Developing Phonological Awareness Skills in Children with a Vision Impairment and Additional Disabilities

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Outline of Presentation

• What is phonological awareness?
• The development of phonological awareness skills – a hierarchy
• What role does phonological awareness play in the development of literacy skills in children with a vision impairment?
Outline of Presentation

- Considerations and adaptations for students with a vision impairment and additional disabilities
- Assessment of phonological awareness skills in children with a vision impairment and additional disabilities
- Contexts in which phonological awareness activities can occur
Outline of Presentation

• Early listening skills
• Phonological awareness activities with video examples including;
  - syllables, rhyme & alliteration
• Additional activities to support literacy and language development
• Useful resources, websites & references
What is phonological awareness?

- **Phonological awareness** is the understanding of the sound structure of a language (Love & Reilly 1995)
- It includes understanding that words are made up of syllables (beats) and phonemes (speech sounds)
What is phonological awareness?

• Phonological awareness also includes the ability to;
  - identify and generate words which rhyme, e.g. cat/mat
  - blend and segment sounds in words, e.g. s-i-t
  - manipulate sounds in words, e.g. say the word ball without the “b”
What is phonological awareness?

- **Phonemic awareness** is the ability to identify and manipulate speech sounds.
- **Phonics** is the association between letters and their corresponding sound.
The development of phonological awareness skills

A hierarchy of skill development

- Syllables
- Rhyme
- Alliteration
- Segmenting
- Blending
- Manipulation

Early skills

Advanced skills
The development of phonological awareness skills

• Phonological awareness starts by analysing larger units (words in sentences) -> smaller units (individual speech sounds in words)

• **Sentence level** – identifying the words in a sentence

• **Word level** – identifying syllables -> identifying sounds
The role of phonological awareness in literacy development

• Research has shown that phonological awareness plays an important role in learning to read and spell (Love & Reilly 1995)

• An awareness of speech sounds in words is necessary to understand the alphabetic script which is the basis for a written language
The role of phonological awareness in literacy development

• Other predictors for success in reading include:
  - vocabulary
  - letter name knowledge
  - intellectual ability
  - receptive and expressive language skills including spoken language skills
The role of phonological awareness in literacy development

- The development of phonological awareness skills for literacy outcomes is just as important for children with:
  - a vision impairment (Hatton et al, 2010)
  - an intellectual impairment (Van Tilborg et al, 2014)
  - a physical disability, e.g. cerebral palsy (Peeters et al, 2009)

as it is for their non-disabled peers
Considerations for students with VI and additional disabilities

- The students engaging in phonological awareness activities at RIDBC Alice Betteridge School demonstrate the following;
  - a severe vision impairment, many with light perception only
  - hearing within normal limits
  - an intellectual impairment in the mild-moderate range
Considerations for students with VI and additional disabilities

- may have physical disabilities, e.g. Cerebral Palsy

- understand uncomplicated spoken language, e.g. simple instructions, yes/no questions and some early concepts, e.g. loud/soft, fast/slow

- some students are verbal, others require specific cues to elicit responses, while some have limited verbal skills
Considerations for students with VI and additional disabilities

• Students with a VI and additional disabilities can participate in phonological awareness activities with appropriate modifications

• The student’s ability to understand phonological awareness concepts will depend on their intellectual abilities and receptive language skills

• Students may use different methods to participate in activities e.g. use of a big mack switch or real objects for a non-verbal student
Considerations for students with VI and additional disabilities

• Communication Partner Strategies, e.g. providing additional response time

• Knowledge of the student’s receptive, expressive and social communication skills

• Knowledge of a student’s physical abilities
Assessment of phonological awareness skills

Approaches to assessment

• The assessment process is ongoing and can be integrated into appropriate learning contexts throughout the day

• The length of time for an assessment may need to be shorter due to factors such as attention of the student, fatigue etc.
Assessment of phonological awareness skills

Assessment Tools

• Various standardised tests are available to assess phonological awareness skills

• Phonological Awareness Screening Test – in *A Sound Way* (Love & Reilly 1995)

• Develop individualised assessments based on the phonological awareness skills to be assessed
Assessment of phonological awareness skills

- Modifications to existing assessment tools include;
  - using familiar vocabulary, e.g. names of known people
  - providing additional examples
  - simplification of language in the instruction
Assessment of phonological awareness skills

- using the same language to describe key concepts, e.g. always saying “starts with” when addressing alliteration

- using sentence completions to facilitate responses, e.g. “Beth starts with the sound…”

- offering binary choices for responses

- providing real objects especially for students who are non-verbal
Contexts for phonological awareness activities

- Individual, small group or whole class
- Motivating and meaningful contexts, e.g. in relation to a familiar story book
- Routine and/or daily activities, e.g. morning assembly/circle
- During braille/print literacy tasks
- Naturally occurring situations during the day
Selecting books

• Select books which include features such as the following;
  - alliteration, e.g. in the jingle, jangle jungle on a cold and rainy day
  - rhyme, e.g.

  when we go to Grandpa’s house

  I’m as shy as a little grey mouse
Selecting books

- a **repeated line(s)**, e.g. “Grandpa, Grandpa come quickly what’s that noise?”

- **onomatopoeia** or a word which imitates the sound an object makes, e.g. “nee naw” to describe the sound of the fire engine

- additional sounds can be easily sourced & provided to support the student’s understanding of the story, e.g. animal sounds
Selecting books

- real objects/props to represent the main ideas in the story can be readily sourced

- understanding the plot/content of the story is not dependent on the pictures/illustrations
Selective books

- Phonological awareness activities are carried out when the students are familiar with the story/key vocabulary
- Phonological awareness activities incorporate:
  - the vocabulary from the story
  - the real objects (props) used when discussing the story
Early listening skills

• Students can develop specific listening skills as a precursor to phonological awareness

• Early listening skills can be applied to;
  - younger children and/or
  - students emerging in their understanding of language, e.g. pre-symbolic communicators
Early listening skills

Awareness/Attention to sounds

- experimenting with everyday objects and the sounds they make, e.g. keys, wooden blocks, metal spoon

- listening to musical instruments, e.g. shakers, drum, bells, triangle, xylophone

- attending to environmental sounds that an adult comments on, e.g. “I can hear a bird.”
Early listening skills

Recognising & Identifying Sounds

• The student; i) recognises ii) identifies familiar voices
• The student; i) recognises ii) identifies familiar, everyday sounds, e.g. telephone
• The student i) recognises ii) identifies animal sounds
Early listening skills

Concepts relating to sounds

i) discriminating (same/different), ii) identifying iii) producing the following;

- loud vs soft sounds
- long vs short sounds
- fast vs slow rhythms
Syllable activities

- Students can participate in syllable activities using a variety of methods including:
  - tapping the beats/syllables on a drum
  - shaking the bells/shaker for each syllable/beat
  - stamping their feet for each syllable/beat

- Consider the physical abilities and preferences of each student.
Syllables - skill development

- The student listens to and then copies a simple clapping/tapping pattern performed by their Communication Partner

- The student listens while their Communication Partner i) claps/taps the beats as they say a word and ii) counts the number of beats
Syllables - skill development

- The student is assisted by their Communication Partner (if appropriate) to perform the beats in a word using their preferred method, e.g. tapping drum

- The student taps out the beats in word, e.g. Annie

- The student identifies the number of beats or syllables in a given word, e.g. Sat-ur-day = 3 beats
Rhyme activities

• Explain the concept of rhyme, e.g. *when 2 words sound nearly the same, they rhyme*

• Provide numerous example of words which rhyme

• Use semantic cues and/or phonemic cues to elicit correct responses, e.g. *I’m thinking of a word which rhymes with sat…it’s an animal which goes meow (semantic cue)*
Rhyme activities

• For students who are non-verbal responses can be provided using;
  - voice output devices, e.g. big mack switch
  - software programs with switch access, e.g. Choose it Maker 3
Rhyme activities

- use of real objects, i.e. find objects for rhyming pairs, e.g. sock/rock, hat/mat

- yes/no responses, e.g. does cat rhyme with sit? shake head = no & “ah” = yes
Rhyme - skill development

- The student listens to rhyming stories, poems and songs on a regular basis

- The student identifies if 2 words rhyme/don’t rhyme, *e.g.* do hat and cat rhyme?

- The student identifies the word which rhymes with a given word from a choice of 2, *e.g.* *which word rhymes with cat...sit or hat?*
Rhyme - skill development

- The student completes a line in a familiar rhyme or story with the appropriate rhyming word
- The student produces words which rhyme, e.g. provides a word which rhymes with *cat*
Alliteration activities

• Explain the concept of alliteration, e.g. *the sound a word starts with*

• Provide many examples & create alliterative phrases relevant to the student, e.g. *Melinda makes music or Angie ate an apple*

• Emphasise & repeat the initial sound, e.g. *book starts with b...b...b for book or sun starts with s....ssssun*
Alliteration - skill development

• The student listens to stories, rhymes and songs that contain alliterative phrases, e.g. Fee, fie, fo fum

• The student listens as the initial sound in a word is pointed out, e.g. Tom starts with the sound, “t”… “t” for Tom”
Alliteration – skill development

• The student is able to identify the sound a word starts
• The student provides the sound a given word starts with
• The student generates other words which start with the same sound, e.g. “b” for book and “b” for bike
Additional literacy activities

- Discussion/exploration of key vocabulary and concepts in the story
- Comprehension questions
- Practical, “hands on” activities exploring real objects, craft activities etc
- Follow up in other classroom activities and at home
Additional literacy activities

**Literacy Activities Proforma**

**TITLE OF BOOK:** Edwina the Emu  
**AUTHOR:** Sheena Knowles  
& Rod Clement

<table>
<thead>
<tr>
<th>Key Vocabulary</th>
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<tbody>
<tr>
<td><strong>Nouns</strong></td>
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<tr>
<td>emu, Edward, Edwina, zoo, eggs, nest, job, chimney, tax, bus, meal, hat, sausages, ballet, pirouette, waiter</td>
</tr>
<tr>
<td><strong>Verbs</strong></td>
</tr>
<tr>
<td>played, sat, announced, dance, whirled, waltzed, twisted, leapt, u-turned, shouted, laid, joking, checking, looks, hop, lined</td>
</tr>
<tr>
<td><strong>Descriptive words</strong> (adjectives &amp; adverbs)</td>
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<td>entrancing, little, lovely, brisked, black, quick, late, below, fast, YEEK!</td>
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**Phonological Awareness**

<table>
<thead>
<tr>
<th>Syllables</th>
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<tbody>
<tr>
<td>1 - zoo, hat</td>
</tr>
<tr>
<td>2 - emu, joking</td>
</tr>
<tr>
<td>3 - Edwina, sausages</td>
</tr>
<tr>
<td><strong>Initial sound</strong></td>
</tr>
<tr>
<td>zoo, sat, nest, pay</td>
</tr>
<tr>
<td><strong>Medial sound</strong></td>
</tr>
<tr>
<td>emu, lock, fun, back</td>
</tr>
<tr>
<td><strong>Final sound</strong></td>
</tr>
<tr>
<td>say, job, eag, You</td>
</tr>
<tr>
<td><strong>Rhyme</strong></td>
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<tr>
<td>zoo two, light, bright, fun one, hat that, fast last, share, chair</td>
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<tr>
<td><strong>Segmenting/Blending</strong></td>
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<tr>
<td>ight, how, laugh, feet, eat</td>
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**Comprehension Questions**

- What animal is Edwina & Edward?
- How many eggs did Edwina lay?
- Who stayed on the nest? Who went to look for work?
- How did Edwina get to work?
- Did Edwina get the job as a ballet dancer?
- How do you think Edwina felt when she didn’t get the job as a ballerina?
- Which job was the best one for Edwina?
- What is a chimney? What does a chimney sweep do?
- How did Edwina feel when the man said had eaten 10 eggs from a nest?
- How many baby emus hatched from the nest?
- What did they call the last baby emu? Why did they call it this?

**Assistive Technology**

- iPad – ask Siri for general knowledge questions or about unfamiliar vocabulary, e.g., pirouette
- access YouTube (to find a clip of a ballet dancer) [http://accessyoutube.org.uk/](http://accessyoutube.org.uk/)

**Additional Activities**

- Craft activities:
  1. make an emu
  2. make a nest (gather twigs, leaves, sticks from the playground)

**Resources**

<table>
<thead>
<tr>
<th>Real objects/props</th>
<th>Auditory/Sound Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>ballerina costume</td>
<td>music (ballet dancing)</td>
</tr>
<tr>
<td>tights</td>
<td>sound of an emu</td>
</tr>
<tr>
<td>ballet shoes</td>
<td></td>
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<tr>
<td>broom (for clearing cobwebs)</td>
<td></td>
</tr>
<tr>
<td>tennis rink &amp; emu</td>
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Useful resources

• Big Mack switch - record spoken messages or sounds, then the student can press the switch to play the message

• [www.findsounds.com](http://www.findsounds.com) - a free website which searches the Web for sound effects
Useful resources

- Choose it maker 3 - [www.chooseitmaker2.com](http://www.chooseitmaker2.com)
- Choose It Maker 3 online enables photographs, symbols, text and sounds to be used in cause and effect and/or choice-making activities
- It is particularly useful for children with special needs and/or physical disabilities who require switch access
Useful resources


www.loveandreilly.com.au
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References
