# International trends in enfancing literacy attainment 

## Thomastown East Primary School 2/3/2004

## Dr Kerry Hempenstall, <br> Psychology and Disability Studies, RMIT <br> http://www.rmit.edu.au/staff/Kerry_hempenstall

## Why do we need to focus upon students' literacy progress?

Too many students are failing

- Victorian Budget allows for more than $22 \%$ of Year 1 students to receive Reading Recovery.
- In a study of 3000 Australian students, $30 \%$ of 9 year olds unsure about letter sounds (Harrison, 2002).
- $30 \%$ of Year 9 students lack basic literacy skills (ACER, 2000).
- $60 \%$ of socially disadvantaged high school students have poor literacy skills (Orr, 1994).


## Initial failure predicts future failure

- $90 \%$ of poor readers in $1^{\text {st }}$ grade are still poor readers in $4^{\text {th }}$ grade (Juel, 1988)
- By adolescence, fewer than $25 \%$ of Victorian students who struggled in Year 2 had recovered (Prior, 2001)

Actually, the gap widens over time


By Year 10, students at the $10^{\text {th }}$ percentile in reading had progressed no further than Year 3 students at the $50^{\text {th }}$ percentile.
The cost is huge
More children suffer long-term life-harm from the failure to learn to read than from parental abuse, accidents, and all other childhood diseases and disorders combined. Assistant Secretary of Education, U.S. Department of Education

Australian Bureau of Statistics reports a $16 \%$ unemployment rate for people with poor literacy skills compared to a $4 \%$ rate for those with high literacy levels. Poverty, depression, poor health, workplace accidents, substance abuse, crime - are each associated with illiteracy.

The National Reading Panel (2000) report http://www.nationalreadingpanel.org
Research from more than 100,000 studies over the past 33 years, from many countries. Involved the reading development of 35,000 children and adults. They discovered that effective teaching is the most crucial factor - not intelligence, motivation, health, or parent involvement. Instruction is the major influence on struggling students

At-risk students in classes with effective teachers for 3 years in a row achieved $50 \%$ more learning than those in classes with poor teachers (not just in reading).

The Panel noted 5 vital elements in effective reading programs:
Students should be explicitly and systematically taught:

- Phonemic awareness: The ability to hear and identify individual sounds in spoken words.
- Phonics: The relationship between the letters of written language and the sounds of spoken language.
sat
- Fluency: The capacity to read text accurately and quickly.
- Vocabulary: All the words students must know to communicate effectively.
- Comprehension: The ability to understand what has been read.

The No Child Left Behind Act provided $\$ 6$ billion for school districts in which students are systematically and explicitly taught the five key components of early reading.

So, maybe we should see what these 5 areas are all about?
UK National Literacy Strategy
Systematically teach all the letter sounds, and

- Teach how to blend sounds together
- Teach how to break words apart
- Research has proved that structured phonics is the most effective way to teach reading.
- Most schools claim to teach phonics as part of a "mixture of methods", but such incidental phonics is insufficient.
- Most teachers need to be retrained.


## So what's the prize?

Persistent reading problems can be reduced to $2-5 \%$ of at-risk students with early, appropriate and at times, intensive phonics instruction. (Brown \& Felton, 1990; Felton, 1993).

## What's happening in the brain when a good reader looks at text?



## Left hemisphere <br> Right

Good readers use three areas in the left side of the brain - to decode letters into sounds, blend the sounds together to make words, and integrate them fluently.

## What's happening when a poor reader confronts text?

The poor reader compensates with the visual centres of the right hemisphere - looking at words as pictures. Little activity in areas of the left hemisphere - where capable readers' activity is dominant


Left Right

## Why do struggling older readers avoid reading?

The poor reader expends between 4 and 5 times the brain energy as good readers for the same reading tasks (Richards et al. 1999).

## After 60 hours structured intensive phonological teaching

Less right-hemi involvement, and more left-hemi, phonologically-based activity as reading improves.


This also corresponds to the pattern displayed by good readers. But for this early systematic phonics emphasis to be effective - phonemic awareness must already be present or quickly developed.

## Phonemic awareness: The language foundation for reading

- The single most powerful advance in the science and pedagogy of reading this century (Adams, 1991)
- The awareness that spoken words can be broken down into bits (phonemes).
- How spoken words such as house, mouse, louse are different
- Hear the differences between goal and gold, boost and boast, unanimous and anonymous, poetry and poultry?


## Phonemic awareness enables the appreciation that:

- $\quad$ Camp and soap end with the same sound
- Blood and brown begin with the same sound
- Removing the $/ \mathrm{m} /$ from smell leaves the word sell.
- What word is left when the m is removed from Germany

Phonemic awareness enables the beginning reader to appreciate the logic of our alphabetic writing system. to the alphabet. The Phoenician alphabetic writing dates from 1000 B.C. It was "a conscious and free creation by one man" (Jensen, 1970). The originator of the alphabet analysed his own speech sounds and how they were articulated. He then devised visual patterns for the sound differences that he could hear in spoken words. He produced a symbolic system that represents a limited number of distinct speech sounds by single characters - called the alphabetic principle. It is one of mankind's greatest achievements.

The appreciation of this code is the task of very new reader. As a beginning, the child must be sensitised to the underlying speech sounds that form spoken words. That sensitivity is phonemic or phonological awareness. It is not auditory discrimination. Hearing the differences between similar sounding spoken words involves auditory discrimination - but knowing how those words differ requires some phonemic awareness.

## Phonemic awareness: Comes naturally?

- Nearly one third of first-graders fail to fully realize the phonemic structure of words (Adams, 1990).
- The proportion is much higher in disadvantaged children (Raz \& Bryant, 1990; Robertson, 1993).
- Not all teachers have sufficient grasp of spoken and written language structure to teach it well (Lindamood, 1993, Moats, 1994)


## How is it developed prior to school? At home:

- Nursery rhymes,
- Sesame St,
- Playschool,
- I Spy,
- $\quad$ Pig Latin (junk becomes unkjay),
- Spoonerisms - letters or syllables get swapped, sometimes in slips of the tongue (or tips of the slung)
- Tongue twisters (Bill and Betty baked brown bread for Barbara's baby),
- Palindromes (Do geese see God?)
- Magnetic fridge letters.

Phonological awareness stages (in the absence of instruction)
Recognition that sentences are made up of words.
Recognition that words can rhyme - production
Recognition that words can begin with the same sound - production
Recognition that words can end with the same sound - production
Recognition that words can have the same medial sound(s) - production
Recognition that words can be broken down into syllables - production
Recognition that words can be broken down into onsets and rimes - production
Recognition that words can be broken down into individual phonemes - production
Recognition that sounds can be deleted from words to make new words - production
Ability to blend sounds to make words
Ability to segment words into constituent sounds

## It's not so easy for adults!

- Is there an /l/ in talk, in palm, in salmon.
- Think of the word 'pink'. Now think of pink without the $/ \mathrm{k} /$. Do you hear pin?
- How many sounds can you hear in sex (the word, not the activity)?
- How many sounds can you hear in pitch?
- What is the $4^{\text {th }}$ sound in the word faxed?
- What is the $3^{\text {rd }}$ sound in squabble?

Your knowledge of spelling gets in the way! To teach it you need to regress.

Teacher Screening for Phonological Awareness (Love \& Reilly) 1 How many syllables in each of the following words?
animal
revolution
caution
invincible

2 How many sounds (not letters) in each of the following words?
flag
clump
3 What is the second sound (not second letter) in the following words?
bride
queen
whim
thrive
4 What is the last sound (not last letter) in the following words?
laugh
though
giraffe
ginger

| stuff | nasty | some | enough |
| :--- | :--- | :--- | :--- |
| pastie | zipper | numb | zither |

## 6 Join the words that begin with the same sound.

cholera knave shoal
pneumonia chef quiet
chauvinist
PA enables the left brain's phonological centre to develop


Then letters of the alphabet are learned. The sounds that those letters represent can be blended to build words. The left brain's parieto-temporal region can used in decoding. Then, progressively, as students see words in print, they start to build a neural model of that word. As they learn to read, they clarify their internal representation, or neural model in the occipito-temporal region. After they've read the word correctly a number of times, their neural model is an exact replica of the printed word. It reflects the way the word is pronounced, the way it's spelled, and what it means. All these features become bonded together. That word is represented in the occipito-temporal region, and its recognition becomes instant \& automatic - less than 150 milliseconds (less than a heartbeat). You can't go straight to the occipitotemporal region without building up the parieto-temporal region. On average, from 4-14 accurate sounding-outs will create the firm links necessary. For some children, it may take many times that number - not all children have a strong phonological talent. A genetic component. An environmental component

## Early screening of PA?

Later remedies are long, slow, often unsuccessful, and student resistance can preclude success
Early screening with two tests: a test of knowledge of letter names or sounds; and a measure of phonemic awareness. This can point out students at risk. They can then be allocated help at once.

Various PA assessment tasks

1. Sound to word matching

Does fish start with /f/?
Does dog end with $/ \mathrm{g} /$ ?
2. Word to word matching

Does foot start with the same sound as feather?
Does dog end the same as pig?

## 3. Recognition of rhyme

Does wish rhyme with dish?

## 4. a) Isolation of beginning sound

What is the first sound you hear when I say box?
b) Isolation of a final sound

What is the last sound you hear when I say dig?
c) Isolation of medial sound

What is the middle sound you hear when I say bit?
5. Phonemic segmentation

There are 3 sounds in ship. What are they?
6. Counting Phonemes

How many sounds do you hear in the word cup?

## 7. Blending

What word is this $\mathrm{r} / \mathrm{a} / \mathrm{ce}$ ?
8. Deletion of a phoneme

Say sat, now take away the s. Say what is left?
9. Specifying the deleted phoneme

Say meat, now say eat. Which sound did I take away?

## 10. Phoneme substitution

Say chair, take away ch, put in f instead. What new word have you made?
Adapted from Lewkowicz, 1980
Some phonemic awareness tests:
Comprehensive Test of Phonological Processing (CTOPP):
Phonological awareness, Phonological Memory, and Rapid Naming.
Elision - a phoneme deletion task.
Blending Words - phoneme blending task..
Sound Matching - initial and final sound.
Blending Nonwords
Phoneme Reversal
Segmenting Words
Segmenting Nonwords
Memory for Digits
Nonword Repetition - child repeats non-words
Rapid Color/Digit/Object Naming
Rapid Letter Naming
Rapid Object Naming
Phonological Awareness Screening Test (Henty, 1993) developed in Tasmania.
The Sutherland Phonological Awareness Test (Neilson, 1995) has norms (Australian) for Years P-3. Assesses rhyme, phoneme identification, segmenting and blending, and deletion.

The Lindamood Auditory Conceptualization Test has norms for Years P-12. Uses manipulation of wooden blocks to assess the ability to isolate individual phonemes in spoken words, and to compare the number and order of sounds

The Rosner Test of Auditory Analysis Skills (TAAS) is a 13 item deletion test with norms for P-3. Say, "cowboy." Allow the child to respond.
Now say it again and don't say "boy"
The Yopp-Singer Test of Phoneme Segmentation is a brief test for Prep/Year 1 students, designed for early screening purposes.
Tell me each sound in the word in order

1. dog 2. keep

Informal un-normed tests are available in:
A Sound Way (Love \& Reilly, 1995)
Sound Linkage (Hatcher, 1994)
Phonemic Awareness Checklist (Lewkowicz, 1980)
Phonemic Awareness in Young Children (Adams, Foorman, Lundberg, \& Beeler, 1998)
Phoneme Segmentation Test (Mann, 1993). Unnormed test given in Prep.
10 items using pictures to identify initial phonemes.

## Phonemic awareness fluency

- $\quad$ Blend sounds to form words $10-12 / \mathrm{min}$
- Segment words into sounds moving colored blocks to mark sounds $40-50$ sounds/min
- Make new words by substituting one phoneme for another $15-20 / \mathrm{min}$


## Free tests:

Abecedarian Reading Assessment (Wren \& Watts, 2002).

- Letter knowledge
- Phonological awareness (rhyme and phoneme identity)
- Phoneme awareness (first and last sounds and phoneme segmentation)
- Knowledge of the alphabetic principle (Child looks at two words - one long, one short. Teacher says one of the words - child points to the word)
- Vocabulary (production, synonyms, and antonyms)
- Decoding (fluency, regular words and irregular words)


## Dynamic Indicators of Basic Early Literacy Skills (DIBELS)

- Oral Reading Fluency - Mid First Grade to end of Third Grade
- Retell Fluency - Mid First Grade to end of Third Grade
- Nonsense Word Fluency - Mid prep to end of First Grade
- Phoneme Segmentation Fluency - Mid prep to end of First Grade
- Letter Naming Fluency - Begin Preschool to mid Prep
- Initial Sound Fluency - Begin Preschool to late Prep
- Word Use Fluency - Begin Preschool to end Third Grade

How often to assess? California's Reading First Plan<br>Phoneme Awareness:<br>Mid-year for Prep<br>End of Grade 1 (if needed)<br>Only if needed for Grades 2 and 3<br>Tasks: Deletion: Initial and Final Sounds, Phoneme Segmentation, Counting Syllables

## Beginning Phonics:

Late Prep
Only if needed for Grades 1,2, and 3
Tasks: Alphabet Names, Consonant Sounds, Short Vowel Sounds

## Phonics:

Every 4 to 6 Weeks for Grade 2
Only if needed for Grade 3
Tasks: Word Study, Decoding, Early spellings

## Oral Reading Fluency:

Early Grade 1, then
3 to 6 times per year for Grades 2 and 3
Tasks: Timed Fluency - WCPM

## Reading Comprehension:

Every 8-10 Weeks, Grades 1
Every 6-8 Weeks, Grades 2 and 3
Tasks: Main idea, Author's point of view, Analysis, and Inference

## Vocabulary:

Every 8-10 Weeks, Grades 1
Every 6-8 Weeks, Grades 2 and 3
Tasks: Antonyms, Synonyms, Multiple Meanings, Context Meanings

## Phonemic Activities

## Phonemic Activities for the Preschool or Elementary Classroom

by Marilyn Jager Adams, Barbara R. Foorman, Ingvar Lundberg, and Terri Beeler See segments at: http://www.readingrockets.org/article.php?ID=416
Blachman, B. A., Ball, E. W., Black, R. \& Tangel, D. M. (2000). Road to the Code. Baltimore, MD: Paul H. Brookes Publishing Co.

O'Connor, R. E., Notari-Syverson, A., \& Vadasy, P. F. (1996). Ladders to literacy: An activity book for kindergarten children. Seattle, WA: Washington Research Institute.
Simmons, D. \& Kame'enui, E. (1999) Optimize. Eugene, OR: College of Education, Institute for
Development of Educational Achievement, University of Oregon.
Love \& Reilly, 1995; A Sound Way: Phonological Awareness: Activities for Early Literacy,
Bev Solomons, 1992 Phonemic Awareness Training. Macquarie $U$
B. Byrne and R. Fielding-Barnsley. 1991 Sound Foundations Artarmon, New South Wales, Australia. Leyden Educational Publishers.
Canada site: http://www.gov.nf.ca/edu/sp/prim/eng_lang_arts/curr_guide/phon_awareness.pdf
University of Oregon: http://reading.uoregon.edu/pa/pa_programs.php
Edmonton Catholic Schools program: http://www.ecs.edmonton.ab.ca/tlc/lit4lit/phonemic_awareness.htm
The EFL Playhouse activities: http://members.tripod.com/~ESL4Kids/phonics.html
Phonics Desk worksheets: http://www.tampareads.com/phonics/phondesk/index-pd.htm

## Teaching Phonemic Awareness:

Typically spans two years. In Prep and first grade. Oral activities in prep focus on simple tasks such as rhyming, matching words with beginning sounds, and blending sounds into words.

Mapping of Instruction to Achieve Instructional Priorities
Kindergarten

| Instructional Priority: Phonemic Awareness | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Focus 1: Sound and Word Discrimination |  |  |  |  |  |  |  |  |  |
| 1a: Tells whether words and sounds are the <br> same or different | X | X |  |  |  |  |  |  |  |
| 1b: Identifies which word is different |  | X | X |  |  |  |  |  |  |
| 1c: Identifies different speech sound |  |  | X | X |  |  |  |  |  |
| Focus 2: Rhyming b |  |  |  |  |  |  |  |  |  |
| 2a: Identifies whether words rhyme | X |  |  |  |  |  |  |  |  |
| 2b: Produces a word that rhymes |  | X | X |  |  |  |  |  |  |
| Focus 3: Blending |  |  |  |  |  |  |  |  |  |
| 3a: Orally blends syllables or onset-rimes |  |  | X | X |  |  |  |  |  |
| 3b: Orally blends separate phonemes |  |  |  |  | X | X | X |  |  |
| Focus 4: Segmentation |  |  |  |  |  |  |  |  |  |
| 4a: Claps words in sentences | X |  |  |  |  |  |  |  |  |
| 4b: Claps syllables in words |  | X | X |  |  |  |  |  |  |
| 4c: Says syllables |  |  |  | X | X |  |  |  |  |
| * 4d: Identifies first sound in 1-syllable words |  | X | X | X | 25 |  |  |  |  |
| * 4e: Segments individual sounds in words |  |  |  |  | X | X | X | X | 35 |

* High priority skill
a. Sounds per minute
b. Optimal time for rhyme instruction not established

In first grade, phonemic awareness tasks are more advanced, focusing on blending ("Blend these sounds together "mmmm-aaaa-nnnn), segmentation ("What are the sounds in man?), and the substitution and manipulation of phonemes (e.g., Change the first sound in man to $/ \mathrm{r} /$. What word do you have?").

## First Grade

| Instructional Priority: Phonemic Awareness | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Focus 1: Sound Isolation |  |  |  |  |  |  |  |  |  |
| a |  |  |  |  |  |  |  |  |  |
| 1a: Identifies initial sound in 1-syllable words | X | X |  |  |  |  |  |  |  |
| 1b: Identifies final sound in 1-syllable words | X | X | X |  |  |  |  |  |  |
| 1c: Identifies medial sound in 1-sylalble words |  | X | X | X |  |  |  |  |  |
| Focus 2: Sound Blending |  |  |  |  |  |  |  |  |  |
| * 2a: Blends 3-4 phonemes into a whole word | X | X | X | X | X |  |  |  |  |
| Focus 3: Sound Segmentation |  |  |  |  |  |  |  |  |  |
| * 3a: Segments 3- and 4-phoneme, 1-syllable <br> words | $35^{\text {b }}$ |  |  |  |  |  |  |  |  |

* High priority skill
a. Skills in this category should be established by mid-year.
b. Number of phoneme segments per minute


## PHONEMIC AWARENESS TRAINING: An early intervention program <br> Beverley Solomons Macquarie University

## WHAT IS PHONEMIC AWARENESS?

Phonemic awareness is the ability to perceive a spoken word as a sequence of sounds. By nature children attend to the meaning of speech. It is, after all, a vehicle for communication. To spell and read words however, in an alphabetic script, we need to be able to attend to the sounds within words irrespective of meaning. Children's ability to attend to and manipulate the sounds within words in kindergarten has been shown to be the most powerful predictor of success in the acquisition of both spelling and reading. Many children have great difficulty in developing these phonemic awareness skills. Phonemic Awareness Training is a means of assisting them to develop these vital skills prior to, and alongside of, formal reading instruction.

## PHONEMIC AWARENESS PROGRAMS

Phonemic awareness programs are most effective when:
There are short, regular sessions. There is a conceptual bridge to writing and reading activities. A visual representation is provided. Skills are finely sequenced. Children progress from one skill to the next on mastery. Children enjoy the sessions and gain practice in use of new skills.

Points to Remember:
Teach phonemic awareness skills in the sequence suggested. Teach segmentation and blending skills only when children are confident with pre-requisite skills. Short, regular training sessions are best. (3 or 4 sessions of 15 minutes each week). Seize opportunities for incidental reinforcement and practice of skills wherever possible.

## PHONEMIC AWARENESS SKILLS

Phonemic Awareness programs follow the developmental sequence that moves through three stages:

1. Sensitivity to sound properties within words
2. Conscious awareness of these sounds
3. Conscious and analytical manipulation of the sounds within words

Levels suggested are flexible - children may move on as soon as the prerequisite skills are mastered.
STAGE 1: Preschool and early prep
Sensitivity:
Rhyming - recognition, matching, odd-one-out activities
Alliteration - beginning sounds
STAGE 2: Prep and Early Year 1.

Conscious Awareness:
Rhyming - creation of rhyme
Alliteration - beginning sounds
Isolation - beginning and ending sounds
Segmentation - syllables, $2 \& 3$ phoneme words
STAGE 3: Years 1 \& 2.
Conscious \& Analytical Manipulation:
Segmentation-3 \& 4 phonemes
Blending - 3 \& 4 phoneme words
Exchanging - Substitution, Deletion

## RHYMING

Materials: Big books. Dr. Seuss books, picture books containing rhyme, pictures, picture cards, rhyming bingo. Note: Nursery Rhymes are a great starting point.

RECOGNITION: * Does $\qquad$ rhyme with
MATCHING: * Which one sounds the same as_
ODD-ONE-OUT: * Which one does not belong? $\qquad$ , $\qquad$ , or $\qquad$ CREATION:

* Make a word that rhymes with_
* Complete the sentence with a word that rhymes with $\qquad$ .
* Complete the sentence with a rhyming word $\qquad$
ALLITERATION Materials: Big books, Dr Seuss books, Story books, Poetry books, Tongue twisters, picture cards. Do $\qquad$ , $\qquad$ , and $\qquad$ begin with the same sound?
Which words begin with the same sound? $\qquad$
ISOLATION Materials: Picture cards
BEGINNING SOUNDS: * Does $\qquad$ begin with $\qquad$ ?
* What does $\qquad$ begin with?
* Does___begin with the same sound as $\qquad$ ?

ENDING SOUNDS: * Does $\qquad$ end with

* What does $\qquad$ end with?
* Does $\qquad$ end with the same sound as $\qquad$ ?

SEGMENTATION: ARTICULATING THE SOUNDS:
Materials: Blank cards divided into 2, 3, or 4 spaces Blank letter blocks Letter blocks: mfsptn a i N.B. It is suggested that only a limited number of letters is used in the program and these are taught to the children prior to segmentation training.

BLANK BLOCKS: CV, VC WORDS Using 2 space card and blank blocks: *Place a block on a space for each sound you hear in the word $\qquad$ (e.g. ti, at)

CVC WORDS: Using a 3 space card and blank blocks: * Place a block on a space for each sound you hear in the word $\qquad$ (e.g. mat, pin )

LETTER BLOCKS CV, VC WORDS: Using a 2 space card and letter blocks:

* Place the letter on the space for each sound you hear in the word $\qquad$ . Say the sound as you put down the block. What does the word say? (e.g. pi, it)

CV to CVC WORDS - 2 to 3 sounds: Using 2 and 3 space cards and letter blocks:

* Make the word $t a$. Good - now place $p$ at the end of it. Sound it out $t-a-p$. What word have you made? Now place the letters on the 3 space card and say each sound $-t-a-p$. What word? tap. Good. Now we can make words with three sounds.

CVC WORDS:
Using a 3 space card, letter blocks and simple picture cards:
Using a 3 space card and letter blocks: NONSENSE CVC WORDS.
COUNTING THE SOUNDS: - 2 and 3 sounds. Materials: Picture cards

* Clap the sounds in the word ( cv vc words e.g. ta, at)
* Clap the sounds in the word $\qquad$ ( cvc words e.g. pin, tin)
* How many sounds in the word $\qquad$ $?(\mathrm{vc}, \mathrm{cv}, \mathrm{cvc}$ words $)$

COUNTING THE SYLLABLES: Materials: pictures, objects

* Break the word into 2 parts, e.g., ti/ger
* Break the word into 3 parts. e.g., oct/o/pus
* Break the word into 2 or 3 parts, e.g., ze/bra, el/e/phant
* How many parts in the word $\qquad$ ?e.g., 2 \& 3 syllable words

ARTICULATING THE SOUNDS: - 4 Sounds
Materials: 4 space cards, letter blocks. CVC TO CVCC WORDS - 3 to 4 sounds:
Using 3 and 4 space cards and letter blocks make cvcc words:
Plurals: * Make fan. Good. Now add $s$. What does it say? $f-a-n-s-f a n s$. Place the blocks on the 4 space card. What is the word? fans

CVCC WORDS: Using a 4 space card and letter blocks: * Make the word $\qquad$ Say the word slowly; stretch it out. ( e.g., pins, mist, pant).

## NONSENSE CVCC WORDS. CCVC WORDS.

COUNTING THE SOUNDS: -4 sounds
CVCC and CCVC WORDS: * How many sounds can you hear in the word $\qquad$ ..
MIXED EXAMPLES: * How many sounds can you hear in the word $\qquad$ .

BLENDING: WORD EXTENSION:
Materials: Picture cards
CVC WORDS:

* Say the words slowly; stretch them out like a piece of elastic in your hands; (e.g. sit s s s siii i it). CVCC and CCVC WORDS.

TELESCOPING: Materials: puppets, pictures

* What word is the puppet trying to say? Say the sounds fast. Slide them together, (e.g. $a-t$ aaat $a t)$. CVC WORDS.
MIXED EXAMPLES.


## EXCHANGING

## Substitution:

Attempt only after segmentation and blending training. Materials: 2,3 and 4 space cards and letter blocks. CVC WORDS:
Beginning Sounds: * e.g., Make sat. Now change $s$ to $f$. What does it say? fat.
Ending Sounds: * e.g., Make fin. Now change $n$ to $t$. What does it say? fit.
Middle Sounds: * e.g. Make pan. Now change $a$ to $i$. What does it say? pin.
CVCC WORDS: Beginning Sounds, Ending Sounds, Middle Sounds
CCVC WORDS: Ending Sounds, Middle Sounds
CCVC WORDS: Ending Sounds, Middle Sounds

## Deletion:

CVC WORDS:

* e.g., Make fat. Take away the $f$. What does it say? at.

CVCC WORDS:
Beginning Sounds: * e.g., Make pant. Take away the $p$. What does it say? ant.
Middle Sounds: * e.g., Make fist. Take away the $s$. What does it say? fit.
Ending Sounds: * e.g., Make nips. Take away the $s$. What does it say? nip.
CCVC WORDS: Beginning Sounds, Middle Sounds

## What characterises a proficient reader?

- Ability to identify and manipulate the speech sounds in words at the phoneme level
- Ability to link sound with symbol accurately
- Ability to process larger "chunks" of print
- Ability to recognise a new printed word with very few exposures (1-4).
- Ability to recognise words with fluency (automaticity).
- Ability to focus on meaning because they are no longer "glued to print
- Ability to comprehend words, sentences


## Characteristics of poor and novice readers

- Over-reliance on context and guessing
- Limited phoneme awareness
- Lack of fluency in word recognition
- Must devote most attention to the decoding process; limited attention available for meaning-making
- In $90 \%$ of cases, the source of reading comprehension problems is poor word recognition skills (Stuart, 1995).


## The critical role of phonics (NRP, 2000)

- Phonics ability leads to whole word recognition - but precedes it
- It is not the whole story, but a necessary early part of it
- About $40 \%$ of students need us to teach it to them, rather than be left to induce it
- For some of these, our teaching needs to be very systematic and provide lots of practice


## Explicit (or Synthetic) phonics:

- All of the letter sounds are taught initially and the emphasis is on how words are built up
- For most students, it can be taught in a few months.
- It starts before children are introduced either to whole words in print, or to literature
- Books initially rely on decodable text - words use the sound-spelling correspondences taught to that point


## Implicit (or Analytic) phonics:

- Taught after an initial sight vocabulary has been established, alongside reading-scheme books
- Within story context, the whole word is emphasized, but children have their attention drawn to certain letters and their sounds


## The role of context in word recognition

- Poor readers over-rely on context because letter-sound knowledge is weak
- Context allows us to decode accurately only one word in ten overall
- The content words in a passage tend to be less common, not in the sight vocabulary and must be decoded accurately
- Context alone can resolve ambiguity and sometimes supplies meaning for unfamiliar words.

What about the early years?

- Educational experiences in preschool cannot completely compensate for the educational deprivation that can occur during the first 3 years.
- Early vocabulary development is particularly critical.

Hart $\mathfrak{G}$ Risley (2003) noted:

- Parents with professional jobs spoke about 2,000 words an hour to toddlers.
- For working-class parents it was 1,200 words an hour, and
- For those on welfare only 600 words an hour.
- By age 3, children on welfare will have heard 30 million fewer words than children of professional families

Specific reading instruction for preschoolers - such as letter, sound, and word recognition - can help close the learning gap between disadvantaged children and their more affluent peers (Farkas \& Beron, 2001).


Literacy issues yet to be properly addressed.

- Converting these research findings into Australian educational practice
- Females are currently under-identified.
- Early identification to minimise reading failure
- Encouragement of reading in competition with other activities
- Insufficient training for teachers
- Intervention needs to occur earlier to increase vocabulary growth in from children disadvantaged families

