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Learning articulation, language and literacy (ALL) through echo poems for young children

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Abstract

The purpose of this paper is to introduce the concept of echo poems, and how they can be used to help young children learn ALL - articulation, language and literacy. The concept of each term, articulation, language and literacy is elaborated, and with that, suggestions on how echo poems can be used for the teaching of the respective conceptual area. To help educators to better support children in their learning, some of the challenges that young children may have in these conceptual areas are discussed. In this way, it is hoped that children can become more motivated to learn and have better outcomes in the learning of articulation, language and literacy.

Keywords: Echo poems, young children, difficulties in articulation, language, and literacy.

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Research (e.g. Bryant, Bradley, Maclean, & Crossland, 1989; Goswami, 1999) has established that in learning to read, interventions targeting rhyming have significant impact on improving the reading skills of children who had difficulty in rhyming. This has confirmed the key significance of rhyming in phonological awareness and learning to read. However, nursery rhymes are often overlooked as an effective vehicle for learning in this digital age. According to the National Institute of Child Health and Human Development (2000) National Reading Panel (NRP) report, there are five essential components of reading instruction - Phonemic awareness, Phonics, Vocabulary, Fluency, and Comprehension.

This article on learning articulation, language and literacy (ALL) relates to these five components from the NRP's report on teaching children to read. The report provides the evidence-based assessment of the scientific literature on reading and its implications for reading instruction. The use of the essential components in learning ALL would therefore find its underpinning in the implications for teaching from the report.

ECHO POEMS

Many educators know that young children enjoy the sound of rhymes, so using poems with rhymes in them can make the job of teaching the English language much easier. Echo poems can be defined essentially as "poems or verses where there is a repetition of the last word or syllable of a line" (Ng, 2017). There is ancient Greek mythology about a nymph named Echo, who was spellbound, which caused her to be unable to speak, apart from repeating the last word spoken by others. Before she was put under this curse, Echo was a talkative nymph. Due to this habit, she constantly interrupted the Greek goddesses in their conversations. Having become so tired of putting up with Echo's rude behavior, the latter put the curse on her. Some children may indeed have Echo's habit of interrupting others; hence the story can even serve a social purpose, other than as a novel way to explain the meaning of echo to young children.

Also, by using this mythical legend as a fun context for practice, young children can be drawn into playing the role of echoing words in an echo poem. With this simple but efficient exercise, educators can plan the curriculum to focus on an array of language parameters beyond speech sounds. For this paper, the aim is to elaborate and provide suggestions on using echo poems as the instructional stimuli to help young children learn ALL, which is the acronym for articulation, language and literacy. In learning to read, Gill (2006) has highlighted that the daily shared reading of poems, songs, and chants can provide students with pleasurable, successful reading experiences. Moreover, it can be the foundation for skill lessons in the context of real reading. Hence, echo poems can be the ideal stimuli for young children to have enjoyable practice in repeated reading to build their foundational skills.

ARTICULATION LEARNING

For the discussion here, the term articulation refers to one of the definitions found in the Merriam-Webster dictionary, which is "the act of giving utterance or expression" (<http://www.merriam-webster.com/dictionary/articulation>). A layman's term for articulation is pronunciation. As noted, young children often require repeated practice or the echoing of the sounds of a word in learning to produce intelligible speech for word retention and retrieval. A simple echo verse such *Wag and Rag* (Ng, 2017) below can be used for such a practice.

Wag and Rag (Ng, 2017)

Verse	Echo
The dog will wag its tail, like this.	(wag, wag, wag) (swish, swish, swish)
You use a rag to clean, like this.	(rag, rag, rag) (swish, swish, swish)

To make the reading more interesting, the teacher can show actual objects (a rag and a toy dog), pictures or videos to let the children see the swishing actions in *Wag and Rag* (Ng, 2017). More importantly, the speech sounds need to be modeled explicitly to be heard before the children practice. In other words, the verse should be read out clearly and then one may focus on the target words which are echoed for practice. In the example here, the target words "wag" and "rag" are both single-syllable rhyming words. This provides the opportunity during the lesson to segment the words into onset-rimes for learning how to articulate each word and learning the difference between them. An "onset" is the initial phonological unit of any word (e.g. /w/ in wag) whilst a "rime" refers to the group of letters that follow (i.e. /ag/ in wag). As the rime in both words are similar, the difference to be highlighted lies in the onsets /w/ and /r/.

As for the echoing practice, the children may echo together and then one after another as a variation. In this way, more opportunities for practice can be created, and each child can be heard individually as well. One can also add movement to the practice by improvising hand movements for the "swish, swish, swish". As young children enjoy nursery rhymes with music, another suggested enhancement is to use the tune of the song "The wheels of the bus go round and round" for this particular echo verse. The lyrics would then be replaced with, "The dog will wag -, wag, wag, wag / its tail like this -, swish, swish, swish" (Ng, 2017). Incorporating music and movement may take away the stress of the difficulties faced by some children in pronouncing phonemes such as the "w" and "r" in this rhyme.

Music can help in emphasising poem structure, the breaks in syllables or onset/rime etc., and therefore the use of music and movement for children to practice articulation can be

really helpful. To keep up to date, rapping with music will make a great addition to learning poems. On the other hand, the American clapping game song "Miss Mary Mack" shown below has been around for quite a while. It is an outstanding example of a traditional nursery song that employs the technique of echo poems. With the clapping and music, it is no wonder that the rhyme is still popular with children through the years. It is therefore a great idea to help children catch on to the song or game in an echo, so that it can become a hit which they would happily practice beyond the classroom.

Miss Mary Mack (<http://www.kididdles.com/lyrics/m008.html>)

Miss Mary Mack Mack Mack
All dressed in black, black, black
With silver buttons, buttons, buttons
All down her back, back, back.

She asked her mother, mother, mother
For 50 cents, cents, cents
To see the elephants, elephants, elephants
Jump over the fence, fence, fence.

They jumped so high, high, high
They reached the sky, sky, sky
And they didn't come back, back, back
'Til the 4th of July, ly, ly!

When working with young children, one might come across articulation problems in omissions such as /poon/ for /spoon/. Another type of error is in substitutions such as "wabbit" for "rabbit", which is often heard in the Bugs Bunny cartoons. The "Wag and Rag" rhyme above might then bring out this kind of substitution issue of /w/ for /r/. The children can be encouraged to think of more words that have the same beginning sounds to reinforce their learning and practice the alliteration of more words with these beginning sounds. When there are articulation errors, the teacher might want to model the word explicitly to see if the child is able to make a correct production of the target word after that. Should that fail, one might listen out for the particular sound production by the child with other target words and in other settings, such as the child's casual conversations during play.

According to the American Speech-Language-Hearing Association (2016a), articulation disorders impact the form of speech sounds and are related to structural issues such as cleft palate, and motor-based difficulties such as apraxia. Should a child refer to a spoon as a fork, it could just be a language difficulty whereby the child does not know the correct vocabulary. Hence, asking the child to say the name of the object (spoon) has its limitations. To assess the articulation, one needs to model the word (e.g. spoon)

for the child to repeat after. Only when the child is unable to make a correct production of the target word might there be reasons for articulation concerns. Data from other settings would then serve as evidence of articulation difficulties for intervention treatment.

ENVIRONMENTAL RISK FACTORS

Although articulation disorders are related to issues in the human bodily functions, for holistic assessment and treatment purposes, one should consider the environmental risk factors of the child. Some insights into the social world of children learning to talk can be found in the research by Hart & Risley (1999). These researchers reported that children from low Social Economic Status (SES) families hardly have any experience of talking about the stories that they have read or that have been read to them. The child's parents may be working at two jobs so there is very little time for interaction with the child. On top of that, the conversations that they have would tend to focus on the basic necessities of their daily living and would hardly ever dwell on anything that extends beyond their practical needs.

The primary factors responsible for the narrow focus of conversations are quite expected. Firstly, there is limited exposure to books as there are hardly any books in their homes. Secondly, the children are not adequately involved in activities for sports or leisure, much less travel. Lastly, children simply reflect the focus of the discussions that the adults around them would have. Despite these factors, Hart & Risley (1999) noted that the risk for a reading disorder will increase regardless of SES, when children are not read to interactively from an early age.

In their earlier study of preschool children's vocabulary learning, Hart & Risley (1995) language interactions with adults and exposure to different words were compared for children from different levels of SES. It was found that these measures were far lower for children of welfare families than children from working-class and middle-class families. Consequently, the children from welfare families knew the meanings of fewer words than the other children. Furthermore, the disparity in their vocabulary knowledge with other children increased over time as the children from welfare families were acquiring new vocabulary at a rate that is far slower.

One other finding of concern from the Hart & Risley (1995) study is the ratio of encouraging to discouraging statements heard per hour by the children. This is 6:1; 2:1; and 1:2 for children of professionals, working-class and welfare parents respectively. If children in low SES groups are likely to hear more discouraging statements than encouraging ones in comparison with other groups, the conditions for the development of their language would be impoverished further. It is therefore particularly important that teachers provide the children in their care with more verbal encouragement, so that conditions are more conducive to learn and children more motivated to practice language at school.

LANGUAGE LEARNING

The term “language” used for the discussion here refers to the English language used for communication. Echo poems can also be used to help children develop both receptive and expressive language skills. As highlighted by the American Speech-Language-Hearing Association (2016b), some of the problems preschool children have with understanding receptive language, are in the understanding of gestures, following directions, answering questions, identifying objects and pictures, and even taking turns when talking with others. Bartak, Rutter, & Cox (1975) have pointed out that receptive language difficulties are linked to a specific cognitive defect involving language impairment in children with autism.

As for expressive language, the American Speech-Language-Hearing Association (2016b) pointed out that young children may have issues in asking questions, naming objects, using gestures, putting words together into sentences, learning songs and rhymes, using correct pronouns, and even knowing how to start a conversation and keep it going. According to Caultfield (1989), children with developmental expressive language disorder exhibit a delay in expressive language compared with receptive language and nonverbal cognitive skills.

With respect to receptive language, the swishing actions used in the “Wag and Rag” verse would help young children learn the gestures that correspond to the words used. The teacher can even tell the children to pretend to use a rag to clean in various ways, so that they can learn how to follow directions, or answer questions about the level of cleanliness. Beyond comprehending at the literal level, one might even help them develop inferential skills by talking about how tired one can get, having to do a lot of cleaning. In this way, they can become more empathic and considerate to people who carry out the cleaning work around them. Likewise, talking about why a dog would wag its tail can help them draw inferences about animal behavior in order to answer questions more logically.

A paper by Hess (2003) recommends a nine-step formula to teach language through poems to English as a second language (ESL) learners. The steps are – Trigger, Vocabulary preview, Bridge, Listen, react (X3) and share, Language, Picture, More language, Meaning, Spin-off. These steps may be a little tedious for young children. Since echoes mark the end of sentences, the echoed word can be used as a scaffolding to help young children identify individual sentences more easily for language comprehension. The echo verse “Lion and Fish” (Ng, 2017) below is an example to illustrate this. The echoes “den”, “roar”, “net” and “more” at the end of each respective sentence essentially provide the auditory cues that separate the sentences from each other. Following that, the teacher can help them to focus on analyzing the structure of a sentence to identify the subject and predicate.

Lion and Fish

Verse (Sentence)	Echo (End of sentence)
The lion is in its den.	den
I can hear it roar.	roar
The fish is in the net.	net
I can catch some more.	more

By using “Who” for the subject, and “What” for the predicate, they can be taught how to sort out the parts of a sentence to identify a relevant part for a “Wh” question. The Scaffolding Interrogative Method (SIM) for teaching reading comprehension (Ng, 2014) below illustrates this:

Table 1. The Scaffolding Interrogative Method

Sentence no.	Who (What person/thing)	What (action/ description)	Where (What place)
1	The lion	is	in its den.
2	I	can hear it roar.	
3	The fish	is	in the net.
4	I	can catch some more.	

The SIM uses a matrix for sorting out a sentence into its “Wh” components so that one can easily process the underlying semantic category of information found in the sentence. Numbering the sentences help children identify each one by the row, and the “Who”, “What”, or “Where” headings help them identify the relevant information by the columns. To illustrate, for the question “Who is in the den?” the child can be directed to find “The lion” in Row 1 under the column “Who”.

The rows and columns in the SIM also help in the teaching of pronouns. For example, the lion is referred to as “it” in Row 2, so the teacher can teach children to go back to Row 1 for the reference of the lion. The children can also learn how to identify objects and pictures corresponding to the words in the matrix under the semantic category of “Who/What/Where”. For instance, if a picture of a fish in a net is used, children can be directed to find the subject “fish” in the “Who” column and the object “net” in the “Where” column.

Thus far, this paper has discussed how short echo poems can be used to help children answer questions, which may also help them ask questions, name objects, use gestures, put words together into sentences using the SIM matrix, learn the songs and rhymes, and even use correct pronouns. They can also be introduced to the typology of sentences, so that they can learn how to start a conversation and/or keep it going.

Table 2. Types of sentences (Ng, 2017)

Type of sentence	Example
Statements	The lion is in its den.
Questions	Do you hear the lion roar?
Commands	Raise your hand if you know the answer.
Requests	Please catch some more.
Wishes	May you be successful with the fishing!
Exclamations	How dark is this den!

Table 2 above shows the six types of sentences used in the English language. Young children who do not have much experience with using language may find it challenging to understand sentences and feel awkward. For instance, a child might think that a well-meaning wish statement "May you be successful with the fishing!" is a question, then he/she might not be able to continue the conversation with appropriate responses. A child may also think that an exclamation such as "How dark is this den!" is a question, because "How", like "May", is an opening word used in questions. Thus, by pointing out the typology of sentences and recognizing the related intonation in echo poems, children can learn how to start or keep a conversation going with the right kind of sentences.

As listening skills are just as important as expressive skills, echo poems can also be used as a vehicle to teach turn-taking in a conversation. As mentioned, the teacher can use the story of Echo as the context for role play, so that the children can be engaged in playing the role of echoing words at the end of each line. Besides pretending to be spellbound like Echo in the story, the moral of the story can be used as a social story for children, as mentioned above. In this way, children can learn to practice socially pragmatic behaviour, and be guided into reflecting on behavioral expectations in social conversations. Given the concept that echoing is sometimes a way to be a good listener in acknowledging what has been said, children can better appreciate the idea of turn-taking in conversations. They can then take turns to play the echo or read the verse. The teacher can include in the echo poem lesson a listening game where the children can score points if they managed to listen carefully to get the last word spoken correctly in their echo.

LITERACY LEARNING

As repeated readings of predictable texts and poems can help in the development of sight-word vocabularies, fluency, and phonics knowledge (Gill, 2006), it would make sense to use echo poems for learning literacy concepts as well. According to the Literacy and Numeracy Fact Sheet by the Department of Education and Training of the State of Queensland (2016), "literacy is the ability to read, view, write, design, speak and listen in a way that allows us to communicate effectively and to make sense of the world". The "Stages of Reading" by Chall (1983) shown in Table 3 below show us that the development of literacy (as in reading) can be charted out in stages.

Table 3 - Stages of reading Chall (1983)

Stage	Age (years)	Primary Development
0	Birth to 5-6	Accumulation of knowledge about letters, words, and books.
1	5 - 7	Initial reading or decoding.
2	7 - 9	Decoding becomes more automatic; beginning of reading for comprehension.
3	9 - 14	Reading to learn; decoding skills become fully automatic.
4	14 - 18	Multiple viewpoints due to increased cognitive skills, which enable abstract thinking.
5	18+	Construction and reconstruction in critical reading, development of hypothetical-deductive reasoning.

For the discussion here on literacy, the focus would be on Stage 1, which is initial reading or decoding. In order to decode print, children need to learn the print or alphabetic system that is used to generate the symbolic representation of the spoken word. Before children learn to read print, they would be in Stage 0, where they hear spoken English and develop phonological awareness to produce speech. By narrowing down their focus on speech sounds from sentences, whole words, syllables, onset-rimes to phonemes, the corresponding print symbol or orthography (i.e., the alphabet) can be introduced at the beginning of their development of print literacy.

With the association of a phoneme sound ("phon") to an alphabet icon ("ic"), children would be learning phonics (Ng, 2017). The easiest Grapheme-Phoneme Conversion (GPC) or phonics rule to start off with uses one-to-one correspondence (1:1) and is called one-letter-one-sound rule. To begin with, one might find it easier to teach this with words like "mum", "dad", "bib" and "pop" with similar beginning and ending consonants like "pup" in the echo verse "Pup and Cup" (Ng, 2017) shown below.

Pup and Cup (Ng, 2017)

The young dog is a pup.	(pup)
It drinks milk to grow bigger.	(ger)
The tea is in my cup.	(cup)
It needs some milk and sugar.	(gar)

For the development of 1:1 correspondence, children need to be taught to segment simple consonant-vowel-consonant (CVC) words into its individual phoneme sounds, so as to match each sound to a letter symbol used to represent the respective sound. Hence "pup" would be segmented into its individual phoneme components /p/, /u/, /p/ for the teaching of the respective symbol or alphabet that represents the sound. To scaffold the segmentation of the phonemes and selecting the respective letters to form the word, one might consider employing the tool known as Elkonin sound boxes (<http://www.readingrockets.org/content/pdfs/Phonics-Sound-Elkonin-Boxes.pdf>). The teacher can first model the segmentation by saying "pup" - /p/, /u/, /p/; and then write the letter symbol into each box with each phoneme sounded out again. Letter cards can be used for children who have difficulties writing the symbols. This is illustrated as follows:

Example: "pup" - /p/, /u/, /p/

p	u	p
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With this 1:1 correspondence strategy, children can learn to read many new words or even nonsense words by applying the rule. For example, by substituting "c" for "p", the word "cup" from the echo verse would be formed. From this, children can be given opportunities to generate word families with similar ending sounds even make their own rhymes.

The challenging part of teaching young children phonics is that they can get stuck in only one rule such as this one-letter-one-sound rule. There is in fact, an array of conventions governing the way that letter symbols are sounded. For example, when "c" is followed by "e", "i", or "y", it makes an /s/ sound instead of the /k/ sound in words such as "cent", "pencil", and "cymbals". This convention is similar for the letter "g" as it makes the /j/ sound instead of the /g/ sound in words like "gentle", "giraffe", and "gymnastics".

The development of print literacy can be taught in an expansionary way from the one-letter-one-sound rule (1:1) to digraphs (2:1), trigraphs (3:1), and to more complex phonograms or orthography. The recommended order in learning orthography reverses that in learning phonological awareness. This is illustrated in Figure 1 with an hourglass model.

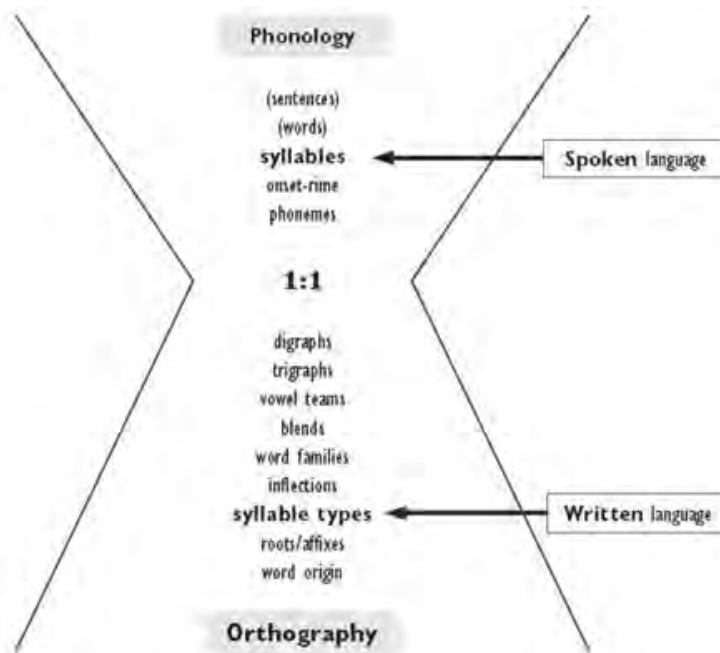


Figure 1. Oral and Written Language (Moats & Tolman, 2009)

In the English language, there are forty-four phonemes (speech sounds) and an array of phonograms (letter pattern symbols) has been developed to represent each of them. For example, Table 4 illustrates the use of eleven phonograms to represent the same sound which is the long “ā” sound (Ng, 2017).

Table 4. Long “ā” Phonograms

Long “ā”						
Phonogram	a	ai	eigh	aigh	ay	et
Example	babe	sail	weigh	straight	ray	crochet
Phonogram	ei	au	a-e	ea	ey	
Example	vein	gauge	gate	break	they	

Learning various phonograms for a phoneme such as the long “ā” sound can be overwhelming for young children. Some children might resist the idea of variation and cling on to the 1:1 concept of short vowel sounds for stability purposes. Hence, teachers would need to show more understanding and support. The issue can be made worse when they are confused by the alphabetic code used to learn speech sounds in languages like Malay, Chinese or Japanese where different phonics rules are applied. For instance, in the Chinese alphabetic code “hanyu pinyin”, the long “i” is sounded for

the phonogram “ai”. Hence, in English, children might sound the word “dairy” as “diary” (Ng, 2017).

Unlike articulation disorders, “speech sound disorders that impact the way speech sounds (phonemes) function within a language are traditionally referred to as phonological disorders; they result from impairments in the phonological representation of speech sounds and speech segments—the system that generates and uses phonemes and phoneme rules and patterns within the context of spoken language. The process of perceiving and manipulating speech sounds is essential for developing these phonological representations” (American Speech-Language-Hearing Association, 2016a). Used as the contextual vehicle, the rhymes in echo poems can serve well for the gradual introduction of such rules and patterns to make the learning easier and fun at the same time for children with phonological disorders.

According to Gill (2006), phonics has received renewed attention since the National Institute of Child Health and Human Development (2000) NRP report concluded that phonics instruction produces substantial benefits for students from kindergarten to grade six and for students with difficulties learning to read. As noted by Shaywitz (1996), based on the clinical symptoms and neuroscientific knowledge of brain organization and function, the reading difficulties in dyslexia are based on a model of phonological processing. This would imply that it would be appropriate to target phonics instruction with the use of echo poems for those at risk of dyslexia. With regards to this, it should be noted that the NRP (National Institute of Child Health and Human Development, 2000) also reported that there is no single method of teaching phonics that has been proven to be superior to another. What has been suggested is that educators ensure that students know the purpose of learning letter sounds and further to that, have the ability to apply what they have learned (Gill, 2006).

CONCLUSION

In summary, this paper has highlighted that echo poems can be used to help young children learn ALL - articulation, language and literacy. The meaning of each of the terms ALL is elaborated upon, together with suggested use of echo poems for the teaching of each of the respective conceptual terms. In addition to this, some of the issues surrounding the difficulties that young children may have in learning ALL are discussed. These issues include those of articulation disorder, language disorders (developmental receptive and expressive language disorders), and the phonological processing disorder that forms the basis of dyslexia. It is hoped that this paper can help educators and parents better understand children’s needs in learning ALL and discover how best to help them overcome the possible challenges. In doing so, children might feel more supported, encouraged and motivated to work towards better outcomes in their articulation, language and literacy.

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