Chapter 4. Grooving with the Rhythms of Language

Notice how, this sentence is particularly difficult to read because I have put in, punctuation, marks that disturb the, basic, flow of what I am, trying to, say. Whereas, when I place the punctuation marks appropriately, my ability to communicate effectively with you becomes much smoother. This little experiment provides a small indication of the huge importance that rhythm, meter, and music have in language and literacy. Although we may be aware of it only when we hear someone sing or recite poetry, or when we hear violations of the natural rhythm of language as noted above, it's still true that all the words that come out of our mouths (as well as the lines that emerge from our pens and word processors) ride upon a stream of music. To help individuals achieve literacy, it seems critically important that we acknowledge this important connection between words and music and use it as fully as we can to help our students read and write more effectively.

Some theorists have suggested that language itself emerged out of musical expression. Charles Darwin proposed that humans' predecessors "courted each other by the aid of vocal tones" (Darwin, 1910, p. 217). Vaneechouette & Skoyles (1998) theorize that communication through singing in birds, apes, and humans facilitated mating, social bonding, and other behaviors important to reproduction, and that such traits for vocal/musical communicative ability were retained by natural selection in the course of evolution. We can also observe the fundamental importance of music as a means of communication in the development of cultures historically. Before the advent of literacy, much verbal information was communicated from generation to generation through chants, rhythms, and other musical and prosodic forms. Some of the greatest and earliest literary works, including The Iliad and the The Odyssey by Homer, and the Hebrew Bible, were originally orally transmitted through rhythmic methods of recitation. The Greeks placed a great deal of importance upon metered verse in both oral and written communication, developing a whole catalogue of rhythmic forms to convey different types of moods and content. Such rhythmic underpinnings were crucial to the sense of the spoken or written passages. During antiquity and into the Middle Ages, reading was rarely silent in the way we understand it today, but rather a kind of incantation, according to McLuan (1965, p. 84).

Old English was remarkable for its alliterative qualities. Anglo-Saxon verse, for example, consisted of two parts bound together by alliteration (for example, in Beowulf: Gréndel góngan, Gódes yrre bæ'r: "Grendel walking, he bore God's anger"). As modern English began to evolve, William Shakespeare demonstrated in his 37 plays how much music and rhythm still remained in the language. For example, Shakespeare varies the rhythms in his plays according to social class (the aristocracy speaks in iambic pentameter, while the lower classes speak in prose or choppier meters). In his play A Midsummer Night's Dream, he creates rhythmic disturbances in his verse whenever the moon is mentioned, because the moon is known to create lunatics and therefore must do something similar to the flow of words. For example, notice how the iambic pentameter (ta-TA/ta-TA/ta-Ta/ta-Ta/ta-Ta) is interrupted by the words "cold moon" in this passage from Act 2, Scene 1: "That very time I saw (but thou couldst not)/Flying between the cold moon and the earth."

In contemporary times, much of the rhythmic content of the English language has been lost in the homogenization of speech rhythms (perhaps aided and abetted by the media, which excels in providing a constant drone to our assaulted ears). However, we still hear the rhythms of music stir words to life in our great orators (remember Martin Luther King Jr.'s historic "I Have a Dream" speech), and in our best writers and poets. Children's literature pioneer Dr. Seuss recalled that it was listening to the clackety-clackety-clack of the railroad moving along the
tracks during a trip that inspired the rhythms for many of his wonderful children’s books (you can almost hear that train echo in the rhythms of: “And to think that I saw it on Mulberry street”). British poet Stephen Spender wrote of how a language of music and rhythms emerged during his creative reveries: “Sometimes, when I lie in a state of half-waking half-sleeping, I am conscious of a stream of words which seem to pass through my mind, without their having a meaning, but they have a sound, a sound of passion, or a sound recalling poetry that I know. Again sometimes when I am writing, the music of the words I am trying to shape takes me far beyond the words, I am aware of a rhythm, a dance, a fury, which is as yet empty of words” (Ghiselin, 1960, p. 124).

This sensitivity to the music of words begins very early in life, perhaps even before birth. Studies show that newborns can discriminate the rhythm of multisyllabic stressed words, suggesting that they’re already sensitized to word rhythms from the mother’s voice in utero (Sansavini, Bertoncini, & Giovanelli, 1997). Mothers and other caregivers have a natural tendency to speak to infants in rhythmic, intonated, and rhymed cadences (“Such a sweetie little baby”). And infants and young children play with the rhythms of language as they begin to babble and speak. In their first literacy experiences, parents generally don’t read to a child in a monotone voice from a car repair manual or the Encyclopaedia Britannica, but rather from nursery rhymes, rhythmic stories, songbooks, and other musical-verbal forms. As young children develop in their speaking ability, they begin to create their own interesting words and phrases that reflect this musical background as well as their own emerging mental structures.

Werner (1973) writes about two young English children who contrived their own language. The word bal meant place. As they varied the intonation of the vowel, the size of the place changed. The longer they stretched out the vowel, the larger the place indicated, so that tonal variations in the same word could mean village, town, or city. Their word for going was dudu and the quicker it was said, the faster was the going, so that “Du-u-du-u” meant to go slowly. Werner also writes about children who developed their own onomatopoetic words, such as the three-and-a-half-year old who said: "Mother, we're going over nubbles" (a sidewalk made of small uniformly cut stones half-buried in the ground) and "Mother, you rhost so!" (rhost referring to the scraping sound made by shoes on gravel). As children enter school, these musical-verbal connections can help them in their acquisition of literacy. One study suggested that sensitivity to rhyme and alliteration leads to awareness of phonemes and the ability to read (Bryant, MacLean, Bradley, & Crossland, 1990). Another study indicated that those individuals best able to detect modulations, or shifts in pitch, of low-frequency sounds, prove best at reading words (Talcott et al., 2000). Some of the most recent research in the study of individuals labeled as dyslexic indicates their greatest difficulties are phonological-musical, particularly in reading rhymed nonsense words (Shaywitz et al., 1998).

Cellular circuits that recognize language and music are found on both sides of the brain, in the auditory cortex of each hemisphere (though the left auditory cortex also contains regions exclusively dedicated to language while the right cortex has areas set aside just for music). The features that music and words share in the brain include meter, duration, contour, and timbral similarity, whereas syntax and semantics for language, and musical pitch relations for music are generally not shared systems (Lerdahl, 2001). However, one study indicated that altering the intonation in verbal speech or the punctuation in reading passages also influenced the subjects’ comprehension of sentence structure and the semantic encoding of individual words, a finding that appears to support the results of our little experiment that began this chapter (Cohen, Douaire, & Elsabbagh, 2001). In studies of individuals with specific language difficulties, including stuttering and aphasia, music and rhythm have often been seen as important factors in reducing symptoms, thus allowing individuals to speak or comprehend language more fluently (see for example, Kimelman, 1999). These studies suggest that words and music do have important connections in the brain that can facilitate the processing of language and literacy.

**Putting Musical Pizzazz into Letters and Sounds**

Because research suggests that many individuals who struggle with reading have difficulty discriminating between phonemes in initially attempting to read (Shaywitz et al., 1998), then phonemic approaches that help accentuate the sounds of these phonemes may go a long way in helping many of these people acquire literacy. One group of researchers has developed a computer learning system that artificially slows down the pronunciation of these phonemes so that students can better hear the differences between them (Greenwald, 1999). Teachers can
provide less expensive and more interpersonally interactive ways of accomplishing the same thing by engaging students in activities that bring out the musical qualities of phonemes to provide a means of distinguishing between them (see Yopp & Yopp, 1997). Here is an example of a song that helps students discriminate between vowel sounds. Its initial version goes like this:

\[(G\ C\ D\ E\ /\ E\ F\ E\ D\ C\ E\ D)\]

I want to eat / Eight apples and bananas

\[(G\ B\ C\ D\ /\ D\ E\ D\ C\ B\ D\ C)\]

I want to eat / Eight apples and bananas

Subsequent versions substitute a specific vowel sound (e.g. “ee” or “oo”) for most of the vowels in the song. For example:

Ee ween tee eet / Eet Eeples and beeeneeens

Ee ween tee eet / Eet Eeples and beeeneeens

Or alternatively,

Oo woon too oot / Oot ooples and boonoonoos

Oo woon too oot / Oot ooples and boonoonoos

Another approach is to take songs that are popular with the students, print out the song lyrics, identify particular phonemes that you’d like to help students distinguish (such as “b,” “p,” and “d”) and then highlight those particular phonemes in color on the lyric sheet. Then, when singing the song, emphasize those particular phonemes by (for example) spitting out on the “p,” “b,” and “d” sounds (make sure to do this outdoors!). The supplementary use of visual cards to show placement of the mouth (as in the Lindamood phoneme sequencing program; see McGuinness, 1985) can help cue students as to how their mouths should be formed for each phoneme. Here are some other ideas:

- Use songs about phonemes that can help students become sensitive to the differences (for example, for vowel substitutions, the song, "Wiloughby Wallaby Woo" by the songwriter Raffi).
- Employ tongue twisters and alliterative verses that provide reinforcement of specific phonemic sounds.
- Have students create their own musical compositions using only phonemes in rhythmic patterns (e.g., “buh buh/puh puh/duh duh duh duh duh”).

Finally, to help students learn the alphabet, there are a wide range of songs, songbooks, and activities (see, for example, Raschke, Alper, & Eggers, 1999).

Enjoying the Delicious Music of Words

One of the most wonderful things about words is the way they sound. Cur-mudg-e-on. Hob-nob. Buzz. Rum-pus. Stomp. Fan-ta-size. Sometimes, as teachers, we get so focused on teaching students the meanings and spellings of words that we don't take time to help students sit back and just savor the delicious flavors of the sounds of words. The closest we get is when we help students syllabify words then we begin to approach words with a sense of rhythm. But often the focus is on counting the number of syllables (a logical-mathematical approach) rather than on realizing the flow of the word through our lips. As students begin to appreciate the tremendous diversity of sounds that fill our language, they are more likely to show interest in their inner workings (semantics, syntax), much as a person who begins to appreciate the music of Beethoven seeks to find out more about his life and times. Here are a number of ways that teachers can help sensitize students to the musicality of English words:

- Have students create a song or rap from this week's vocabulary list.
- Introduce students to a wide range of particularly onomatopoeic words. Let them find their own examples. Finally, let them create poetry by using these words and by making up their own onomatopoeic words.
Let students come up with their Favorite-Sounding Word of the Week.

When reading a text, take time out to appreciate the sounds of particularly interesting words. Look for authors and texts that emphasize the sounds of words. My own particular favorite is James Joyce's novel *Finnegans Wake*. Joyce creates many of his own words in this book based in part upon their delicious sound value (for example, to represent the sound of thunder, and man's fall from the Garden of Eden) he wrote: “babadalgharagh-takamminarronnkonbronntonerronntuonnthunntrovarrhouarnskawntoohoohoordenenthurnuk!” (Joyce, 1969, p. 3).

When teaching syllabification, let students use percussion instruments to tap out the syllables.

In addition to these suggestions, music can assist teachers more directly with word meaning and spelling in some of the following ways (see Prichard & Taylor, 1980):

- Have students sit back with their eyes closed and listen to some slow and regular piece of music (for example, any classical piece in 4/4 time, such as the Largo from Handel's opera *Xerxes*, or Pachelbel's Canon in D). Then, repeat the week's vocabulary words and their meanings slowly in time to the music.

- Teach spelling words to the sound of music. For example, any seven-letter word (or multiple of seven letters) can be sung to the tune of "Twinkle Twinkle Little Star" (for example, "S-n-i-p-p-e-t, s-n-i-p-p-e-t . . ."). For six-letter words, use "Happy Birthday to You," for five-letter words use "Row, Row, Row Your Boat," for four-letter words, "The Happy Wanderer," for three-letter words, "Three Blind Mice."

- Spell words rhythmically to a metronome, to background music, or to percussion instrument sounds created by the class.

**Making Sentences Move to Music**

Any sentence can become the lyrics of a piece of music or a rhythmic chant, including this one. Try it! Knowing this simple fact can turn a boring grammar lesson or other literacy lesson using single sentences into a musical or rhythmic festival! Here are some ways to make music a part of grammar lessons:

- Chant individual sentences with the student or class, using a drum or other percussion instrument to bang out the rhythms.

- Sing popular songs, but change the syntax to reflect the objectives of the grammar lesson (for example, to learn verb tenses, sing "Michael Rowed the Boat Ashore," "Michael Will Row the Boat Ashore," "Michael Has Rowed the Boat Ashore," "Michael Would Have Rowed the Boat Ashore," and so on).

- Teach adjectives using rhythmic chanting based upon an old British social game called “The Minister's Cat” (an example of this game being played is shown in the movie *Scrooge* with Albert Finney). Participants sit in a circle and begin clapping their hands in a regular beat (not too fast at first). Then the person to start says in time to the beat: "The Min-is-ter's Cat is a lov-a-ble beast." Without missing the beat, the next person must continue this rhythm with a different adjective: "The Min-is-ter's Cat is a cap-a-ble beast" and so on down the line. Anyone who fails to keep up the beat drops out, with the game resuming until only one person is left. This basic structure can be made simpler (with one- or two-syllable adjectives) or harder as needed to suit the particular group of students.

- As a class, read sentences out loud (the students should have written copies of the sentences in front of them). As each punctuation mark is reached, students should make a specific sound (e.g., commas might be “pops,” and periods might be "Bronx cheers") to represent that mark (the musical comedian Victor Borge used this method in his comedy routines).

One particular movement that has accomplished a great deal to bring together rhythm, music, and language is the Orff-Schulwerk approach. A basic tenet of the Orff-Schulwerk approach (*schulwerk* is German for schoolwork) is that students should begin with their own speech and song heritage—rhymes and proverbs, children's chants and games, and song. Much is done with musical patterns linked with verbal phrases, often using percussion.
instruments that have been specifically designed for this work (see Nash, 1974; Shamrock, 1986).

**Making the Text Come Alive with the Sound of Music**

When I taught special education classes in California in the 1980s, I often began my classes with music and words. Students would come into class and see the lyrics to a song on their desk. Usually it was a song that was based upon their own kid culture. I knew, for example, that my students loved the television show “The Dukes of Hazzard,” so one day the lyrics for the theme song of that program, written by Waylon Jennings, were waiting there for them to read and sing. These song lyrics became text, with as much validity as the text in their basal readers, in their library books, and in their special education materials. In fact, it had more validity because it had more *vitality*. I was disappointed at the time to see that only one formal reading program was based upon song lyrics. The program was limited to Donny and Marie Osmond songs.

Today, a search of the educational databases indicates no reading programs based primarily on music and song lyrics. Why is this so? Perhaps they would be too expensive to produce (with money required to reprint song lyrics and recorded music). However, I also think that part of the reason is that there is the sense in education that music is a frill and that, aside from small doses of it in cute little songs and rhymes, formal reading programs are much too serious to be bothered by this kind of creative nonsense. And yet, for the highly musical individual who struggles with reading using traditional methods, such a program might well be the magic key that gives them access to the world of literacy. Because there isn’t a formal reading program based solely on music, the next best thing is for teachers to create their own informal methods for exploring text using music as a primary learning tool (for excellent resources see, for example, Rivard & Bieske, 1993; Wallace, 1992; McCracken & McCracken, 1998; Paul, 2000; Fisher, McDonald, & Strickland, 2001; Fisher & McDonald, 2001).

A good starting place is to pay attention to the music that is "playing" in a text. It's amazing how often music, or musical sounds, or references to music, take place in literature and nonfiction works. Look for musical metaphors, such as when Rosalind says in Act 4, Scene 3 of Shakespeare's *As You Like It*: "What, to make thee an instrument and play false strains upon thee! not to be endured!" Students can play around with such a metaphor—for example, a person might hold a violin while someone else comes up to them with a bow and plays dissonant sounds as they speak Rosalind's line. Also, look for music being played in the background of a text, and then find some recorded music that reproduces these sounds. I remember teaching S. E. Hinton's novel *That Was Then, This Is Now* to a group of high school students, and there was a scene where some popular music was being played. I asked the students if they had any recorded music we could use to recreate this scene, and at least 10 students immediately took out cassette tapes and CDs from their bags and purses! If specific pieces are played in the background of a text, or the characters refer to a specific musical work, it can accentuate the experience of reading to bring in that piece to supplement the text. There is, for example, a CD recording of well-known Irish songs that appear in various pieces of James Joyce's writing (*Joyce's Parlour Music: 13 Songs of the Time* available through Maginni Enterprises, 24 Vernon Street, Dublin 8, Ireland).

Also, look for environmental sounds in texts, such as rain falling, the wind blowing against the trees, or the sound of an avalanche. These sounds can be recreated using sound effects made by the students, or by using sound effects tapes borrowed from a public library or imported from the Internet. In fact, a class might even create a sound effects library of materials to use in putting on plays or in providing sound effects during the reading of other texts. Sound effects can also be a useful way to help students remember the sequence of key events or passages in a story. In my work with teachers, I often ask them to help me re-create a five-part story using background sound effects:

**Part 1. It was a dark and stormy night.** ("shhh. . . krrr. . .")
**Part 2. There was a knock on the door.** ("knock, knock, knock")
**Part 3. A shot rang out.** ("Bang!")
**Part 4. A cry was heard.** ("Yeek!")
**Part 5. It was the opera lady.** (Laaa!)
We practice each part with the audience providing the sound effects appropriate to each scene. Then, after going through the five parts verbally, I signal for the group to tell me the story nonverbally through the sound effects (“shhh... krrr... knock, knock, knock... Bang!... Yeek!... Laaa!”) Teachers can do the same thing for more complex stories, novels, or other narratives to help students remember the flow of the plot or the development of a character. One might, for example, tell the story of a specific character’s rise and fall using percussion instruments. Many famous symphonic works were written with the idea of creating a story. Beethoven’s *Pastoral Symphony* loosely tells the musical story of a group of peasants out for a picnic in nature until a storm interrupts their festivities. Hector Berlioz tells Shakespeare’s most famous love story in his symphonic poem *Romeo and Juliet* (the clashing of instruments parallels the feud between the Capulets and the Montagues). Here are a few other strategies that can help put the musical pizzazz back in reading and writing:

- Have students keep Musical Response Journals where they write about their experiences listening to different musical pieces (Kolb, 1996).
- Select text that is especially rhythmic and read it out loud. Great examples include poems and stories by Edgar Allan Poe, Lewis Carroll, Samuel Taylor Coleridge, Ogden Nash, and Dr. Seuss.
- As a text is being read out loud, have students listen to the rhythms and comment on their experiences (for example, differentiating between texts that have smooth versus choppy rhythms).
- Let students write song lyrics as part of their regular writing activities.
- Take text that is especially boring (such as textbook material), and as a group rhythmically chant it out loud as if it were a musical work being performed in a symphony hall.
- Get software programs (such as karaoke software) that allow students to sing a song while they read the lyrics on screen.
- Use dialogue in text as an opportunity to play around creatively with rhythms, dialects, and intonations.

**Books and Other Literacy Materials for the Musical Learner**

Stock your literacy or reading program library with books and other literacy materials that reflect musical themes in some way*works that would be likely to draw in a word-phobic person who has lively musical interests. Songbooks top the list, ideally with recordings available to support them. For younger children, song picture books such as *Eat Your Peas, Louise!* by Pegeen Snow, provide rhyme, rhythm, and repetition of vocabulary and story structure to reinforce literacy skills (Barclay & Walwer, 1992). There are also books that include embedded computerized keyboards along with a color-coded notation system and lyrics to the music*so that readers can read and play the music all within the covers of one book. Another group of books come with musical instruments attached in a bag, such as John Gindick’s *Country & Blues Harmonica for the Musically Hopeless* (Klutz Press). There are also books that include musical themes in their content, such as Bernardine Connelly’s *Follow the Drinking Gourd: A Story of the Underground Railroad*, which is based on the traditional folk song ”Follow the Drinking Gourd.” Finally, any musical literacy library should include plenty of poetry (including recordings of the poets reading their work out loud), as well as other books and programs that include songs, rhymes, rhythms, raps, alliteration, and other ways of making the words come alive with the sound of music.

**Musical Literacy Styles**

The writer Hart Crane used to write on his typewriter while playing phonograph records of Cuban rumbas, torch songs, and classical works such as Maurice Ravel’s *Bolero* (Ghiselin, 1960). His writing habits suggest one way that educators might treat highly musical individuals when they are engaged in literacy activities: allow them to listen to music when they read and write, and let them select the music whenever possible. Research suggests that music can help focus certain individuals, such as those identified as having attention deficit hyperactivity disorder (see Cripe, 1986). Provide students with the freedom to sing, hum, or talk out loud as they read or write if they need to. Some highly musical readers and writers may want to tap their fingers, move their feet rhythmically, let their body rock, or in other ways groove to the words they are reading or writing. Again, provide an environment that is conducive to this activity. The silent classroom, while considered an exemplary model to
many school administrators, may not provide the proper atmosphere within which certain musical individuals can adequately develop their literacy skills. Consider providing a rocking chair, hammock, or other rhythmic place to relax in while engaged in reading. Ideally, a literacy program should, at least part of the time, be rockin' the aisles with the music of words!

**For Further Study**

- Put on a poetry slam or songwriting contest where students can write and perform their work before a supportive audience (see Glazner, 2000).

- Develop a music program based upon favorite songs of the students in the classroom. Select vocabulary words from the lyrics, create phonics lessons based upon selected words, and help students plot the sequence of the story (if there is one) for each song. Let students write alternative lyrics to the songs, and develop other reading and writing skills based on this material.

- Create a song or chant based upon the 44 phonemes of the English language (or some judicious selection of phonemes based upon the phonological needs of individual students) and teach it to your class.

- Surprise your students one day by singing or chanting a text that you are reading to them. Have students share their reactions, and use the discussion as an opportunity to talk about the music of words.

- Develop a list of "programme music" (instrumental works such as Berlioz's *Symphonie Fantastique* or Beethoven's *Pastoral Symphony* that tell a story) to play to your class. Play Prokofiev's *Peter and the Wolf* along with the verbal commentary by Leonard Bernstein (*Bernstein Favorites: Children's Classics*, Sony). Then invite your students to create their own musical stories using simple musical instruments.