

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 2000 Volume V: Sound and Sensibility: Acoustics in Architecture, Music, and the Environment

Basic Reading of Sound Words-Onomatopoeia

Curriculum Unit 00.05.11 by Pamela J. Tonge

Communication through reading, writing and speaking has been around for thousands of years. During primitive times, we have learned that communication did take place in order for man to survive, as it does now, but our understanding of what was actually said during those primitive times isn't quite clear. We are lead to believe what research has suggested about how these early humans survived and their dire need to communicate in their rugged and often dangerous environment.

Although sounds of communication played a significant part for primitive man, it is possible to imitate the "groaning," "cooing," and/or "barking" that might have been made for them to communicate with each other during that time. Over thousands of years, humans have continued to master the art and their ability to be heard, primarily, by means of communicating through the use of "sound words."

Communication and speech are very much related. The human ear and the human voice are also related when it comes to speech and communication. Throughout this unit, I will attempt to explain and successfully show how the use of "Onomatopoeia" and the combination of the voice, the ear, and speech can help children become great readers and writers.

The emphasis on involving children to read and write in the form of "Onomatopoeia" must begin with their ability to hear and say what they believe may make a sound. Children at an early age need to develop the ability to communicate effectively.

To begin teaching any lesson and have it end in success, it is important for children to have the tools that are necessary in order for success to take place. "Onomatopoeia" is poetry and a language all its own. We are all exposed to sound and these sounds have names. Many children and adults probably never knew that there is a name for the sounds we hear. With this in mind, it is essential to explore the interesting and slightly varied meanings of the word

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"Onomatopoeia".

"Onomatopoeia" is a word whose sound imitates the actual sound to which it refers, such as "pop," "sizzle," and "crash." Poets use this device in which the words they use sound like the very thing being named or written about. "Onomatopoeia" is an ancient Latin and Greek word meaning "name-making".

The many roles of an educator is to assist in the child's reading and writing ability-literacy does sit on a high throne in the educational process of children. It would be a great advantage for children to be involved in creative activities that will get their young minds in gear and enthusiastic about learning to read and write. The process of reading and writing is somewhat challenging to young children and speech can be awkward during this stage. Our society is not as quiet at times as we would like. Everywhere we go, signs of communication are around. Words and sounds are the way of our planet. Children are surrounded by words and sounds that they may or may not understand. In any instance, they are encouraged to begin ways of communicating.

Since Onomatopoeia is a form of poetry with sound words as it focus, children will have very little difficulty in creating a word that imitates the sound it represents. This perception of sound can be demonstrated through instruction of simple songs. With simple songs, musical sounds and sound words blend into a harmonic capacity that youngsters can comprehend-especially if it is repetitive. Old favorites such as "Old MacDonald Had A Farm" and "The Wheels On The Bus" are songs among a few others that young children love to sing. Their perceptions of these songs are realistic enough for them to understand. The rhythms of these songs have a repetitive pattern that young children can follow and retain long after the song is over. The power of music and reading sound poetry is a lesson taught that many youngster have yet to realize. With Onomatopoeia, these sound words can be visually written and displayed. Children can create their own imitation of what objects make what sound. A list of comparison and association are sometimes more perceived and strengthen by letters and syllables that imitate, repeat or reproduce the sound described. Ex. "r-r-r-ring," "m-m-m-moo," "a-chooo" are just a few familiar sound words. Singing simple songs and visually displaying what sound words look like, incorporates and gradually produces a level of reading, writing, and speaking that children can successfully master.

Once the children can understand what Onomatopoeia is and its relationship to poetry, I would suggest, as a reinforcement tool, to read a book to them that contains Onomatopoeia poetry. Jill Bennett's collection of children's poems called "Noisy Poems", illustrated by Nick Sharratt, is great! This book has vivid, bold pictures that the children would love. The titles are cute too. From this book, children will hear sound word for a fish, spaghetti, a yak and other familiar things. Of course books are an excellent resource for children to enjoy. They foster reading on their own, even if they only read the pictures. Many books and songs that children begin to discover have repetitive verses and rhymes. These repeated patterns also have a definite and pronounced rhythm. When these poetic elements are combined and taught to children, they begin to have fun with this skill of memorization. Children are taught to memorize the sounds of letters, which leads to letters forming words and words forming visual pictures. This recipe of word formation can be distinctly blended into what we see, hear and read in Onomatopoeia.

Children can choose words that sound much like the things or actions they name; such as creating sounds for a dripping faucet, a washing machine, the wind in a forest, an ocean beach, the Fourth of July, a busy street. Literature for creative expression in the sound of poetry will encourage children to write and simply read the sound words that they've created. Children will find joy and feel successful in their accomplishments on a

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lesson that doesn't have any right or wrong responses. Children should be comfortable to express themselves in a way that they can relate to.

Prior knowledge for them is important and retainable in ways that just workbooks can't supply. Manipulatives, books, personal experiences, creative expressions and visual display of work rendered by children can give them the rewards of learning that all children on all levels should be exposed to. With the aforementioned introduced and produced (reading, writing and speaking (these ingredients can mix co-operatively into sound-musical sound.

Sound has been around for ages; it is universal in all varied and complex environments. Musical sounds may or may not have accompaniments, but they can be musical sounds just the same.

Onomatopoeia has no limits to its usage. It's a language that can fit in many subjects. Having a voice and an ear are prerequisites to Onomatopoeia, so there is no real wrong way to teach it, unless one is without the use of hearing and speaking. Exploring the sounds of our inside and outside environment and the sounds in musical instruments can create a source of musical communication in a poetic language that we are familiar with today. Music is a source of communication. Humans have produced and used music for thousands of years. Musical instruments can be a way of alerting one of danger approaching or to relax and comfort those in need. Musical sounds can be joyful or painful. Our emotions can be influenced by the musical sounds we hear. A live, symphony orchestra would be an excellent opportunity for children to see and hear the harmonic blend of musical instruments making sounds. They'll take a delight in hearing and seeing their favorite song or jingle from television performed on a stage. Children will have the chance to see individual instruments combined to produce a variety of sounds. The visual aspect of these musical instruments can be very captivating for young and older audiences.

This musical experience can also lead to the viewing of the Walt Disney classic "Fantasia"- where they can see and hear musical sounds portraying distinct, individual characters. The musical experience with Onomatopoeia is continued by using sounds heard and by relating words to it and hopefully poetry begins-the rhythm of poetry put to music.

With some assistance from the music teacher, children can "compose" their own musical piece of Onomatopoeia. Constructing musical instruments through materials collected by teachers and students will have children co-operating in groups, refining social skills, and, with practice, these Onomatopoeia experts can perform a mini-concert of their own for the school!

The ultimate learning facility is the classroom. The entire school is a sound paradise. Within each room, there are sounds imaginable and unimaginable-children and adults are bombarded with constant sound. It is strongly suggested, when focusing on Onomatopoeia, to allow children to listen quietly and attentively. They will become experts to what makes what sound and they'll be able to imitate it. They'll be able to hear the sounds of the motor in a water fountain, the sounds of a fish tank, footsteps in the hallway, maybe outside sounds as well. There is really no limit to the way in which sound is perceived. If possible, allow the children to visit the main office, the cafeteria before and after lunch, the gym. As these in-school trips occur, the children can have group discussions about what sounds they heard and list these sound words on the blackboard. Mini trips can also be a walk around the block. Discovering outside sound is great. Children can become more aware of outside sounds when their eyes are closed.

Outside sounds can be overwhelming or quite tranquil. In the city, sounds of cars, traffic, construction machinery, horns, whistles may be more evident; whereas country sounds may be a babbling brook, wind

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blowing through the leaves of a tree, insects, or the chirping of birds.

With the physical and not-so-physical environment, children can continue to become creative in their own unique way in learning to read and write "sound words".

As this unit develops and expands, it might be somewhat difficult to actually find materials on Onomatopoeia poetry. It is important to remember throughout this unit that children are very creative when given the proper tools to express themselves creatively. Many children have a want, a need and a desire to learn-a little encouragement and creativeness can go a long way-this applies to those from pre-school through high-school.

Guidance through words, sounds, music, and prior knowledge of varied experiences can lead to dramatic academic gains for children. Sound is heard and created at all levels and volumes. The time has long since come when we as educators must relate the reality of our society in our educational institutions. Learning to read and write should be a pleasurable experience in our schools for all students.

Children and teachers thirst for new and innovative ways to promote learning. Onomatopoeia poetry, music and sound words, with the collaboration of basic reading and writing (and other needed elements) can create a new dimension of higher intellectual learning for children.

Basic Reading of Sound Words-Onomatopoeia

(suggested lessons and integrated activities)

*students will define sound on their own and list several objects that makes sounds.

*students will use their imagination and imitate sounds for objects.

*students will list the sound words for the object.

*students will define what they think Onomatopoeia may mean.

*students will read sound words with related object.

*students will be musically inclined and sing songs with sounds words in them.

*students will listen to indoor and outdoor sounds.

*student will create sentences using sound words.

*students will create Onomatopoeia poetry.

*students will share and read their poems to classmates.

*students will listen to Onomatopoeia poetry read from books by the teacher.

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- *students will integrate their poems using musical sounds with assistance from the music teacher.
- *students will listen to music teacher play musical instruments for individual and varied sounds.
- *students will make musical instruments.
- *students will perform a mini "sound" concert using their instruments.
- *students will view Walt Disney's "Fantasia"
- *students will listen to the sounds of nature on CD's, and cassette tapes.
- *students will see the performance of a symphony orchestra, either live or on videotape.
- *students will measure the level of sound with a Digital Sound Level Meter (Science and Math)
- *students will become familiar with mathematical terms to measure sound.
- *students will construct musical instruments using proper measurement.
- *through science instruction, students will become familiar with the vocal organs, the vocal chords and the vocal tract, which enables us to hear, be heard and produce speech sounds.
- *students will demonstrate the various positions of the vocal organs.

Onomatopoeia Instruction

Throughout this curriculum unit on reading of Onomatopoeia, it is important to note that it is a language. Language is words, their pronunciation and the method of combining them; communication. Language is a form or style of verbal expression. Language is a system of signs of symbols. Language is a way to communicate and communication is global. It is necessary to introduce Onomatopoeia on a smaller scale. The students will gradually progress to a higher level as their experiences and knowledge of Onomatopoeia becomes broader.

The following are lessons on Basic Reading of Sound Words- Onomatopoeia:

LESSON 1

Listening Comprehension/Creative Expression (verbal) K-5

Objective-Students will define in their own words what Onomatopoeia may mean. They will listen to Onomatopoeia poetry and stories that are read to them by the teacher.

Materials-Onomatopoeia literature and attentive students

Teach-Students will enjoy listening to the strange, weird and peculiar sounds made by familiar objectives. This lesson will also encourage them to create their own sound words to various objects in and around their environment.

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Lesson Enhancer-Use audio materials. There are many CD's and cassette tapes on listening of sounds. I don't have a particular favorite. Choose a CD or tape that you feel your students will enjoy and can relate to. Sounds of the ocean; whales or sounds of a barnyard, city or country sounds are nice to begin with. You really can't go wrong with any selection.

LESSON 2

Reading and Language Arts K-5 (Onomatopoeia Poetry)

Objective-Students will brainstorm and list sound words and write a poem or sentences about sound objects make.

Materials-activity sheets with incomplete sentences which students have to fill in and pencils.

Example:	is what a ghost says.
The balloon burst	and went
The sound a telephone makes is	

Teach-This lesson teaches how students can work individually or as a group. This written assignment is very basic as students are introduced to Onomatopoeia. This activity can be used after reading Onomatopoeia literature to them. This will assist the students so they'll know what is actually expected from them.

Students should give their poem a title and illustrate the sentences or poems. Allow time at the end of this lesson for students to share their work. Praise and encourage students through this lesson, for they would have created sentences using sounds words, listing sound words and actually create something that they can share and possibly read to their classmates. Display their efforts around the classroom.

Lesson Enhancer-Before handing out activity sheet, students can verbally say sounds those objects may make (class activity).

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Example: "What is the sound an alarm clock makes....."

"What is the sound an airplane makes......"

"What is the sound a car horn makes......"
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It is o.k. to write their responses on the chalkboard, they'll love it.

LESSON 3

Musical Appreciation/Listening Comprehension K-5

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Objective-Students will listen to sounds made by musical instruments as music teacher plays them.

Materials-It is hoped that various instruments will be available and utilized to enhance this musical experience of sounds.

Teach-Students should have the opportunity to play some of these musical instruments and the to imitate the sounds.

Lesson Enhancer-Take students on a field trip to see a live performance of a symphony orchestra or see a video tape of one.

Walt Disney's Fantasia and Fantasia 2000 is available on videotape as well. Students will enjoy seeing and hearing these tapes of musical sounds of colorful and enchanting imagination.

LESSON 4

Science K-5

Objective-Students will examine the function of the human vocal organs.

Materials-Any Science or human anatomy text that visually illustrates a detailed diagram of the human vocal organs.

Teach-This particular science lesson can be taught, as with other lessons, through the use of teacher aid materials, since texts aren't always current, available or of limited supply. Terminology in learning about the human vocal organs can be complex, assist students with pronunciations, definitions of the terms as they relate to the instruction. At this level, the larynx, trachea, vocal cords and the Adam's apple are among the most studied terms.

Lesson Enhancer-Have students do an art activity by creating a visual display of the human vocal cords and labeling the various parts. Definitions of terms should also be visually displayed and will be an extra highlight to this student-made art activity. Have available, if possible, any and all materials to construct and complete this art project.

LESSON 5

Mathematics/Woodworking/Art K-5

Objective-Students will make musical instruments.

Materials-a few different sizes of wood, cardboard tubes, scissors, rubber bands, paint, paintbrushes, tape, nails, hammers, pencils, markers, and rulers.

Teach-Allow the students to use foremention materials and rulers for measurement to construct musical instruments. Allow students to use rulers and measure widths, lengths and depths to build their instruments. As students begin to measure these dimensions for their instrument, they'll discover the different sounds that the instrument creates. Students should attempt to make their instruments to the likeliness of the real thing. This math lesson can be a spin-off into the exploration and measuring of sound and how it travels through air.

All these lessons are tools in teaching children basic reading and writing of Onomatopoeia. Throughout these

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lessons, allow the children to be unafraid of being unique, different and creative. Too often children are intimidated by lessons that require them to focus too much attention on being "right". The lessons in this particular curriculum unit is not dismissing the students ability to master these objectives, but these lessons allow them to discover within themselves the enjoyment they can achieve as they learn. Sometimes this need and heavy emphasis of focusing children on the "right" answer can often fail what we, as educators, are trying to achieve.

The Sound of Language in Onomatopoeia

The characteristics of speech and the complexity of language and articulation are dramatic in the way in which people communicate. As students become more knowledgeable with the linguistics of Onomatopoeia, they will become more sound perceptive. It is necessary to review and reinforce lessons on Onomatopoeia and relate it to more in-depth, auditory exercises.

Linguistic sound is very complex. The smallest linguistic sound segment is conventionally called a phoneme, but even a single phoneme is itself a complex construction of such features as voice, nasality, plosiveness, height, length and many others. When phonemes are combined to form larger units such as words and phrases, these units then require what are called prosodic featurespitch, loudness, and all of which to turn have something to do with how language sounds.1.

Throughout the use of this curriculum unit, it is essential for students to be active participants in listening and producing soundrelated primarily to Onomatopoeia. For a more detailed, auditory lesson, allow the students to listen to the music from Walt Disney's Fantasia on cassette tape without the colorful, visual effects of the movie. This technique will have students use their sense of hearing and focus basically on what the sound is and how the sound was created. They could listen to see if the sound they hear had a high or low pitch or if it was loud or soft. They could identify the instrument that produced the sound; drum, flute or violin. By listening, the students could try to identify what object the sound is suppose to represent; singing tulips, dancing elephants, or a waterfall. Students could also be active by making vocal sounds---a tone, and possibly matching it to a keyboard sound and identifying the note.

Students need to understand the correlation between sound and speech and how it influences they way we judge people. Within the language of Onomatopoeia, students will realize that vowel sounds and speech have tones and they repeat themselves on a regular basis. Expressive sounds such as "eek", "ah", "oh" and "whee" have strong vowel and consonant pitches. These pitches and their frequencies can be dimensionally displayed for students on a vocal register.*

Let the students speak into the vocal register, they can watch the indicator on the device and see were the sound of their voice "peaks". They'll be able to learn the frequencies and pitches that occur on the vocal register. If possible, it would be ideal to have available a musical scale chart that shows the note and its frequency when using the vocal register.

The vocal organs are where sound comes from. The vocal cords vary the tone or intensity of air that moves freely by opening and closing quickly. This nature of opening and closing gives off a vibrated sound from which vowels and voiced consonants are made. These vocal organs, which have unique and individual functions, produce a variety of consonant and vowel sounds, along with dipthongs. They each offer varied

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levels/pitches of Onomatopoeia resemblance.

Upon completion of this curriculum unit, it will be feasible for students to read and think of Onomatopoeic words. Whizz, bang, splash, thump are a few familiar examples for students to recognize, and for them to invent new ones. While there are quite a few definitions for Onomatopoeia, it is truly the name of a relationship between the sound of a word and something---keep the imagination flowing.

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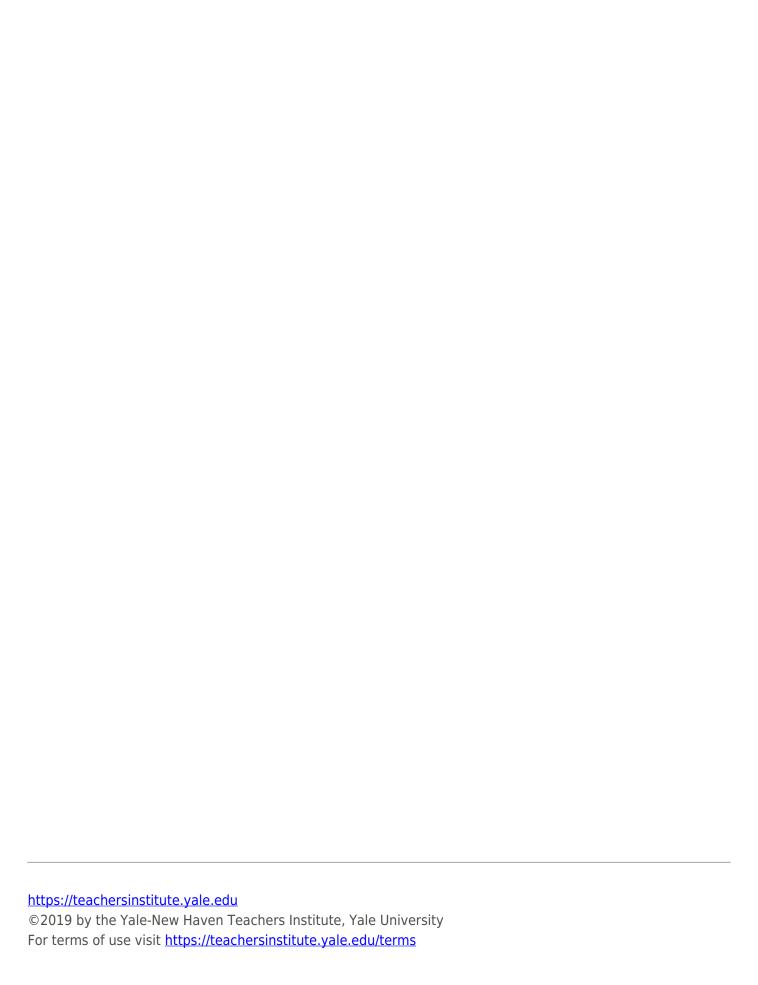
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*Radio Shack Digital Sound Level Meter-it precisely measures area noise and sound level in decibels (dB). A Speech Spectograph shows frequency (kHz)

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