

TEACHING GUIDE

Activity 2: Grades 5-8
Creative Notation

There are all sorts of ways to create music using electronic tools. Some high-tech methods require the composer to wave hands or move body parts to control the selection and attributes of sound. A more traditional approach uses Hyperscore, a PC application that allows both children and non-musicians to create music. By selecting textures, shapes, and colors, the composer identifies elements of musical material. The software then integrates these elements and creates a musical composition - one significant enough to have been played by the Berlin orchestra.



This activity page will offer:

- An opportunity to understanding musical notation
- An arena in which to use creative thinking skills

Creative Notation

Most people are familiar with standard musical notation. Some people, especially guitar players, may also be familiar with tablature, or tab for short. In this activity, you'll have the chance to go beyond these traditional representations and create your own method of musical notation .

Materials

- Paper
- Variety of markers
- Assortment of art materials
- Music samples
- Playback device (tape recorder, CD player, computer, etc.)

Steps

1. Think of any one note. In your mind, have that same note repeat every second. Now, draw a shape and/or pattern that would communicate this repeating note. Be creative in your use of colors, shapes and patterns. You can even use art materials and create a 3D representation of this sound pattern.
2. Now, think of a slightly higher note playing the same pattern. Based upon the language you are developing, write down the musical notation

for this note pattern.

3. Think of a third note, much lower than your original note. It too plays the one-second pattern. How would you communicate the pattern of this lower note?
4. Now, let's bring all three sounds together and have them play the same repeating pattern. How would you represent this? Can you think of any shortcuts or icons that might effectively communicate this music?
5. Think of the tune "Jingle Bells." Using the language you are creating, write down the patterns and symbols that would communicate this tune. Remember that notes are not only different in pitch, but they also differ in duration. Make sure these differences are communicated in your language.
6. Suppose a bass drum joined the melody instrument. How would you add a drum beat to your musical notation?
7. Suppose another instrument joined in, but played the same melody an octave higher. How would you represent this in your notation?
8. Keep increasing the complexity of your musical creation. As it expands, extend your set of rules and representations to compile a language that can communicate all of the elements of this musical composition.

Questions

1. In standard notation, how is a note's pitch represented?
2. What kinds of tools and strategies might expand the communication of standard musical notation?
3. What are the advantages and disadvantages of standardized notation?

Tablature

Obtain a guitar or other string instrument. Compare and contrast the appearance of standard musical notation for guitar with guitar tablature. Which type of notation visually represents the guitar fingerboard? Explain. What are the advantages and disadvantages of tab? Once you are familiar with tab basics, create a guitar tab for a simple original melody composed on guitar.

A Language of Dance

Could you create a language to communicate dance and movement? Begin with a basic walking step. How could you record this on paper? How might larger, smaller, softer or stronger steps be communicated? Change the step. Skip. Hop. Spin. Jump. Add more dancers. Have your performers move individually and then in unison. As you expand the choreography, extend your language to include all of the elements of your dance composition.

Operational Definition in Music

Using a piece of software such as Hyperscore, compose a musical piece that suggests the contention between traditional instruments and hyperinstruments. Identify themes and melodic motives that are associated with instruments and contrasting playing style. When the piece begins, use your musical language to identify the basic sounds and instruments. As it evolves, integrate the rivalry of styles. As a finale, build the composition into a

crescendo in which the styles compete head-to-head. Which style of music survives? As the composer, you get to select the winner and communicate the victory.

Web Connection

Brain Opera

<http://brainop.media.mit.edu/>

A site that explains the brain opera

Hyperscore

<http://web.media.mit.edu/~egon/>

[developing/mit/hyperscore/](http://developing.mit.edu/hyperscore/)

The Hyperscore program and information. It only plays on PCs with a MIDI sound card and Direct3D graphics acceleration.

Introduction to Standard Musical Notation

<http://www.people.fas.harvard.edu/>

[~desmith/guitar/notate/intro.htm](http://www.people.fas.harvard.edu/~desmith/guitar/notate/intro.htm)

A primer on standard musical notation

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**Questions**

1. In standard notation, how is a note's pitch represented?
(By its vertical placement on a musical staff.)
2. What kinds of tools and strategies might expand the communication of standard musical notation?
(Accept all reasonable suggestions such as colors, additional shapes, designs and positions, a 3D staff, tactile elements, etc.)
3. What are the advantages and disadvantages of standardized notation?
(It is helpful in communicating musical concepts to a wide audience. However, it may be limited, less creative, and kludgy in how it presents some musical concepts, especially when applied to hyperinstrument compositions.)

CURRICULUM LINKS**Technology :**

Music notation symbols

Notation technology and software

NATIONAL SCIENCE STANDARDS (Grades 5-8)**Science in Personal and Social Perspectives - Content Standard F**

Students will examine the influences of technology on society.