

Phonological awareness and its role in learning to read

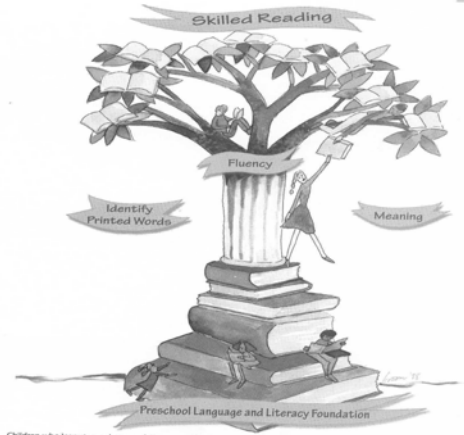
Snow Part I, IRA paper,
and Bryant's chapter

Outline

- Reading is a complex processes
- Growing up to read: the first 5 years
 - Obtain cognitive skills
 - Acquire language skills
 - Develop metalinguistic skills
 - Phonological awareness
 - Levels of phonological awareness
 - Phonics
 - How do we assess phonological awareness
 - Development of phonological awareness

Reading is a complex process

- Reading is a multifaceted process:
 - 3 major accomplishments:
 - Understand the alphabetic system of English
 - Alphabetic principle: letter-sound correspondences
 - Obtain meaning from print
 - Read fluently



Growing up to read: the first 5 years

- Learning to read and write begins before school years:
 - Obtain sensory, perceptual, cognitive, and social skills
 - Symbolic concepts about objects:
 - one object stands for another: golden arches for McDonald's (age 3)
 - Alphabet is a symbol system for sounds
 - Acquire language skills

Acquiring language skills

- Acquiring language skills involves phonological, semantic, morphological/ syntactic and pragmatic development.
- Knowing a language doesn't necessitate an ability to understand the underlying principles of the system.
- Metalinguistic skills are needed to understand language.

What are metalinguistic skills?



- Metalinguistic skills refer to the ability to think about, and to reflect on language.
- Knowledge of what a word is
 - Young children mistaken the word with the object or action
 - “train” is a “long” word
 - “caterpillar” is a “short” one
 - Older children understand the distinction between a word and its referent.
- Knowledge of word boundary in a sentence

Phonological awareness is a critical metalinguistic skill



- Phonological awareness is unique for learning to read an alphabetic language.
- Phonological awareness refers to the general ability to attend to or manipulate the sounds of language
 - Spoken words can be phonologically divided into:
 - Syllables
 - Onset
 - Rime
 - phonemes

Levels of phonological awareness



- Three levels:
 - Syllable awareness
 - The ability to detect constituent syllables in words
 - E.g., cowboy
 - Appears to be present at about age 4
 - Onsets/Rime awareness
 - The ability to detect that a single syllable can have two units: onset and the rime
 - Present at about age 4
 - May even emerge as young as 2 or 3 via nursery rhymes, etc.
 - Phonemic awareness

Phonemic awareness: a finer-grained phonological skill



- Phonemic awareness refers to the insight that words can be separated into a sequence of phonemes.
- Phoneme is the smallest sound unit.
- Phonemic awareness emphasizes the awareness of every constituent phoneme in words, rather than the awareness of particular phonemes such as onset phonemes.

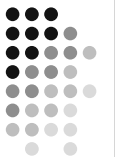
Phonological awareness hierarchy



- Segmentation
 - Onset-rime separation
 - Segmenting a vowel
 - Separating a cluster onset (consonant cluster, e.g., stop) into constituent phonemes
- Blending (put sounds together)
- Manipulation (add, delete, or otherwise move phonemes)

How do we assess phonological awareness?

See handout “Examples of phonological awareness tests”



Development of phonological awareness



- Children develop phonological awareness throughout the preschool years.
 - 2- to 4-year-olds:
 - can play with sounds, monitor and correct speech errors
 - can appreciate rhymes
 - can appreciate alliteration (onset awareness)
 - 5- or 6-year-olds
 - can reliably identify rhymes and alliterations.
 - can manipulate individual phonemes (later development)

Development of phonological awareness



- Phonological awareness is highly correlated with general language ability.
 - The higher language proficiency, the better phonological awareness.
 - Further, semantic and syntactic skills are useful for developing phonological awareness.

Development of phonological awareness



- Phonological awareness is different from speech perception.
 - Speech perception is the ability to differentiate between spoken stimuli that have many elements in common.
 - e.g., mail, nail → same or not
 - Children who have good speech discrimination may have phonological awareness problems.

Class activities for phonological awareness

See handout



What is Phonics?



- Phonics is instructional practices that emphasize how sounds of speech are represented by letters and spellings
 - /m/ sound is represented by letter "m"
 - /i/ sound is represented by letter combination "ea" as in "bead"
- Phonics assumes that children have already acquired phonemic awareness

Generate examples to demonstrate the differences between phonemic awareness and phonics.

Phonological Skill is a Causal Determinant of Reading Success



- 4 yr longitudinal study of 368 kids
- An early test of pre-reading children's (4 yrs old) sensitivity to rhyme and alliteration predicted reading and spelling success over the next four years.
 - independent of intelligence
 - did not predict math
- Is this causal?

Phonological Skill is a Causal Determinant of Reading Success



- Training Study
 - Over a two yr period the experimenters trained a group of 6-7 yr olds to spot a common sound and say it, and compared their reading progress to a group not trained in spotting the sound.
 - At the end of the project the experimental group was three to four months ahead of the control group in reading and spelling
 - no effect on math
 - In sum, training in phonological awareness helps children learn to read, particularly when that training is combined with experience with alphabetic letters and written words.