# Pho/ne/mic A/ware/ness

## What is it Really?

## Testing it and Teaching it For Kids Who Struggle

By Dr Jason McGowan

# Introduction

❖ Definition:          Keeping it Short

❖ Examination:     Keeping it Simple

❖ Instruction:         Keeping it Straightforward

# Definition

## Phonemic Awareness

An Intuitive Yet Conscious Awareness of the Smallest Units of Sounds (Phonemes) That Make Up Spoken Words

# Examples

- */b/* - a single phoneme
- */tr/* - two phonemes blended together
- "at" – a word made up of two phonemes
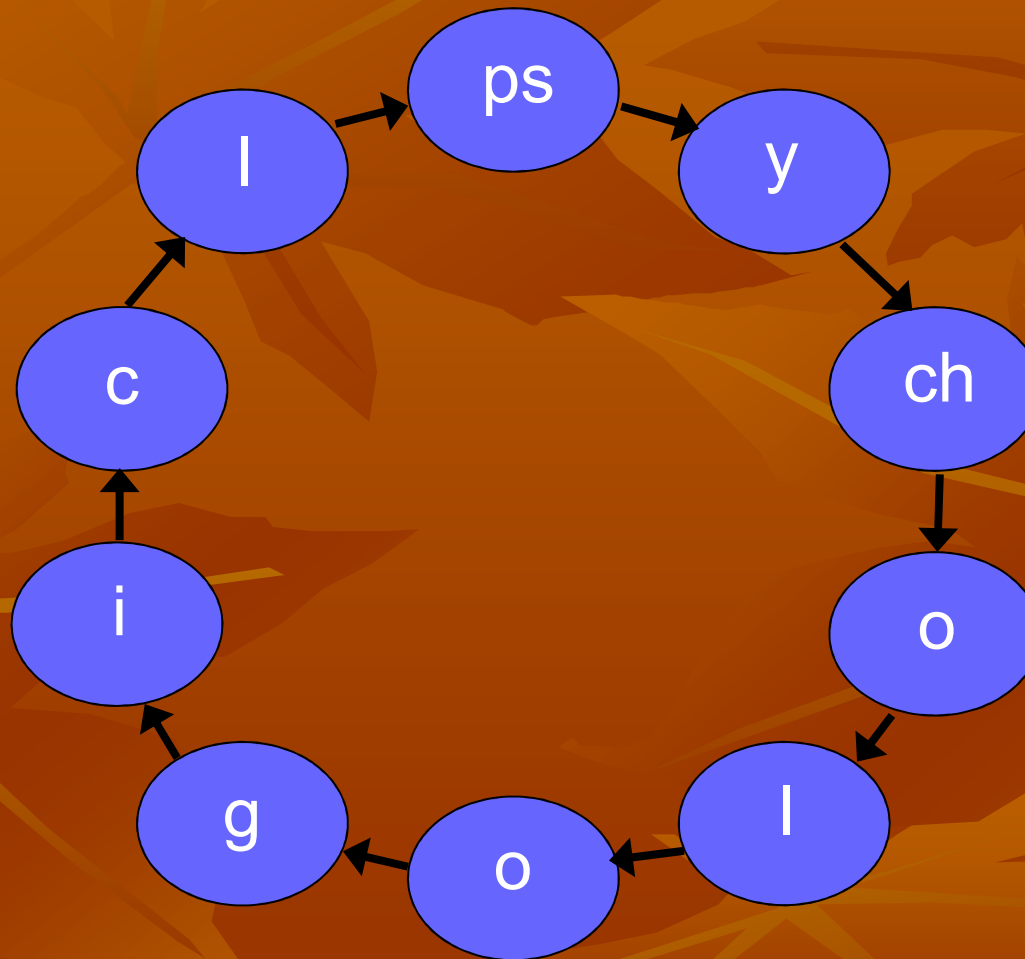- "but" – a word made up of three phonemes

### Strings of Sounds

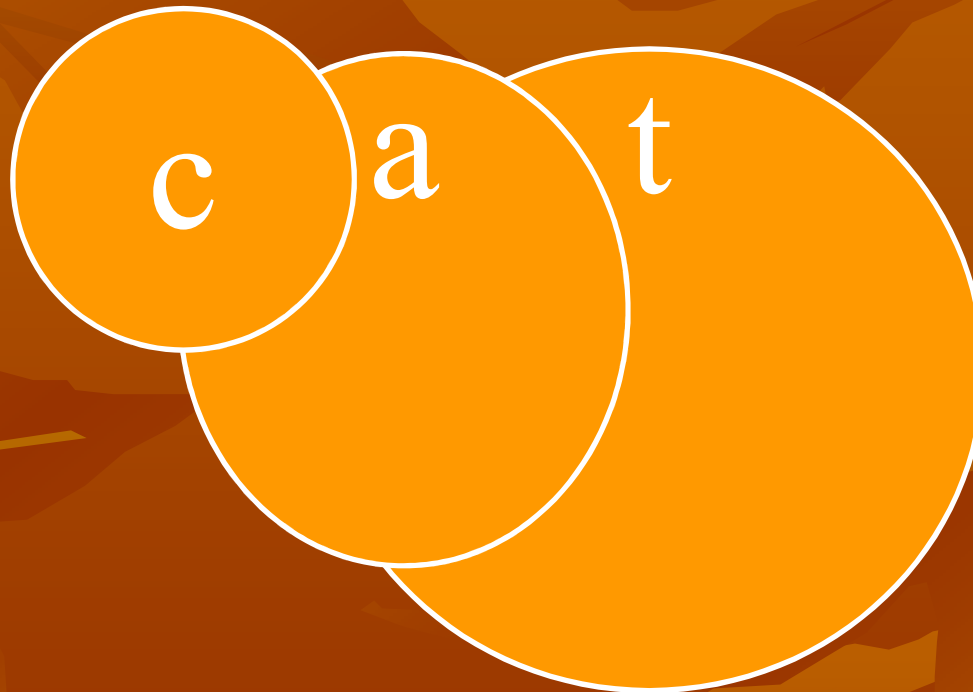| b | u | t |
|---|---|---|

## "psychological"

- A word made up of .......... - How Many Sounds?

# Psychological – 10 Phonemes



Phonemic Awareness - What is it Really?  Testing it and Teaching it For Kids Who Struggle

5

# A word is a series of discrete phonemes that acoustically presents as an overlapping and blended burst of sound

Cat  →  c a t

# Phonemic Awareness and Phonological Processing

## Phonological Processing

Refers to the use of phonological information, especially the sound structure of one's own oral language, in processing written language (i.e., reading, writing,) and oral language (listening, speaking) (Wagner and Torgesen 1987)

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

7

# Three Kinds of Phonological Processing

- Phonological (Phonemic) Awareness ✓

- Phonological Memory

- Automatic Rapid Naming

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

8

# Phonological Memory

Refers to the coding of phonological information for temporary storage in working or short term memory

Q.      How do you remember a phone number that you have looked up as you make your way to the phone?

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

9

# Phonological Memory (cont'd)

A.    You store the number temporarily in working memory.  You probably do so not by storing a visual representation of the sequence of digits (although you may be able to do so if you tried) but rather by storing a phonological representation of the sounds of the digits.

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle
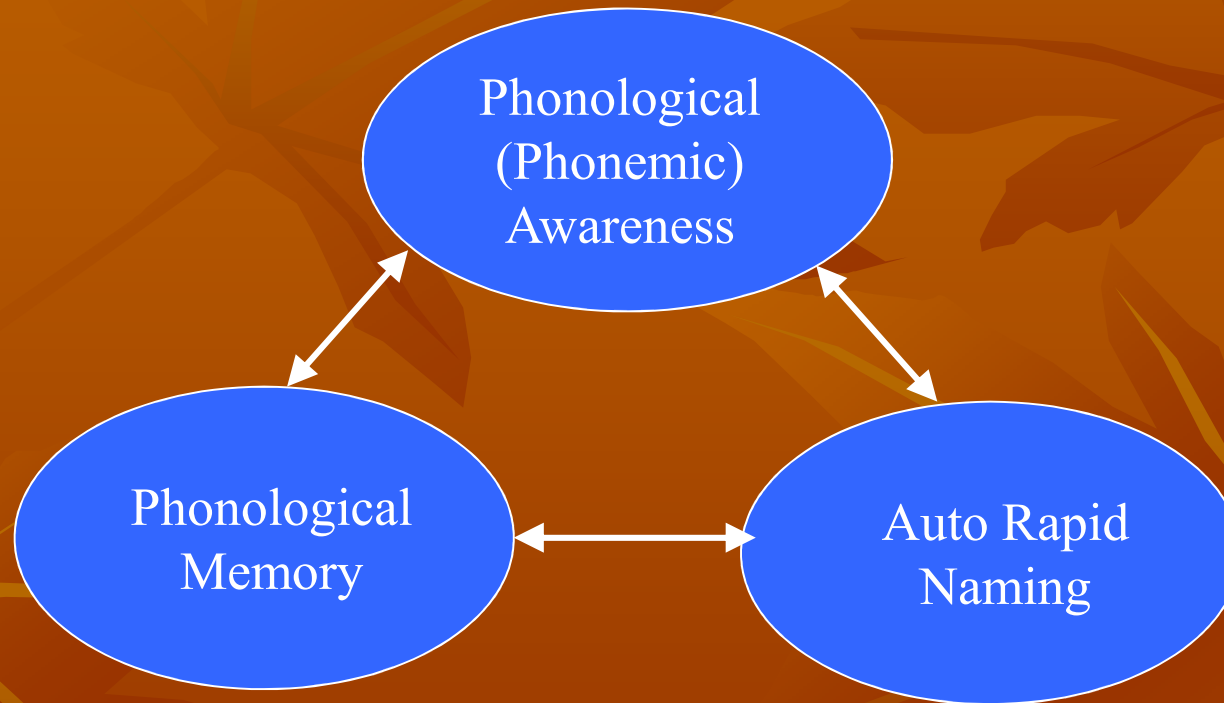
10

# Automatic Rapid Naming

Refers to the rapid and efficient retrieval of phonological code.  When reading we retrieve:

1.  Phonemes Associated with Letters or Letter Pairs
2.  Pronunciations of Common Word Segments
3.  Pronunciation of Whole Words

# Automatic Rapid Naming (cont'd)

The efficiency with which we are able to retrieve phonological code associated with individual phonemes, word segments, or entire words will determine how useful phonological information is in decoding printed words

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who Struggle

12

# Automatic Rapid Naming (cont'd)

Phonological (Phonemic) Awareness

Phonological Memory

Auto Rapid Naming

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

# Phonemic Awareness
## Another Definition

Refers to an individual's awareness of and access to the sound structure of his or her oral language. (Mattingly 1972)

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

14

# Strings of Sounds

- The spoken words of a language represent strings of phonemes that signal differences of meaning.


- Cat = /c/ /a/ /t/
- Bat = /b/ /a/ /t/

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

15

# Strings of Sounds (cont'd)

- Of the nearly infinite number of possible strings of phonemes that might be represented in an oral language, only a relatively small number actually occur, and these occur (and re-occur) in multiple words

- Children who have an awareness of this structure seem to have an advantage learning to read the printed forms of language

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

16

# Strings of Sounds (cont'd)

- This makes sense given that many printed languages attempt to convey pronunciation as well as meaning, and even more so for alphabetic languages such as printed English because letters of the alphabet have a rough correspondence to phonemes.

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who Struggle

17

# Developing Awareness

As children develop they demonstrate awareness for increasingly smaller phonological units of speech.

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

18

# Developing Awareness (cont'd)

1. Word Length Awareness – COW/BOY

2. Syllable Awareness – SE/VEN

3. On-Set and Rime Awareness – S-EV-EN

4. Individual Phoneme Awareness - S-E-V-E-N

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

19

# Examination

## Why Test?

1. There are clear implications for intervention

   - Many children who are weak in phonological awareness show improved reading performance after being given intervention designed to improved their phonological awareness (Ball and Blachman 1991)

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

20

# Why Test? (cont'd)

- Reading approaches that feature systematic explicit instruction in phonological awareness and phonetic decoding skills produce stronger reading growth in children who are weak in phonological awareness compared with reading approaches that do not teach these skills explicitly. (Torgesen, Wagner and Rashotte 1997)

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

21

# Why Test? (cont'd)

## 2. To Inform Instruction

Testing phonemic awareness allows for the further identification of the sub components that may be weak.

- Blending
- Segmenting
- Elision
- Sound Matching

# Why Test? (cont'd)

3.  There are many activities available to train the various components of phonemic awareness.

# Which Tests Are Best?

There are a number of helpful test instruments

- The TAAS
- The Sutherland
- TOPAS
- HAPP-3
- Khan-Lewis Analysis
- CTOPP

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

24

# Which Tests are Best? (cont'd)

The CTOPP

- Comprehensive

- Clearly defines and separates Phonemic Awareness, Phonological Memory and Automatic Rapid Naming

- Provides Discrepancy Formulas to determine statistically significant disparities between the three composite areas

- Directly Informs Instruction

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

25

# Who To Test

Prevention

- Young Children
- At Risk Children

Diagnostic

- Deficient Readers of Any Age
- Underdeveloping Children

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

26

# Instruction

For children in which there is a direct link between deficient phonological processing and poor reading phonological processing may be better taught as a discrete unit of work

Phonemic Awareness - What is it Really? Testing it and Teaching it For Kids Who Struggle

27

# INTERVENTION

**Phonological Processing**

**Reading Instruction Decoding/Encoding Word Attack**

**Reading Instruction Fluency/Vocabulary Comprehension Reading Volume**

**Assisted Oral Reading / Repeated Reading Strategies**

Phonological Processing Training is not necessarily the same as reading instruction

Phonological Processing represents a set of neural conditions that must be present in order for instruction to be effective

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

29

# Phonological Processing Training
# 16 Skill Areas

## Phonological (Phonemic) Awareness

- Blending
- Segmenting
- Elision
- Sound Matching
- Phonemic Reversal

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

30

# Phonological Processing Training
## 16 Skill Areas (cont'd)

### Phonological Memory

- Memory for Digits
- Memory for Letter Names
- Memory for Phonemes
- Non Word Repetition
- Beat and Rhythm Repetition

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

31

# Phonological Processing Training
## 16 Skill Areas (cont'd)

### Automatic Rapid Naming

- Rapid Colour Naming

- Rapid Digit Naming

- Rapid Object Naming

- Rapid Letter Naming

- Rapid Whole Word Naming

- Rapid V/C Pattern Naming

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

32

# Additional Activities

- Invented Spelling
- On Set and Rime
- Rhyming
- Games
- Alliteration

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

33

# Helpful Strategies

- Sequential Repetition
- M3SW (Multisensory Say Sound Spell Write)
- Build Ups
- Synthetic Phonics
- Analytical Phonics

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

34

# Helpful Interventions

- GreatLeaps ✱
- RAVE-O ✱
- Discover Intensive Phonics ✱
- Brainskills
- PACE
- PACT
- Sensational
- READCARE ✱

✱ Some of these are also reading instruction programs

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

35

# Questions!

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

36

# Thank You

Phonemic Awareness - What is it Really?
Testing it and Teaching it For Kids Who
Struggle

37