

The Harberton Reading Programme

The Harberton Reading Programme (HRP) was developed from 2000-2002 for children with moderate learning difficulties (MLD) who were experiencing significant difficulties acquiring phoneme-to-grapheme correspondences and learning to read. This action research found that this group of children (n=18: ages 8-11) could not retain any phoneme-to-grapheme correspondences because they had no anchors in memory to attach this learning to. For this reason a small sight word vocabulary was taught using a range of activities to develop orthographic awareness and semantic and syntactic understanding. Alongside these orthographic activities rudimentary alphabetic knowledge was developed; phoneme-to-grapheme correspondences (PGCs) were taught discretely and linked to the initial consonant sounds in the sight words being taught. Vousden et al's (2011) research also found that for very small reading vocabularies (up to around 50 words), whole-word representations are actually the simplest and most efficient way to learn, not PGCs, but only at the very outset of the beginning reading programme (page 53). Vousden et al (2011) do not recommend a discrete stage of whole-word learning followed by phonics. The authors advise that teaching an initial small sight vocabulary using whole word methods, should be alongside teaching phoneme-to-grapheme correspondence so that some letter sound relationships can overlap and be applied. This was also the finding from the HRP action research.

The difference between the HRP and decodable books is that the HRP aims to develop the full range of cognitive processes needed to develop secure sight word recognition and reading fluency, whereas decodable books train children to rely on decoding phoneme-by-phoneme. It is important that children can respond flexibly to the different cognitive demands of regular and irregular words when reading. In the HRP irregular and regular words are taught successfully by using orthographic strategies and semantic and syntactic activities to embed this learning so that when children get the reading book they can read with fluency.

There are 34 books in the HRP which build a sight vocabulary of approximately 43 words. The sight words retained can range from 40 to 50+. Two children in the action research group had an IQ of 50 meaning that their learning difficulties were borderline severe (SLD). The HRP is not a programme for protracted use and should only be used with children who require extensive repetition and overlearning. The reading vocabulary is taught in advance of the reading books through workbook activities so that children experience success when reading the reading books.

Because the reading vocabulary is limited and repetitive it is essential that there is discussion around each book's topic to develop a more enriched spoken vocabulary. It is also essential that children have the experience of listening to books with rich, more sophisticated vocabulary to develop their language and vocabulary knowledge.

The HRP starts with 5 words that are recognised on sight. These are taught through the **Match, Select, Say** game and starter activities to develop orthographic awareness of the sequence of letters in the word, in advance of the first reading book. The activity books for each level of the programme include the sight words needed for the next level so that these words are learned in advance of getting the next reading books.

The HRP (McMurray, 2002) was developed for children with moderate learning difficulties (IQ 51-69) who were experiencing extensive difficulties acquiring any literacy skills, but it has also been used in mainstream primary schools with children in the normal range of ability (IQ 70 and over), who struggle to learn to read (McMurray, Bower and O'Neill, 2023). The HRP is designed for children who require a very small step-by-step approach and considerable overlearning. The reading vocabulary moves very slowly to take account of limited memory capacity and to allow sufficient overlearning to ensure progress. It is also very important to understand that reading comprehension and reading fluency are essential skills from the very beginning.

Children with moderate learning difficulties (well below average ability)

Children who have moderate learning difficulties (well below average ability- IQs in the range 51-69) will require four separate sessions over 4 days to complete one activity worksheet per day and the **Match, Select, Say** game. This is because they have general learning difficulties in all areas. Consequently, their reasoning ability, language development and motor skills are all significantly behind children in the normal range of ability. An important part of the teaching for this group is developing the thinking skills necessary to complete the activities.

Children with average or below average ability

Children with IQs in the normal range of ability (average or below average ability) may be able to complete the **Match, Select, Say** game and more than one activity sheet each day. This will depend on the memory capacity of the child and every child may be different. Children with moderate learning difficulties (MLD) require more direction and instruction in how to complete the activities and take longer to become independent in their use. Children with below average or low average ability can become independent in the tasks quite quickly.

For example, a Year 2 child (5-6 years of age) receiving individual support in a mainstream school was able to engage with a number of activities within one forty-five-minute session. For example, filling in the missing words, sequencing words in the correct order to make a sentence, a phonic worksheet, the **Match, Select, Say** game and writing using a whiteboard. Participation in the HRP enabled this child to retain words for fluent reading and enabled him to write simple sentences independently using the taught sight vocabulary, with a high level of success in spelling the words needed. This child had an average IQ (103) but had received speech therapy before attending school, and due to his speech and language difficulties needed much more than the synthetic phonics approach that had been used in Year 1. He was unable to learn using a sound-based approach and had retained no phoneme (sound)- grapheme (letter) links and was unable to read entering Year 2. He completed all the HRP programme within two terms in Year 2. He was able to progress through the HRP very quickly

because his memory difficulties were mild, and learning was no longer impacted by his significant phonological difficulties; other skills were being developed supporting his weak phonological processing. He could now retain and apply eight initial consonant sounds which were anchored to the sight vocabulary he had been taught.

Phonics at phoneme-to-grapheme level could never be this child's primary word attack skill due to his severe phonological difficulties, but as a result of the activities to develop orthographic awareness in HRP he had learned to use a rudimentary phonics strategy in combination with sight word recognition, comprehension, and syntactic awareness.

The HRP is a programme designed to establish the foundations necessary for reading development. The rate that a child moves through the programme will depend on the extent of his or her memory difficulties and the amount of overlearning required to make progress. One mainstream child might complete the full programme in a term, another child will require a full school year to complete the programme before moving on to commercially produced reading material. It is important that children using the HRP are read to and enjoy hearing stories for language development and enrichment.

Initially the text in the reading books up to Level 3 follows a 'traffic light' system to let the children know where to begin and end a sentence and to draw the child's eye to the start of each word. Children requiring this programme may have difficulty identifying the start of a word. This traffic light system helps them to overcome this difficulty. It also prompts them to apply the sounds they are learning.

Green - Indicates the beginning of the sentence and the use of a capital letter.

Orange – Attracts the child's eye to the start of the word and is used as a prompt to apply the child's developing phonic knowledge. If the sound has not been taught, it is not highlighted.

Red – Indicates the end of the sentence and reminds children to pause.

There is a workbook for each reading book which is completed in school with the support of the teacher when necessary. There is a slightly easier homework book for children to do at home following the completion of the associated workbook in school. This parallel approach enables the child to build his/her self-esteem and confidence, demonstrating to his/her parent(s) that he/she can work independently.

Before the child gets his/her first HRP reading book, and in preparation for each subsequent reading book, he/she should engage in the workbook activities as part of the lesson. Each of the activities in the workbook contributes to the learning and retention of an automatic sight word vocabulary. The fundamental difference with this programme is that the reading books are not the teaching tool but the celebration of success.

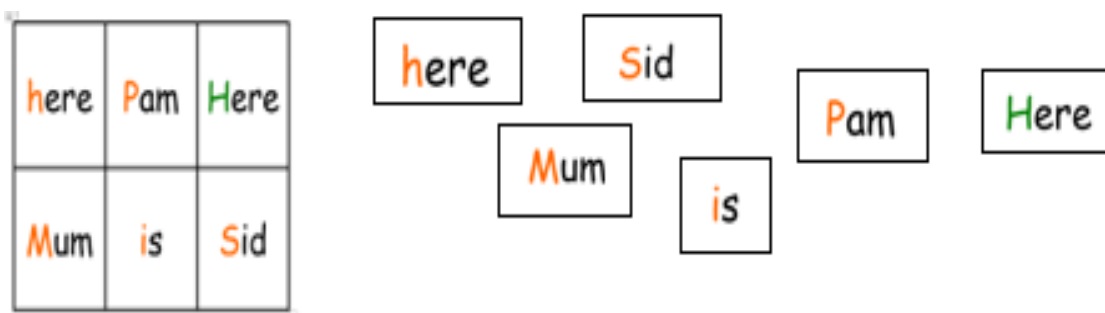
Physically constructing sentences with the target vocabulary is one of the activities used in the HRP to develop the semantic and syntactic associations that are particularly important for learning high frequency words that are standalone function morphemes, e.g. 'is' 'the', 'at', 'and', 'in', 'are'. The HRP includes 'sentence making' in the activities to secure the sight vocabulary needed in advance of each reading book. It should be noted that learning irregular words in this way secures automatic sight word recognition. The SSP focus on decoding all words by sound and looking for the irregular part of an irregular word (described as Heart words in the DE, 2025 Literacy Framework) is an inefficient and protracted way to secure sight word recognition of the irregular word. The necessity to engage in this process when reading text disrupts reading fluency, negatively impacting comprehension of what is being read.

WORD GAME

The target words should be taught using the **Match, Select, Say** games and flashcards in advance of the book that they appear in for the first time. '**Here, here, is, Mum, Pam, Sid**' are the 5 words that appear in Book 1, Level 1.

Match, Select, Say (adapted from Bird and Buckley, 1994)

Each child in the group has a board with six or more target words. The words are in different positions on each of the boards. These boards are rotated each day so that children do not become familiar with the position of the words. Each child has six small word cards for matching to the words on the boards.



MATCH: The teacher holds up a large flashcard and tells the children what it says and asks them to find the same word on their individual word cards and match it to the same word on their board. The teacher should encourage the children to look at the beginning and end of the word and the letters in the middle of the word to help in the search by drawing attention to these on the large flashcard.

Throughout this matching stage the teacher repeats the word so that while the child is matching, he/she is being reminded of the name of the target word linking visual matching to auditory recognition. The children can also say the name of the word that they are looking for as they search and match.

SELECT: When all the words have been placed on the board then the teacher asks the children to find a specified word on their board and hold it up. The children look for the word on their boards and hold the specified word up saying its name. The fun level can be increased by asking them to find it quickly and giving a point to the child who finds it first.

SAY: This part of the game is only played when the children are confident in the match and select stages of the game. The teacher asks the children to raise their hand if they can say the name of a specified word on the flashcard the teacher is holding up.

The teacher can test if there is automatic sight word recognition by using 'Look and Say,' but only when the teacher is confident that this is secure for each child.

Children should also be made familiar with the characters by using the character cards.



These character cards can also be used for matching activities and vocabulary development.

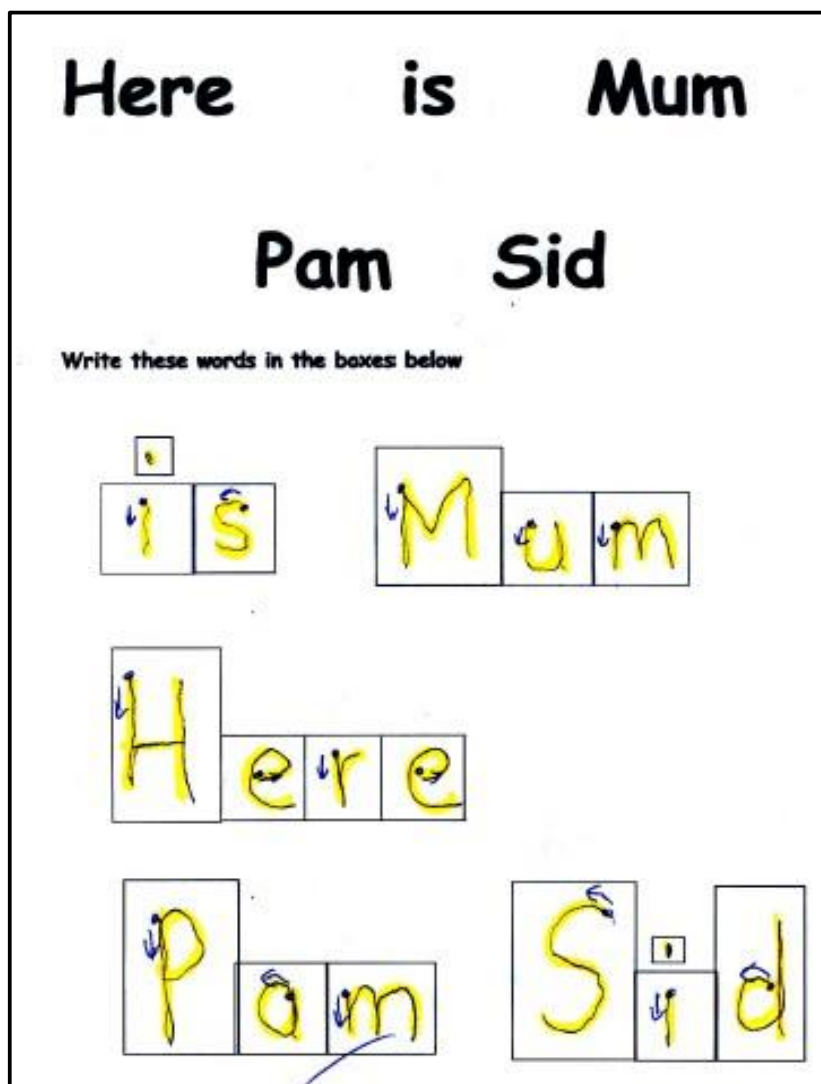
The starter activities should be introduced and completed before the child receives his/her first reading book. Remember, the child should be able to read book 1 and the other five books in Level 1 with understanding and fluency. The child will read all six books in Level 1 with a secure sight vocabulary of 5 words, discussing the pictures using wider spoken vocabulary than is in the book. Level 1 books 4-6 include activity words such as painting, swimming, which can be worked out using the picture together with recognition of the initial consonant sound. The initial consonant sounds are taught through phonics activity sheets. The first four initial sounds are introduced alongside Level 1 in the following order- s, m, h, p.

The next **Match, Select, Say** game (see below) should be played in advance of the six reading books in Level 2, to introduce the words '**the**' and '**in**'.

Sid	here	in	Here
Mum	Pam	the	is

Kinaesthetic learning

Letter formation is very important because motor memory can be a powerful memory aid which can help retrieval of words from long term memory. It is important that correct letter formation is established in Year 1 as embedded motor memories of incorrect letter formation can be extremely difficult to change and ultimately can prevent joined writing.



COMPREHENSION ACTIVITIES

Here are some examples of comprehension activities from Level 1 and Level 2.

The child cuts out the words and sticks them in the correct sentence.



Here ____ Pam.

Here is ____ park.

Pam is ____ the park.

the	is	in
-----	----	----

Level 2



Here is Pam. ✓

Pam is here. ✓

Here is Pam. ✓

Level 1

The child cuts out each sentence and sticks the correct sentence beside each picture or the child can write the sentence if he or she has the writing skills and memory capacity to do this.

  Here is Sid. Mum is swimming. Here is Mum. Sid is painting.	 Here is Mum. Mum is swimming.  Here is Sid. Sid is painting. Well done Here is Sid. Mum is swimming. Here is Mum. Sid is painting.
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Here are some comprehension activities from Level 7. When writing answers to questions children are taught always to write the answer in a full sentence, even from Level 1. They can do this by re-ordering the words in the sentence. Children who do not have the physical or motor writing skills can do this by cutting and sticking the answer. The teacher can give the child the words they need, already cut up for putting in the correct order and sticking on.

Look	Write
	1. Are Ben and Sid going to the shop? _____
	2. Are they going swimming? _____
	3. Are they going in the bus or the car? _____

Activities from Level 6 'Ben' and Level 8 'The Farm'

Missing words

Here is _____. Ben is _____
to Sid's house. Sid is at _____.
He is in the _____ with his
mum _____ dad.

house Ben home going and

The class are going on a school trip.

They are going to the farm.

Sid is going to the farm with his

friend Ben, Ben is in his class.

They with going his

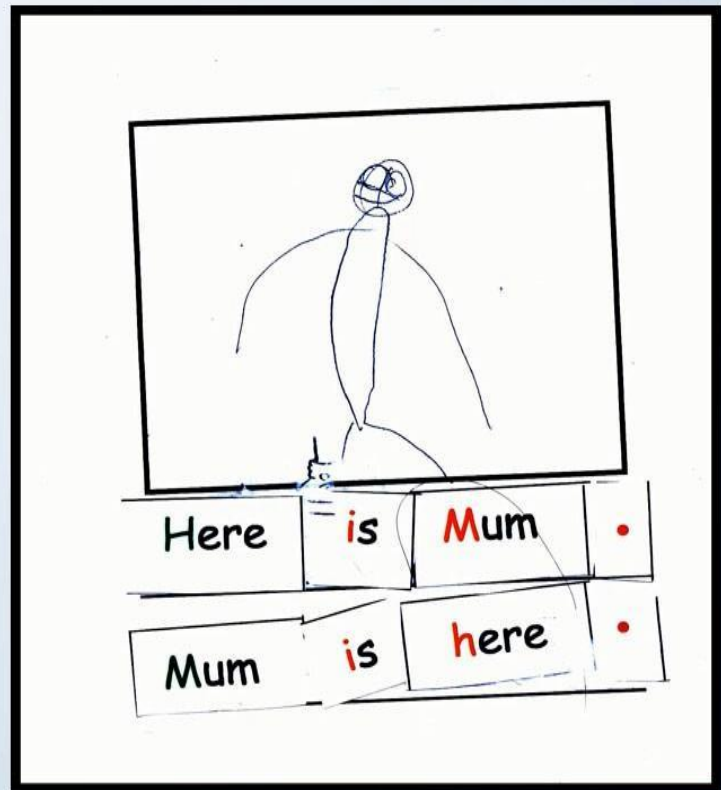
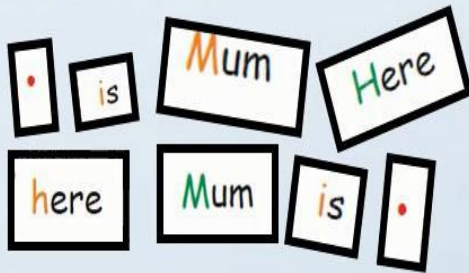
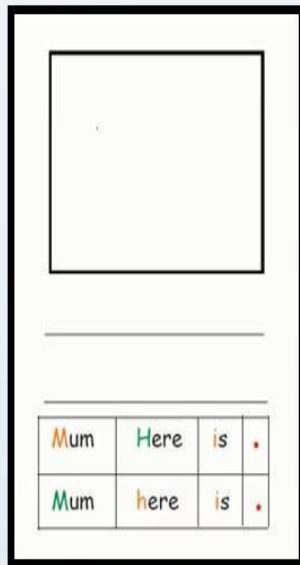
friend her am teacher said his

f	m	i	t		t	am	✓
n	o	t				said	✓
h						friend	✓
a	e	r	w	e	r	pet	✓
t	o					his	✓
t	e	a	c	h	e	teacher	✓

a b c d e f g h i j k l m n o
p q r s t u v w x y z

Syntactic awareness Level 1. This activity is completed before getting the Level 1, book 1 reading book.

Sentence construction



Jumbled sentences

11

Level 1 Book 3



is	Here	Mum	.
swimming	Mum	is	.



mum is hrere Mum is swimming

Well done

Swimming

Syntactic awareness Level 7

Put these words in the correct order to make a sentence.

1. is Ben to going house. Sid's

2. and Sid Ben going are the bus. to get

3. going are They the to pool. swimming

Children write answers to these questions using full sentences.

	1 Is Pam in the cafe?
	2. Is Mum here?
	3. Is Sid going to get a drink?
	4. Is Ben going home?

Example of an activity page from Level 8 'The Farm'

Look	Write
	1. Is Pam here? yes Pam is here ✓
	2. Is the teacher with her class? yes The teacher is with her class ✓
	3. Are they going home? No they are not going home. friend said where went ✓
	friend where went said
	abcdefghijklmnopqrstuvwxyz w x y z ✓

Activities needed to develop a secure, automatic sight vocabulary.

			
1. Visual Match, Select, Say	2. Meaning Cloze Procedure	3. Syntactic Jumbled sentences	4. Sounds Discrimination activity

The activities described above are designed to develop a secure, automatic sight vocabulary. These contextual links are essential to this process and aid the formulation of semantic (meaning) and syntactic (grammatical) 'anchors' in memory which enable the retrieval of an automatic sight word vocabulary.

Limited memory capacity in terms of retention and retrieval of learning, was the most significant factor holding back progress for the action research group (2000-2002). All of the reading strategies needed to be developed at compatible levels so that retention and retrieval from memory was not dependent on one process alone, but was secured by the simultaneous interaction of all of these processes; orthographic (visual), semantic, syntactic and phonological (at initial consonant level). It is important that these connections are secured at the point of learning, not as an add-on later. The introduction of new strategies to develop other processes at a later stage makes the integration of these processes much more difficult.

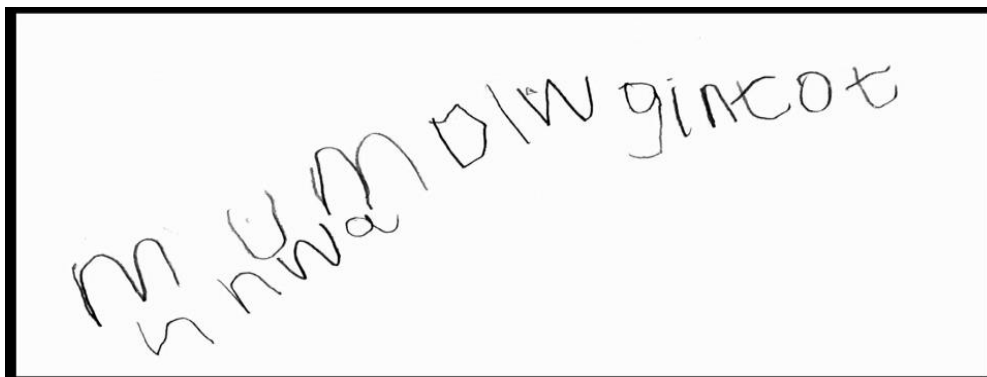
Each workbook ends with an independent writing activity.

Two mainstream primary case studies

Child A

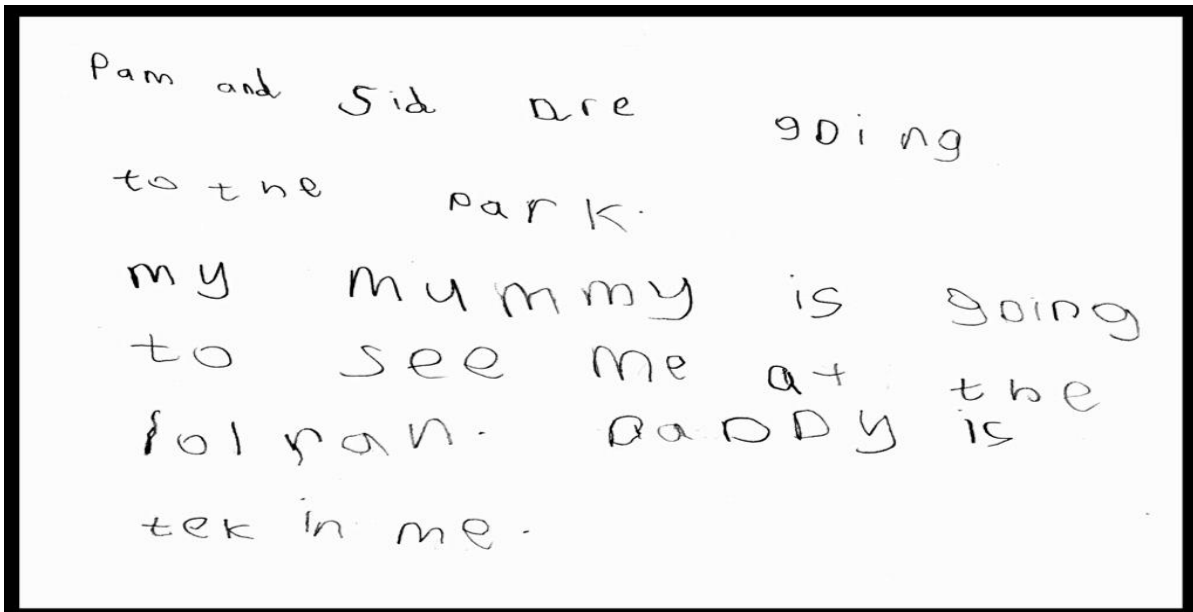
The first sample of writing from Child A was written in October Year 4 before Child A commenced the HRP. This child's ability score was at the lower end of the normal range (low 70s). Even though the IQ is in the below average range, it is important to remember that word recognition difficulties are not linked to IQ. This child should be able to learn to read.

Child A writing sample written in October of Year 4 (7-8 years of age)



The sample of writing on the next page was written by Child A at the end of Year 4. This writing was completed independently. Child A was able to spell most of the words correctly and could understand that written words have spaces between them unlike words in the speech stream which run together. All the words he can spell have been learned through the HRP and reinforced when reading. He has read these words many times in the HRP books. The two words he could not spell have not been taught and he has spelled them how he says them.

Child A's writing sample written in May of Year 4 (7-8 years of age)



Child B

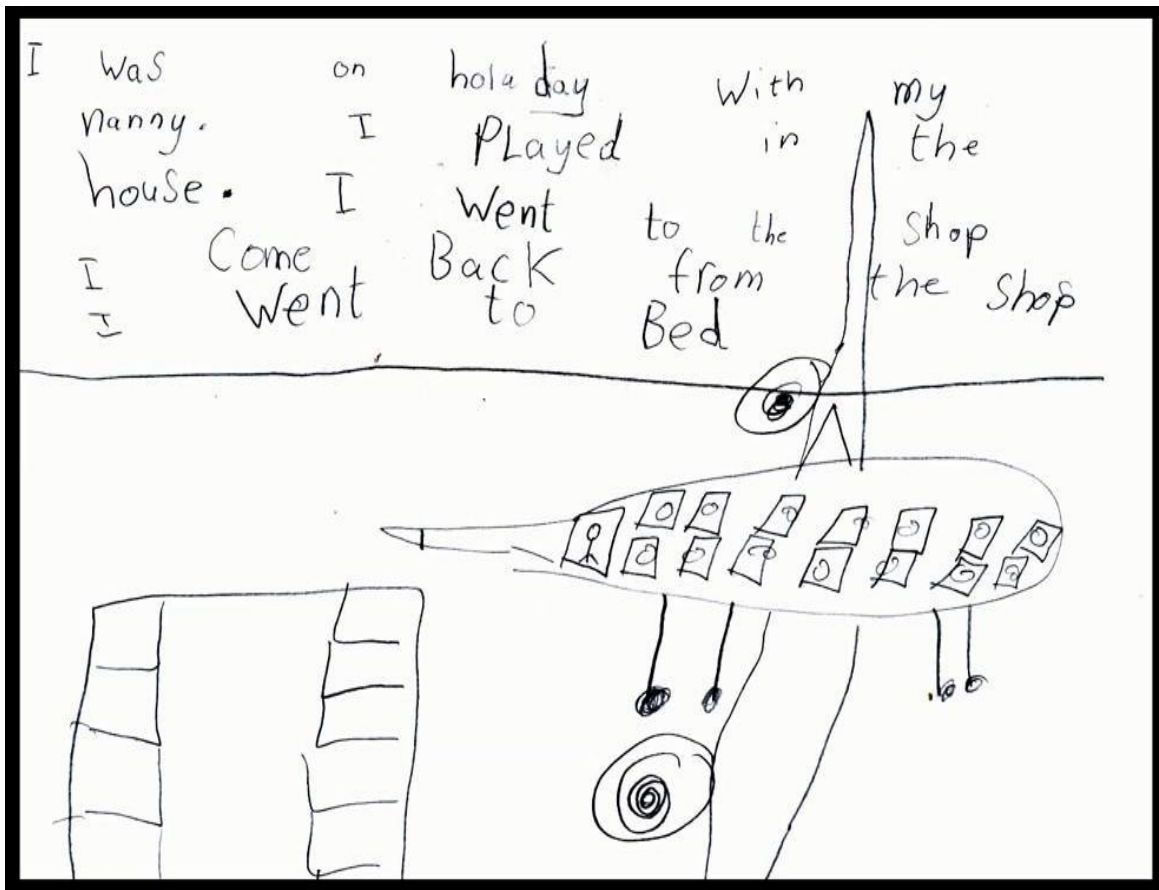
The sample of writing below was written by Child B in October of Year 3 (6-7 years of age). This attempt at story writing shows the extent of the Child B's difficulties and how little Child B had learnt up to this point.

Child B's writing sample written in October of Year 3 (6-7 years of age)



The sample of writing below was written by Child B in May of Year 3, seven months later. This sample was written independently; the only spelling error is 'holaday' for holiday. This child started using the HRP in October together with the CSP Spelling and Language Programme (McMurray and Fleming, 1998, 2014) which uses an integrated approach to developing phonic, orthographic, and morphemic knowledge at compatible levels.

Child B writing sample written in May of Year 3 (6-7 years of age)



RECAP

The target sight vocabulary in the HRP is approximately 43 words which are built up over 10 levels and 34 reading books. This is a programme designed to lay the foundations for successful reading and to prevent failure. The target vocabulary is used to develop all the sub-skills in reading. This vocabulary is taught in advance of being introduced to the reading book, using a range of activities to develop orthographic awareness of the sight words being learned and building up to reading and constructing sentences with the target vocabulary, so that when reading each book for the first time, success is ensured. The reading book is not the teaching tool, but the celebration of success and the child should be able to read the reading books independently and with fluency. Vocabulary that is not taught is introduced in the reading books to allow application of reading strategies in tackling unknown words.

There is a wider range of activities in the workbooks for use in class than those shown here. The length of time it takes a child to work through the programme will depend on his/her learning profile. Interaction between teacher and child when working through the workbook in class is an essential part of the programme. The teacher should support children in a group or on an individual basis as they work through these activities. Teachers need to be aware that new activities may require substantial support. The homework activity books are slightly easier than the class workbook and are designed to reinforce what was done in class earlier in the day. The child should be able to complete these homework books independently.

The aim is to make the children as independent as possible on each task. In school it is advised to make a short note at the bottom of each activity to indicate how much help each child has received, e.g.

- No help needed

- A little help needed

- A lot of help needed

This enables the teacher to chart progress as the child moves through the tasks and becomes more and more independent. The programme is designed to develop all the underlying processes that enable reading development, within the memory capacity of the child, by:

- engaging visual (orthographic) memory through the **Match, Select, Say** word game and the spelling of target words

- developing syntactic awareness of usage of target words to form sentences
- developing comprehension of usage of target words in context
- developing understanding and ability to use punctuation effectively
- linking teaching of initial sounds to reading words, taught discretely and applied using an analytic approach
- incorporating what has already been taught and providing overlearning to ensure retention

- introducing words that are not targeted allowing a top-down approach to learning as well as a bottom-up approach.

By drawing on the knowledge developing around these target words, the child develops strategies which can be used to tackle unknown words. The dangers of advancing one reading sub-skill, such as a phoneme-grapheme phonics strategy, or using a whole-language focus which engages the use of psycholinguistic guessing at words, should be clear. All the sub-skills essential for effective reading development must be developed in balance and in tandem, so that the underlying cognitive processes that we are unaware we are using, can connect and interact with increasing efficiency, enabling children to read with fluency and understanding.

Please view this short video at: <https://vimeo.com/1188427627/12a13fa33a>

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