Action Research Project

Abstract

Several skills that are commonly associated with beginning reading instruction help children develop phonological awareness. A problem for many emergent readers is the inability to segment and blend a sequence of sounds in words. This effects their word attack skills and reading ability.

For this study, a set of twin boys was selected from Year Three. This study was developed to investigate incorporating the specific phonemic awareness strategies of segmenting and blending into a teaching program for students experiencing difficulties with reading. Both boys have difficulties in the phonologically related processes of word attack and phonemic awareness. Their limited knowledge of sound patterns hinders their ability to learn the matching letter clusters and they are unable to use what they know about some words to read others. They both have trouble reading and spelling nonsense words, notably sound sequencing in reading and vowel confusion in writing.

The teaching targeted explicit teaching in segmenting and blending a sequence of sounds. The students were assessed and from this a teaching program was implemented. Both boys were withdrawn from class in the literacy block for eight sessions. Each session went for twenty minutes and was administered over a period of eight days. Testing was carried out before, during and after the intervention.

The comparative data was generated from observational notes together with gains measured from a series of pre and post-tests administered to each student. The test which was to carry the most significant weight was the Sutherland Phonological Awareness Test as both students have been given this test over the course of the year with no significant improvement whatsoever.

Hypothesis:

Explicit instruction on the phonological area of segmenting and blending a sequence of sounds increases the student's ability to read unfamiliar words.

Both students improved in their ability to segment and blend a sequence of sounds and then transfer that skill to read unfamiliar words. They also performed significantly better on the Sutherland Phonological Awareness test in the post-testing section.

Introduction

Unfortunately, many children experience difficulties in the early stages of learning to read that becomes barriers to later reading and learning. A primary focus of recent research in education, therefore, has been the prevention of early reading problems (Adams, 1990;Snow, Burns, and Griffin, 1998;Torgesen, 1998). One area of beginning reading research that has received enormous attention in the professional literature is phonological awareness. This research has been called "a scientific success story" (Stanovich, 1987) because phonological awareness has been shown to be a reliable predictor of reading achievement and a key to beginning reading acquisition (Smith, Simmons, and Kame'enui, 1995).

Children with strong phonological awareness can detect, match, blend, segment, and manipulate speech sounds. Such facility with the sounds of spoken language enables children to learn more readily how to apply these skills to decode prints. Numerous studies have demonstrated the importance of phonological awareness, particularly at the phoneme level, as the foundation for skilled decoding and therefore, for fluent reading (Blachman, Tangel, Ball, Black, and McGraw, 1999: Cornwall, 1992; Lenchner, Gerber, and Routh, 1990; Liberman and Shankweiler, 1985; Pratt and Brady, 1988; Wagner and Torgesen, 1987).

The ability to discriminate phonemes, or phonological awareness, involves an awareness of each sound or phonological segment in a spoken word, in addition to the ability to manipulate those segments. This awareness is shown when a student can orally use words in tasks such as rhyming, segmenting, blending, and deleting. And these skills pose problems for many emergent readers as blending and segmenting phonemes are the most sophisticated skills associated with phonological awareness and the most important for application to decoding. When children learn to decode, it is necessary for them to identify the sounds of separate letters and then to blend those letter sounds together. Previous oral blending practice is helpful for students when they are ready to become more fluent with decoding skills.

In an extensive longitudinal study of 244 children, Wagner, Torgesen, and Rashotte (1994) collected performance data over three years on seven phonological awareness tasks and reading achievement. Using confirmatory factor analyses, these researchers concluded that phonological processing likely exerted a strong casual influence on later word decoding. Considering the strong connection between reading achievement and phonological awareness skills, the development of

measures to assess these skills has become an important focus of early intervention research.

Research suggests that children's existing knowledge of spelling patterns develops gradually, in a sequence influenced in part by their ability to process letter-sound information in words (Ehri, 1989; Gentry, 1981; Griffith, 1991; Richgels, 1995; Blachman and Tangel, 1994; Treiman; 1993). Decoding a written word is based on the knowledge that individual letters and groups of letters represent sounds used in the English language (Clay, 1985). Therefore students will be unable to segment and blend a sequence of sounds accurately if they are unable to discriminate the sounds that constitute spoken English.

As earlier stated the ability to recognise spoken words as a sequence of individual sounds is thought to have a positive correlation with early reading success (Lovegrove 1998). The children in this study cannot transfer their phonemic knowledge to the use of segmenting and blending and they are experiencing difficulties with reading. Morgan and Torgesen (1992) showed that explicit instruction in blending and segmenting improved the skills of students in segmenting words into phonemes resulting in enhanced ability to read new words.

Castle (1999) suggests that training programs to improve children's phonemic awareness should be given the following priority:

- Segmenting words into sounds.
- Blending sounds to make words.
- Identification of initial and final sounds in spoken words.

She also suggests that phonemic awareness training and the explicit teaching of letter-sound knowledge to young children can significantly reduce the number of children experiencing reading failure.

This study is limited to isolated word reading, and doesn't specifically look at transferring their segmenting and blending knowledge into reading unfamiliar words in prose reading.

Method Design

This study uses an action research design in which a problem for students

with reading disabilities is identified. A strategic plan of action is then devised to address the problem. Data is collected to enable study to be done on the effects of the strategic action plan. The action plan is carried out and further data is collected and then analysed to determine the success of the action plan and modifications required (Munro 2002). This study uses a case study OXO design, which measures the gains, made by two Year Three students given explicit instruction in segmenting and blending.

Participants

The participants are two brothers in Year Three who have a history of learning difficulties. For the first two years of their primary schooling they attended another school in the local area. They left that school as the parents were unhappy with their academic achievements and also because the teachers wanted to separate the twin boys in Year Two as there were some behavioural issues associated with the boys. However, the parents felt that the boys needed each other as both boys lacked self-esteem, and one is particularly aware of his difficulties and displays no confidence whatsoever.

It is worth noting that the boys did not orally communicate with anyone other than each other for the first four and a half years of their life. They had their own language and even now their mother says they still revert back to their secret language at times. On analysing some of their isolated word-reading tasks it becomes apparent that many of their inaccurate and unique attempts at reading unfamiliar words are exactly the same.

The two students were selected as they are working with a special needs teacher on a weekly basis and also see an educational specialist outside of school once a week that focuses on literacy skills. One student has improved a little throughout the course of the year, however his twin brother who is lacking in confidence appears to have made little progress. After discussions with the special needs teacher the two students were chosen as the teachers felt they had similar learning needs, in particular poor phonological awareness.

One of the students (student A) was referred to the Catholic Education Office for an educational assessment in October of this year. A Neale Analysis of Reading Ability was administered. Reading accuracy was assessed and his reading age was 6.2. His comprehension was also assessed and his reading age range was 7.5. A Kaufman Brief Intelligence Test was also administered and he received a raw score of 37 on the

vocabulary sub-test, which puts him in the below average category. He scored 26 on the Matrices sub-test, which places him in the average category. These scores indicate that his overall intellectual ability is within the average range, with a significant difference between his verbal and performance abilities. This difference indicates that Student A performs better in tasks where he is able to think non-verbally and to solve new problems visually rather than with language.

Both students have difficulty at the word level. They don't have the necessary sound knowledge and have difficulty blending individual sounds and forming letter clusters. As a result the students find it challenging performing word analogies.

Their entry age and pre-test assessment results are shown in Table 1.

Table 1

	Student A	Student B
Age	9 years 11 months	9 years 11 months
Instructional reading	Level 19	Level 20
level	Accuracy: 90%	Accuracy: 90%
Sutherland	41	42
Phonological Reading		
Test		
Burt Word Reading	38	40
Test		
Diagnosis Three Word	38%	55%
Test		
Diagnosis Three	21%	50%
Pseudo-word Test		
Phonemic Awareness	76%	76%
Test (Peter Westwood)		

Materials

Materials used included the following

- Pre-test and post-test: Reading Accuracy-PM Benchmark Kit, Sutherland Phonological Awareness Test, Burt Word Reading Test, Diagnosis Three (Reading Freedom-Teacher's Manual), Phonemic Awareness Test Reading and Learning Difficulties: Approaches to teaching and assessment- Peter Westwood (Appendix Two p111) Language Programs Phonological Awareness 2 (Catholic Education Office Speech Pathology)
- On-going assessment: flash cards from the previous session were tested at the beginning of each new session.

Procedure

The students were withdrawn from class together every morning for twenty minutes for eight consecutive days. The first two lessons consisted of explicit instruction in segmenting two and three sound words in order to develop the student's ability to segment words into sounds. Lessons three and four consisted of explicit instruction in blending two and three sound words developing the students ability to blend sounds together to form words. Lesson five consisted of segmenting cluster sounds developing the student's ability to segment and blend more complex words with two consonants together. Lessons six, seven and eight consisted of the deletion of sounds in spoken words developing the students ability to manipulate sounds in spoken words by removing a sound in a word to form a new word. The program ensures that the three learning styles (visual, auditory and kinetic) are utilised. At the beginning of each lesson students revised what they had learnt and at the end of each lesson the teacher articulated what was learnt.

Data Collection

Changes in the students' abilities to accurately read unknown words and pseudo-words were observed.

Data was collected in two ways:

- Pre-test, interim test and post-test
- Daily observation notes

Results

Student performance is described in three ways:

- Orthographic reading: Burt Word Reading Test, Diagnosis Three,
 Pseudo-words and Phonemic Awareness (Peter Westwood)
- Phonological awareness
- Text accuracy

The student's orthographic reading was calculated in terms of their scores on the pre, interim and post-tests. The Sutherland Phonological Awareness Test was administered pre, interim and post teaching. The text accuracy was calculated using running records to determine the instructional text level at pre and post-testing.

The data related to the assessment is shown in Table 2.

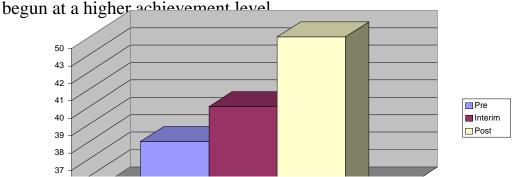
Table 2

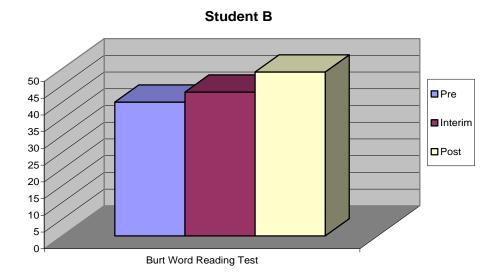
Tests	Pre	Interim	Post	Percentage
				difference

							between post-test	-
	Student A	Student B	Student A	Student B	Student A	Student B	Student A	Student B
Burt Word	38	40	40	43	44	49	+6	+9
Reading Test								
Diagnosis								
Three Word	38%	55%	48%	66%	59%	76%	+21%	+21%
Test								
Diagnosis								
Three Pseudo-	21%	50%	28%	50%	57%	57%	+38%	+7%
word Test								
Phonemic								
Awareness	76%	76%	96%	90%	98%	98%	+22%	+22%
Test								
Sutherland								
Phonological	41	42	50	47	51	50	+10	+8
Awareness								
Test								
Text Accuracy	Level	Level	Level	Level	Level	Level	One	One
Instructional	19	20	19	20	20	21	text	text
Level	90%	90%	92%	90%	94%	94%	level	level
							+ 4%	+4%

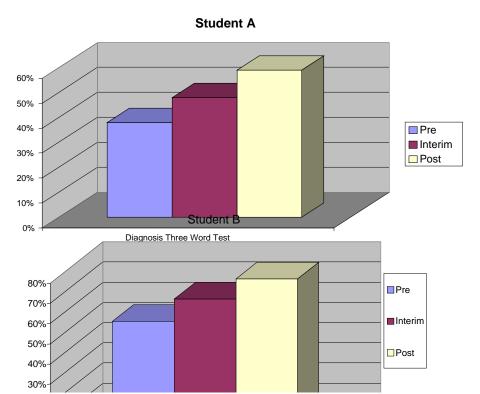
Throughout the intervention Student A presented himself in a much more enthusiastic and positive manner. He became very tuned in to the routine of each lesson and was responsive and accurate in his responses. Student B, on the other hand, didn't respond to praise or humour so much as Student B and on occasions would make mistakes and appear apathetic towards the procedures. At other times he was in good spirits and both students were able to have a laugh over some words that didn't appear outwardly funny at all.

Trends from the two students indicate that the explicit teaching of blending and segmenting words benefited their learning. Both students improved their orthographic knowledge significantly and made gains in every area. Student A's improvement in the Diagnosis Three Word Test was particularly impressive. It was interesting to note that Student B made good, but less impressive gainst than Student A even though he had



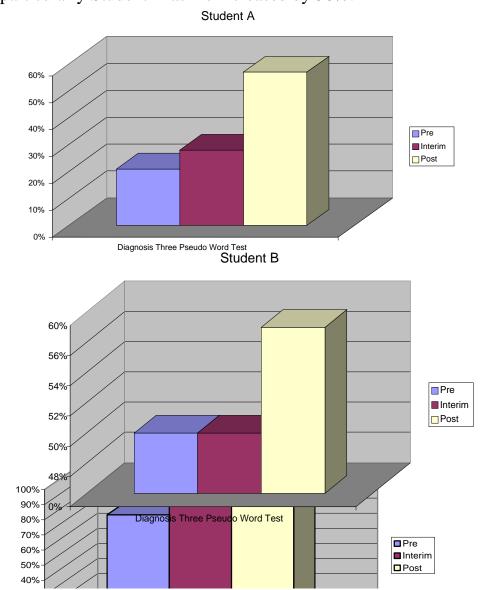


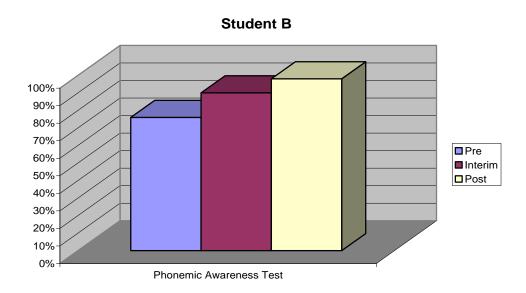
Student A was able to read six more words in the Burt Word Reading Test and his attempts of many of his mistakes in the post-test relied on more than just distinctive visual features, as was evidenced by his incorrect attempts in the pre-test. He was obviously breaking up the words into sounds and not just reading the initial sound and guessing the remainder. Student B was able to read nine more words in the Burt Word Reading Test. He has also made an improvement and his attempts were very similar to the actual word.



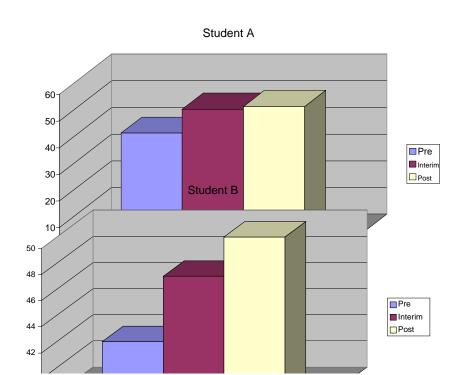
Both students had very poor orthographic knowledge prior to the intervention, and were unable to segment and blend words when reading unfamiliar words. They relied heavily on distinctive visual features and never broke up a word into sounds. As the graphs for the Diagnosis Three Word Test indicate, both students made a 21% increase in reading words for this particular test. In fact by the post-test stage Student A had worked out that the "e on the end of some words changes the vowel sound in the middle". Having this knowledge he was able to correctly read many more words than he could prior to this self-taught knowledge.

The next series of graphs shows the progression of reading accuracy for pseudo words. Both boys increased their reading accuracy of pseudo words, particularly Student A as his increased by 38%.



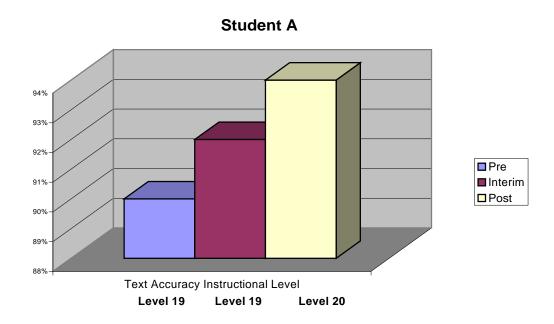


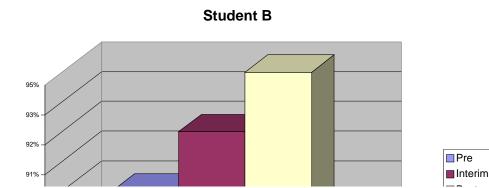
These simple listening tests assessed the general ability of the student to identify and manipulate sounds. Both boys performed well in the blending section and poorly on the segmenting section at the pre-test level. However at the post-test level Student A improved significantly at the segmenting section, whilst Student B only improved slightly.



Phonological Student performance on the pre-testing component of the Sutherland Awareness Test (SPAT) showed that both students were adept at the syllabic and subsyllabic level, however displayed difficulties at the phonemic level of segmenting and blending. They also both found it difficult to read non-words and to spell non-words and their total score was below the mean. At the post-test, it became apparent that Student A and B had gained significant phonological knowledge, with both boys being assessed at least one standard deviation above the mean.

The next series of graphs show individual text reading accuracy as measured by converting error rate to percentage accuracy score. Both students improved in reading accuracy. Student A and B both gained one text level each.





Discussion

Research suggests that the ability to rhyme at the ages of three and a half to four and a half is one of the most powerful reading predictors. As previously mentioned both twin boys were speaking their own unique language until the age of four and a half. At a young age they weren't vocalising patterns common to a universal approach to sounds and this would have had a significant impact on their limited amount of phonological knowledge. As well as this their exposure to print and lack of preparedness to engage in reading, would critically have affected their orthographic learning.

This study examined how helping students develop their knowledge of segmenting and blending a sequence of sounds, would increase the student's ability to read unfamiliar words. The results show that both students made great gains in every area as a result of this intervention. Their confidence increased as they attained more skills, and the students could see that they were improving. The activities became easier for them as their knowledge developed and they became more familiar with the lesson procedures. They could see themselves learning and could appreciate that what they once felt was difficult were now becoming easier.

Both students showed an ability to use the strategies of blending and segmenting when decoding unfamiliar words, although throughout the lessons Student A seemed to orally outperform Student B. However that had more to do with Student B's attitude rather than his knowledge as at each testing component he was in fact improving.

Comparison of pre-test and post-test scores for both students show increases in accuracy for all categories. Both students scored lower on the Diagnosis Three Word Pseudo-word Test, which might suggest that the children were relying more on meaning than the visual analysis of the word. Although for Student A, at post-testing, his reading of pseudo-words improved by 38%, which was the biggest improved difference of any of the testing. This suggests an improvement in word level reading strategies in the absence of meaning and context which is possibly a more accurate indicator of whether the explicit teaching of segmenting and blending increased the student's ability to read.

Both students were also able to transfer this knowledge at text level and progressed one text level each. They were reading more fluently and were attempting unknown words by trying to break them up into sounds. Each

error they made looked more like the written word although at times they were pronouncing the words wrongly as they weren't stressing the vowels correctly, especially three syllable words. When reading unfamiliar words, they were finding it difficult to recognise the schwa in two and three syllable words and in order to increase their phonological and phonemic awareness knowledge the next thing they may need to work on is the discussion and teaching of modifying stress patterns for two and three syllable words.

The results of this study demonstrate the benefits of explicit segmenting and blending teaching. However, the study has been more focussed on isolated word reading. This intervention could be continued to look further into the benefits of this explicit teaching on prose reading. Concerning these two students, who are most reliant on each other, it would be interesting to observe any gains made, when in future years they are separated into different classes for a school year.

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Appendix One

Teaching sessions

These teaching sessions are designed to help the children learn to read words more efficiently.

Lesson One

Segmenting Two and Three Sound Words

Aim: To segment words into sounds

The 16 words to be segmented are: shoe, zoo, fish, face, sew, leaf, cheese, five, knee, nose, feet, lake, eight, soup, fan and nut Steps to follow:

(Teacher models first)

- Using pictures students identify the picture, say the word slowly, stretch the sounds, and at the same time, push a counter into a square for each sound
 - Eg. sh-oe (2 counters for two sounds)
- Work through the worksheets Segmenting 1-4 (Sounds Abound) and if a word is difficult demonstrate the word yourself and then ask the student to copy you
- After each student says the sounds slowly for a word, they then say the word, blending the sounds back together Eg. f+i+sh=fish
- Model to students what was learnt today. Eg. 'Today we learnt that 'fish' is made up of three sounds 'f' 'i' 'sh'. Have students articulate what they have learnt

Lesson Two

Aim: To segment words into sounds

The 27 words to be segmented: she, say, size, each, shave, I, me, of, laugh, oh, off, sit, sheet, age, nice, chose, joy, race, rock, up, love, sigh, ah, live, mop, may and in

Steps to follow:

This lesson is similar to lesson one, except the number of sounds is not shown by the number of boxes. You also say the word without the picture

- Revise what was learnt yesterday
- Using Segmenting 6 activity sheet and three counters teacher demonstrates the procedure
- Upon hearing the word from teacher students then break up the word into sounds and students place counters in the box to represent each sound

- After students have successfully segmented the word, they then say the word normally
- Review the 16 words from lesson one using the same procedure
- Model to students what was learnt today

Lesson Three

Blending Two and Three Sound Words

Aim: To blend sounds together to form words

The 16 words to blend are shoe, fish, cheese, mouse, saw, knife, match, ice, eg. map, soap, rake, leaf, rope, rose and net Steps to follow:

- Revise what was learnt previous lesson (Teacher models first)
- Using cut out pictures of each of the 16 words students segment each segment of the picture separately and say the corresponding sounds.
 Then put the pictures together to say the word
 Eg. sh oo makes shoe
 (Pointing to each part) (Drawing parts together)
- Students do each of the 16 words
- Model to students what was learnt today

Lesson Four

Aim: To blend sounds together to form words
The 20 words are: hat, pin, jug, can, fox, bug, cat, box, bed, sun, ten, wig,
fan, pen, cap, bus, pig, cup, dog and log
Steps to follow:

- Revise what was learnt previous lesson
- Take the page titled 3 Sounded Words A and cut two copies of the pictures in half to make up the 4 Bingo boards.
- Cut the copies into individual pictures to make Bingo cards.
- Put the cards in a box
- Pull out a card and say the individual sounds of the word (eg. segment; h-a-t). Encourage students to listen and then tell you the word (eg. blended; hat). The student who has the picture on their Bingo board then covers it with the card.
- Proceed through the other cards and when someone fills their Bingo board they call out BINGO.

Interim tests to be administered

Lesson Five

Segmenting Cluster Sounds

Aim: To segment and blend more complex words with two consonants together

The 20 words to segment: snow, pro, free, crow, fry, clay, ski, play, slow, stay, fox, flat, best, wasp, disk, plate, nest, cats, stop and dump Steps to follow:

- Revise what was learnt previous lesson (Teacher models first)
- Use the word list of 20 words and activity sheet Segmenting 8 with coloured counters
- Put the counters above the line on the sheet Segmenting 8
- Move a counter into a square for each sound
- Ask students to look for words with consonant clusters in their take home reader to further practice the skill of segmenting cluster sounds. This activity is more difficult than previous sound segmentation activities because these words contain clusters.

Lesson Six

Deletion of Sounds

Aim: To manipulate sounds in spoken words by removing a sound in a word to form a new word. The specific aim of this lesson is to identify the sound that has been taken away

Steps to follow:

- Revise what was learnt previous lesson
- Demonstrate the task first
 - say the base word eg. say rat
 - say the contrast word eg. say at
 - tell the students that the 'r' has been taken away
- Ask your students to determine which sound is missing in the following word pairs

Base Word	Contrast Word	Sound Missing
tin	in	t
rat	at	r
band	and	b
fill	ill	f
tear	ear	t
lend	end	1
gate	ate	g
call	all	c
pit	it	p
pill	ill	p
fin	in	f
sat	at	S

Use coloured counters to represent each sound

- Use a different colour to represent each sound of the base word eg. have three counters to represent the base word eg. mat
- say the base word
- ask the students to repeat it
- take one counter away from the front and say the new word at
- ask the students to repeat it
- ask the students which sound was taken away
- Model to students what was learnt today

Lesson Seven

Aim: To take away the first sound from a new word Steps to follow:

- Demonstrate the task first
- say the base word eg. say fall
- say the contrast word eg. say all
- tell the students that the 'f' has been taken away
- Say the words from the following table and ask the students to say the word again without the first sound. For example: Student says boat. Wait. Then say to student, "Now say it again but don't say "b."
- Use counters to show all of the sounds

Base Word	Sound Removed	Resulting Word
boat	b	oat
meat	m	eat
fall	f	all
peel	p	eel
sand	S	and
bend	b	end
race	r	ace
near	n	ear
mice	m	ice
gold	g	old
nice	n	ice
lace	1	ace
bark	b	ark
witch	W	itch
rage	r	age
wax	W	ax
bold	b	old
teach	t	each
call	c	all
rash	r	ash
fold	f	old
lend	1	end
coat	c	oat
hand	h	and
rice	r	ice
cage	c	age
dark	d	ark
face	f	ace
wall	W	all

Lesson Eight

Aim: To take away the first sound from a new word Steps to follow:

- Revise what was learnt previous lesson
- Demonstrate the task first
- say the base word eg. say beat
- say the contrast word eg. say bee
- tell the student that the 't' has been taken away

- Ask your students to say the new word when the last sound of the word is taken away
- say the base word to student eg. say cart
- ask student to repeat it eg. cart
- ask student what would be left if you take away the last sound eg. take away the 't'
- ask student what is left eg. car
- Use coloured counters to represent each sound

Base Word	Sound Removed	Resulting Word
beat	t	bee
base	S	bay
mean	n	me
find	d	fine
make	k	may
loaf	f	low
time	m	tie
toil	1	toy
safe	f	say
grape	p	grey
toad	d	toe
soak	k	SO
bite	t	by
stain	n	stay
like	k	lie
note	t	no
plate	t	play
loan	n	low
grate	t	grey
road	d	row
base	S	bay

• Model to students what was learnt today

Appendix Two

Diagnosis Three Word Test

foot	bird	mule	deaf	fall	fire
cause	goal	foil	turn	paw	mood
leaf	pew	page	toy	cute	pure
cow	raw	rode	tall	wake	mow
heed	huge	voice	hood	fear	pile
own	dine	soon	jeep	sort	boil
lime	fork	deal	mice	boat	deer
fair	few	tow	gale	law	dart
far	bead	pear	pain	care	down
hood	cube	peel	note	dirt	herd
low	hope	bout	here	dew	head
gain	coil	gown	term	rate	joy

Appendix Three

Diagnosis Three Pseudo Word Test

feen	mape	cewf	lawp	koul	hoob	roit
poy	yoat	bauk	gice	pute	zie	noan

Appendix Four

The Burt	Word Reading Tes	on) RECORD FORM	
Name			Number correct
School		• • • • • • • • • • • • • • • • • • • •	
Age	Years	Months	Class

То	is	up	for	big
he	at	one	my	sun
went	girl	boys	day	some
his	that	of	an	wet
love	water	no	just	pot
or	now	things	told	sad
carry	village	quickly	nurse	beware
return	scramble	twisted	journey	luncheon
known	shelves	explorer	tongue	projecting
terror	serious	belief	events	emergency
refrigerator	steadiness	obtain	overwhelmed	universal
nourishment	encyclopedia	commenced	circumstances	fringe
formulate	motionless	trudging	theory	destiny
scarcely	exhausted	labourers	urge	atmosphere
apprehend	binocular	domineer	melodrama	economy
ultimate	reputation	humanity	excessively	philosopher
autobiography	contemptuous	terminology	mercenary	glycerine
unique	microscopical	perceptual	efficiency	influential
perambulating	renown	physician	champagne	exorbitant
hypocritical	atrocious	constitutionally	contagion	palpable
melancholy	eccentricity	fatigue	phlegmatic	fallacious
alienate	poignancy	phthisis	ingratiating	subtlety

Appendix Five

Phonemic awareness

These simple listening tests can be used to assess the general ability of a child to identify and manipulate sounds as required in decoding and spelling. The child does not look at the list of words but responds to the teacher's oral presentation.

Blending

'I am going to say some words very slowly so that you can hear each sound. Like this: /aaa/ //t/ = at. /h//i//t/ = hit. I want you to tell me what the word is. If I say /i//n/, what do you say? Yes, = in. OK, Let's try.' (Sound the phonemes at the rate of one per second. Discontinue after about five failures.)

1 i-f	6 g - o - t	11 sh - o - p	16 s-p-i-ll
2 a - t	7 m-e-n	12 st $-e-p$	17 $b-1-a-ck$
3 u-p	8 b-u-t	13 1-o-s-t	18 f-1-a-sh
4 o-n	9 c – a –t	14 j – u – m – p	19 $c - 1 - o - ck$
5 a - m	10 d-i-g	15 t-r-u-ck	20 $c-r-u-s-t$

Segmentation

'When I say a word I want you to tell me each sound in that word. For example, if I say "ran" you say "/r/ - /a/ - /n/". If I say "shop" you say "/sh/ - /o/ -- /p/".

1	cat	6 that	11 face
2	man	7 step	12 sing
3	red	8 help	13 brush
4	hot	9 book	14 string
5	bus	10 flag	15 table

Initial sound

'I am going to say some words. I want you to tell me the sounds that begins each word. Like this. Monkey: mmmmonkey. Monkey begins with /m/. Stop: sssstop. Stop begins with /s/.

1	house	6 fish	11 swing
2	table	7 little	12 trees
3	bag	8 red	13 chips
4	cake	9 dog	14 blue
5	water	10 egg	15 school

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