

## Workshop Proposal

### Electronic Music

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#### Session Overview

##### 1-3 graders

This course is for classes of 8-10 students. The group will experiment with various electronic sound-producing circuits. These will include a capacitance-sensing circuit (students complete the circuit with their bodies, thereby producing sound), a simple noise generator, and a simple oscillator. Students will be asked to identify how this sound is different from their normal environmental sounds, and which acoustic sounds would blend well with the electronic sounds. Using both the electronic instruments and acoustic sounds, students will perform an “instructions” piece whereupon they are given direction outlining a predetermined composition. Discussion will follow.

##### 4-6 graders

The class begins with a discussion of feedback. Each group of 3 students receives a “feedback box” (a box containing a feedback circuit), a noise generator, and an oscillator. Students will explore various ways of controlling the pitch and volume of the feedback by changing the shape of the enclosure—covering the holes, stuffing paper inside the box, etc—and how these sounds blend and contrast with those produced by the other “instruments.” The class will briefly discuss how the physical properties (size, shape, etc) of an enclosure or room affect its acoustics, and search for real-world examples. The students will then perform an instructions piece whereupon they are given direction outlining a predetermined composition. They will use the electronic circuits and find complementary acoustic sounds to perform this piece.

The session will culminate with a performance of new electroacoustic works for flute and electronics.

**Key Elements:**

Heightened awareness of the likenesses and differences between electronic and acoustic sound

Insight into physical acoustics

An awareness of sound and silence and their equal values

Following instructions to create music

**Budget:**

Materials: \$200

Travel: \$250

Fee: \$1050

Total: \$1500