>
</tr>
<tr>
<td>Ran</td>
<td>run</td>
<td>run/rain</td>
</tr>
<tr>
<td>Saw</td>
<td>sway</td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td>tree</td>
<td>thee/there</td>
</tr>
<tr>
<td>Watch</td>
<td>which</td>
<td>which</td>
</tr>
<tr>
<td>Am</td>
<td>I s/c</td>
<td></td>
</tr>
<tr>
<td>Around</td>
<td>are</td>
<td></td>
</tr>
<tr>
<td>Came</td>
<td>come</td>
<td>come</td>
</tr>
<tr>
<td>By</td>
<td>my</td>
<td></td>
</tr>
<tr>
<td>Fast</td>
<td>first</td>
<td>first</td>
</tr>
<tr>
<td>Into</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>on</td>
<td></td>
</tr>
<tr>
<td>As</td>
<td>us</td>
<td>us</td>
</tr>
<tr>
<td>Ever</td>
<td>very</td>
<td>every</td>
</tr>
<tr>
<td>From</td>
<td>come</td>
<td></td>
</tr>
<tr>
<td>Stop</td>
<td>spot s/c</td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>womb</td>
<td>warm</td>
</tr>
<tr>
<td>Above</td>
<td>about</td>
<td>about</td>
</tr>
<tr>
<td>Find</td>
<td>fire s/c</td>
<td></td>
</tr>
<tr>
<td>Gave</td>
<td></td>
<td>give</td>
</tr>
<tr>
<td>Has</td>
<td>have s/c</td>
<td></td>
</tr>
<tr>
<td>Word</td>
<td>Correction</td>
<td>Note</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Know</td>
<td>now</td>
<td>now s/c</td>
</tr>
<tr>
<td>Made</td>
<td>land</td>
<td>mad/mud</td>
</tr>
<tr>
<td>Many</td>
<td>main</td>
<td></td>
</tr>
<tr>
<td>Under</td>
<td>yonder</td>
<td>yonder</td>
</tr>
<tr>
<td>Again</td>
<td>agh</td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>ul/s/c</td>
<td></td>
</tr>
<tr>
<td>Ate</td>
<td>art</td>
<td>art</td>
</tr>
<tr>
<td>Cannot</td>
<td>can and not</td>
<td></td>
</tr>
<tr>
<td>Could</td>
<td>called</td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>fanned s/c</td>
<td></td>
</tr>
<tr>
<td>Walk</td>
<td>war</td>
<td></td>
</tr>
<tr>
<td>Were</td>
<td>where</td>
<td></td>
</tr>
<tr>
<td>When</td>
<td>whan</td>
<td></td>
</tr>
<tr>
<td>Every</td>
<td>n/a</td>
<td>very</td>
</tr>
<tr>
<td>Goes</td>
<td>girl s/c</td>
<td>gors</td>
</tr>
<tr>
<td>Mother</td>
<td>more</td>
<td></td>
</tr>
<tr>
<td>Once</td>
<td>ease</td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td>upon</td>
</tr>
<tr>
<td>Our</td>
<td>are</td>
<td></td>
</tr>
<tr>
<td>Say</td>
<td></td>
<td>stay s/c</td>
</tr>
<tr>
<td>Upon</td>
<td>utton</td>
<td></td>
</tr>
<tr>
<td>Want</td>
<td>went</td>
<td>went</td>
</tr>
<tr>
<td>Would</td>
<td>world</td>
<td></td>
</tr>
</tbody>
</table>

N/a – non-attempt.
A blank space next to a problem word means that the word was read correctly.