Sounds like Science

A Community in the Classroom Presentation for Grade 2

Rebecca Roberts
Radio Reporter

STANDARDS CONNECTION

Grade 2 Physical Science: Sound is vibration and can be described by pitch and volume.

INSPIRATION AND INVOLVEMENT

Rebecca works in the world of sound everyday as a radio reporter. She brings her enthusiasm and knowledge of the topic to the classroom. She will discuss sound waves and how they move differently based on pitch and volume. The class will read the book *Too Loud Lily* together and provide the sound effects.

VOCABULARY

Vibration, pitch, volume, waves

LEARNING EXPERIENCES

Demonstration/Activity: Students will think about sound and how we describe it by listening to and making a variety of noises as a group. Students will use their arms to model the shape of different sound waves based on pitch and volume.

Activity: Students will work with Rebecca to supply provide sound effects to produce a radio drama of *Too Loud Lily.* Rebecca will bring different every day items to help make the appropriate sounds.

Discussion: After exploring, we'll talk about what they observed and what sound is. The students will review the shape of different sound waves based on their pitch and volume.

I'm a radio reporter. Why am I teaching science? What do you do with a radio? Smell it? Taste it? Radio is sound, sound is science. We'll do three things: talk about how sound works, then we'll listen to some sounds, then we'll make a radio show.

Can you hear me in back row? Don't have to touch to hear. Hear me around corner? Don't have to see to hear.

When you make a noise, air is disturbed, like rock in a puddle. Vibration makes wave. Wave travels to your ear. Put your hand on your throat when you say your name – something is vibrating to make the sound. What vibrates when a guitar plays? When you whistle?

Not all sounds are alike. Wave is shaped differently. We have low sounds and high sounds, called PITCH. Pitch changes depending on how fast the vibration is: male voice vs. female voice, bee vs. mosquito.

We also have loud and soft, called VOLUME.

Loud, low sounds make tall long wave FOGHORN
Loud, high sounds make tall tight wave SIREN
Soft, low sounds make short long wave WIND
Soft, high sounds make short tight wave SPARROW

Listen to the sounds and make the shape of the wave with your hand.

Okay, now we know about different sounds and how to recognize their differences. Let's make some radio. What do you hear on the radio? Music, DJ's, news. Also something called radio drama, like a play or a movie without pictures. Tell a story, and add sounds to it.

TOO LOUD LILY. Read story once, then go through and name sounds. Find good objects to make sounds, assign sounds to children. Some will have sound effects (rain, thunder, stomping) others will be "chorus" and make human sounds (clapping, breathing, laughing, roaring).

Read story again, with sound effects. Record?