

Program Overview

Music Technology in the Classroom

In the Music Technology program, students learn to operate and create music on the Digital Audio Workstation (DAW). Taking a compositional approach to teaching music — from the latin *componere*, "to put together, to collect a whole from several parts" we facilitate the process of music creation in its entirety: From the technical instruction of the tools themselves, to the revisioning and refining of their completed works.

Through this process, students engage in the many questions that arise from creative expression: How can my musical form support emotional content? What elements of my music are intrinsic and what are relational? Where does my music fit in relation to my peers, the broader culture, and the whole of music history?

The learning indicators in much of early music education have so often been limited to motor skills and memorization. We aim to stimulate the range of muscles and emotional connections involved in music creation, and weave young voices into the fabric of the musical landscape today.

Key Concepts

The Voices of the Chorus

From synthesizers to sampling, effects processing to the incorporation of non-musical sounds, the sonic landscape has been blown wide open by the advent of personal computers. Students engage with an array of new sounds as they learn to make them work together.



Peeling the Layers

The DAW allows students to peek under the hood to reveal the detailed mechanisms of musical compositions. The internal workings of a drum groove, the harmonic rhythm of a bass line, the character of a sound effect; students learn that musical motion is a result of the coordination of these different layers.



Music is Malleable

How do we create a captivating beginning? A memorable climax? From proportioning out musical form to quantifying musical contrasts, students freely apply transformations to their music. Through the process, students cultivate a relationship to their own music as both a technician and artist.

Critiquing and Refining

Once the students had the opportunity for thorough creative exploration, they rigorously critique and refine their completed works. Through assessing mistakes through degrees of audibility, exploring artistic vs. technical excellence, and justifying musical decision making, students are offered a chance to hear their own works in a new light. Additionally, they learn to view their own work in relation to their peers, the cultures from which it was derived, and the whole of music history.

Topics

DAW Basics

Navigating the user interface of the DAW. Setup of signal sources and their destinations.

Sampling & Audio Manipulation

Walkthrough of the audio recording process. Exploring the different techniques of audio manipulation and its musical application.

Filtering & Modulation Effects

Survey of various filtering and modulation effects and its musical application.

Drum Programming

Exploring individual drums, and walkthrough of a basic drum groove programming. Technical and aesthetic consideration to manipulating tempo.

Bass & Chordal Programming

Navigation of a piano keyboard, development of beginning keyboard skills. Basic ear-training and eye-training.

Scoring to Picture

Music composition to a video clip. Consideration to the interaction between picture and sound.

Flipped Learning

The program utilizes the power of the digital age: All technical instruction as well as any assignment details, are presented in video/PDF online, and are reinforced in-person.

We use Soundtrap, a browser based DAW service, in our program. Soundtrap is accessible on the DOE issued iPad and laptops without the hassle of third-party app installation, and can also be accessed through any other devices students may have at home. This format is optimized for easier file sharing, management of versions, and allows for music class to spill outside of the school hours.

The use of technology brings back the focus to where it is most important — the time spent with the teaching artist. In-person instruction can now be maximized for feedback, rich discussions, and open ended experimentation.

Tech Specs:

DOE issued iPad or Laptop.

Soundtrap Education (www.soundtrap.com/edu) \$4.98 per seat per year

Minimum bandwidth 20Mbit per active classroom

Speakers and projection system/smartboard in classroom

Minimum: iOS 9

Recommended: iOS 13 or higher