



Integrating science, art, and music using technology.

Our 5th grade class was doing a science unit on energy including sound, electricity, magnetism, and light. The central theme of the sound lessons is “sound is energy we perceive with our ears.” One of the students mentioned how annoying a particular sound was to him. Because different people perceive sounds in a different way, they can have emotional reactions to different sounds.

Music can evoke emotional reactions too. Music also displays several other characteristics of sound such as volume, pitch, and tone. So music can be used to reinforce several concepts in science.

As part of a rotating stations/center lesson in science I used 6 iPod shuffles at a table. Each iPod had a different style of music on it: classical, rock, R & B, African, techno, and jazz. Students were instructed to listen to the music for a few minutes and draw what they felt as they listened. They could also draw a place the music suggests, or the instruments they hear in the music.

The drawings are great and several of the students really interpreted the music well in the drawings. The lesson integrated science, art, and music and tapped the spatial intelligence as well as the musical intelligence addressed throughout the unit.

The technology:

I used 6 iPod shuffles and six pairs of dollar store headphones. The in-ear style headphones that come with the iPods would not be as sanitary as the over the ear style headphones that I used. Instead of charging each iPod separately, I used a powered USB hub and had all 6 plugged in at once. iTunes was able to handle having all six at once and I named and numbered each one. I marked the back clip of each iPod with a Sharpie. Each unit can be programmed to have a different playlist in iTunes that loads music.