

## Celebrate Poetry Through Science Content: 3 Easy Lessons

By [Carol I. Bearse](#)

For the past 30 years I have been an ESL teacher, a literacy specialist, a dual language coordinator, a poet-in-residence, and a university professor. While working in these roles, I have used poetry as a vehicle to enrich the vocabulary and observation skills of my English language learners. The new emphasis on the Common Core State Standards has renewed the focus on teaching rich vocabulary, close reading, and analytical skills; poetry lends itself to work within units of study that integrate science and the arts.

I have used the following three lessons with intermediate ELs as well as mainstream students. The lessons revolve around animal studies, ocean studies, and botany, but can be used in any area of science study. Depending on the grade level, all lessons can be adjusted for length and requirements.

### Assessment

Here is a simple rubric that can be applied to these lessons. For different levels of language learners, the rubric can be adjusted and individualized without losing the science content:

**Science Content:** 5 specific details, 5 related facts; 10 line minimum

**Figurative language:** 2 metaphors or similes, and 2 uses of personification

**Rhythm:** Use of repeating line and/or repeating sounds

**Word Choice:** 3 vivid verbs, 3 specific nouns, 3 specific adjectives

**Mechanics:** Spelling and punctuation

### Getting Started

These kinds of lessons are best used within units of study where students can research their favorite topics. Brainstorming vocabulary on large wall charts or classifying vocabulary using index cards are ideal ways to begin a lesson. Use of photos, paintings, and video add to the background knowledge of students as well.

I have found it best to teach one or two elements of poetry at a time and then introduce a specific pattern that could be based on a model poem. Modeling this poem several times is crucial to success.

### The Poems

#### Riddle Poems

A kind of simple seven-line poem that students love is a riddle poem based upon science facts. For example, the following poem by a sixth grader describes a sea creature:

*My body is flat-shaped (shape of body)  
I live on the seabed (where does it live?)*

*My family's location is near the coast of South Carolina. (specific location)*  
*My prey includes shrimp, (specific animal's prey)*  
*Mollusks and other animals.*  
*I have a brassy brown color and a long tail. (color and shape details)*  
*Who am I?*

Notice that in this poem each line requires specific science content that guides the students to create a successful writing piece without struggling with an essay or a long research report. This will come later after the students have acquired a strong vocabulary and observational/analytical skills.

### **Persona Poems**

A variation of the above poem can be written as a persona poem. In a persona poem, the poet writes in the first person as though he or she is that object being personified. The same line pattern and requirements can be used.

*I am a King Angelfish, known as the*  
*Blue-banded, the king of all angelfish.*  
*I live in the Red Sea.*  
*And also in the Indo-Pacific water.*  
*My colors are white, brown, black, purple, red, and blue.*  
*I only eat small worms and algae.*  
*My gill plate cover with is long spine for protection from predators*  
*I am King Angel, the king of all angelfish.*

### **Learn to Be Poem**

One last kind of variation of becoming a scientific object is called a learn to be poem. (McKim & Steinbergh, 1992). Using the same kind of specific language that is gained from content area study, which are mainly Tier 2 and Tier 3 vocabulary words (Beck, McKeown, & Kucan, 2002), learn to be poems are perfect for the science or language arts classroom. Teachers from different disciplines can collaborate and contribute to the knowledge of the content, while the ESL coach or teacher can help with the actual writing of an appropriate pattern.

I have used the poems, "How to Tell a Tornado" by Howard Mohr, "Thirteen Ways of Looking at a Blackbird," by Wallace Stevens, and "(from) In the Root Cellar" by Maxine Kumin as model poems for this lesson.

Here is an example of a learn to be poem from an eighth grader to get your lesson started:

*To Be Seaweed*  
*To be seaweed you have to learn to sway gracefully in the smooth ocean current.*  
*To be seaweed you have to be able to smell of the sweet salty ocean air.*  
*To be seaweed you have to find your wet home to the sandy shore.*  
*To be seaweed you have to feel as slippery as an eel and look like one too.*  
*To be seaweed you have to keep it afloat in Japanese tea.*

*To be seaweed you have to be grand enough to top the largest and fanciest of all sand castles.  
To be seaweed you have to slip away from a young child's grasp, so as to preserve your life.  
To be seaweed you have to learn to keep alive as you are transferred from your outstretching home and be set down in an aquarium.*

Remember, poetry is the perfect vehicle for writing in science and for enriching students' content area vocabulary as well as descriptive language. So, this spring, take a chance with poetry in the content areas. Add spice to your teaching and enjoy.

## References

Beck, I., McKeown, M., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: the Guilford Press.

McKim, E. & Steinbergh, J. (1992). 2<sup>nd</sup> Edition. *Beyond Words: Writing Poems with children*. Brookline, MA: Talking Stone Press.

---

[Carol I. Bearse](#) is an ESL/literacy consultant who has more than 30 years of teaching experience in various contexts. She specializes in integrating the Common Core standards of vocabulary enrichment and reading analysis with the principles of SIOP.

Note: Every effort has been made to contact the copyright holders for permission to reprint borrowed material. We regret any oversights that may have occurred and will rectify them in future printings of this work.