



Young Audiences of Massachusetts

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MASSACHUSETTS CURRICULUM FRAMEWORKS CONNECTIONS

Gideon Freudmann: *Sound Science*

<i>Language Arts 9</i>	...identify the basic facts and essential ideas in what they have read, heard, or viewed.
<i>Arts-Music 1</i>	Singing...sing, alone and with others, a varied repertoire of music.
<i>Arts-Music 3</i>	Playing Instruments...play instruments, alone and with others, to perform a varied repertoire of music.
<i>Arts-Music 4</i>	Improvisation and Composition...improvise, compose, and arrange music.
<i>Arts-Music 5</i>	Critical Response...describe and analyze their own music and the music of others using appropriate music vocabulary.
<i>Arts-Music 6</i>	Purpose and Meaning in the Arts...describe the purpose for which works of dance, music, theatre, visual arts, and architecture were and are created.
<i>Arts-Music 8</i>	Concepts of Style, Stylistic Influence, and Stylistic Change...demonstrate understanding of styles, influence, change.
<i>Arts-Music 10</i>	Interdisciplinary Connections...apply knowledge of the arts to the study of English language arts, foreign languages, health, history, and social science, mathematics, and science and technology/engineering.

Gideon Freudmann: *Sound Science*

Grade levels: 2-12

VOCABULARY:

Adagio - A tempo having slow movement; restful and at ease

Allegro - A direction to play lively and fast

Canon - A musical form where the melody or tune is imitated by individual parts at regular intervals; the individual parts may enter at different measures and pitches and the tune may also be played at different speeds, backwards, or inverted

Chord - Three or four notes played simultaneously in harmony

Forte - A symbol indicating to play loud

Harmony - Pleasing combination of two or three tones played together in the background while a melody is being played

Measure - The unit of measure where the beats on the lines of the staff are divided up into two, three, or four beats to a measure

Piano - An instruction in sheet music to play softly

ABOUT THE PERFORMER:

Gideon Freudmann, creator of CelloBop, performs throughout the US and has been featured at the Montreal International Jazz Festival and the Prague Swing Jazz Festival. He has composed music for film, theatre and dance, and selections from his 12 CDs are frequently heard on NPR. Gideon presents master classes and educational concerts at universities and secondary schools across the country, and is a Parents Gold Choice Award winner. A classical musician by training, Freudmann earned a Bachelor of Fine Arts degree in Cello Performance from the University of Connecticut. Gideon Freudmann's mastery of classical cello combined with his skillful use of electronics introduces students to the cello history and construction, offers a wide variety of musical styles from classical, folk, pop and jazz and salutes the joy of music making. For more information on Gideon Freudmann, please consult his website: www.cellobop.com

ABOUT YOUNG AUDIENCES:

Founded in 1962, Young Audiences has served as the vital link between Massachusetts' best performing artists, arts organizations and the region's school children. Young Audiences has more than 110 teaching artists who are not only nationally and internationally recognized in their field, but have the passion and expertise to work with and inspire children.

Young Audiences of Massachusetts is one of the state's leading nonprofits focused on providing students with access to quality arts programs. Driven by our mission – to initiate life-long involvement in the arts by making them integral to every child's education – arts education is all that we do, and we are the one place where you can do it all. We offer programs in music, theater, dance, storytelling, and visual arts in the form of on-location performance assemblies, workshops, residencies, and professional development seminars. We are proud to provide countless customizable arts programs to schools and students state-wide.

POST-ACTIVITY: VISUALIZING MUSIC

LEARNING GOAL:

To show the breadth and flexibility of the instrument and its infusion into various musical arenas

MATERIALS/PREPARATION:

Musical excerpts
CD/Tape player
Drawing materials (paper, markers, etc.)

TIME:

45-60 minutes

STEP 1:

Discuss reactions to Gideon Freudmann's performance. What was surprising? What was particularly interesting? Did any musical selections seem familiar or remind students of a particular piece of music?

STEP 2:

Play a variety of musical excerpts for the students. Ask the students to close their eyes and listen to the music.

STEP 3:

Repeat the same musical excerpts. This time, ask the students to write down a list of words that the music brings to mind. Encourage the use of descriptive words.

STEP 4:

Use the list of words to draw sketches of images that could be associated with the music. Write a paragraph about what the music expresses and what emotions are felt.

STEP 5:

Share the writing and sketches with the class. Make note of similarities in the reactions to the music.

EXTENSIONS:

1) **Play** a piece of classical music. Have the students create a story that would go along with the music. Include characters, setting, and plot.

2) **Brainstorm** familiar stories that share similar plot, characters, themes, or settings with the musical examples listened to in class that could be related to the music.

(Examples: Romeo and Juliet, Hercules, Hamlet, Trojan War, Beauty and the Beast, Aladdin, Iliad and the Odyssey)



PRE-ACTIVITY: SECTIONS OF THE ORCHESTRA

LEARNING GOAL:

To introduce the history and construction of the cello and other orchestral instruments.

TIME:

45-60 minutes

TIPS FOR THE TEACHER:

*Ask students who are studying music to provide demonstrations to the class

* Brass instruments:

trumpet, trombone, tuba, french horn

* Woodwind instruments: piccolo, flute, clarinet, oboe, bassoon, saxophone

* String instruments: viola, violin, cello, stringed bass

* Percussion instruments: drums, piano, xylophone, timpani

STEP 1:

Ask students if they have ever seen an orchestra perform. What are the instruments in an orchestra? Where do they perform?

STEP 2:

Divide students into groups and assign each group a section of the orchestra to study. Include strings, woodwind, brass, and percussion.

STEP 3:

Ask each group to brainstorm a list of instruments in their assigned section. Share the list with the class, and see if any more can be added to the lists.

STEP 4:

Assign each student an instrument to research. Find out about its origin, how it is played, what kind of sound it makes, etc.

STEP 5:

Have students present their research to the class. Encourage the use of pictures and sound clips.

EXTENSIONS:

1) **Play** sound clips of musical instruments and see if the students can identify the instrument used.

2) **Research** the chosen instrument in terms of its use in different cultures. How has the instrument evolved in various countries? Present findings in an oral or written report.





Young Audiences of Massachusetts *Educational Materials*

Please forward to teachers

12/10/10

ABOUT THE PERFORMANCE

Gideon Freudmann: *Sound Science*

Grade levels: 2-12

Sound Science is an energetic and enlightening examination of where art and science intersect. Demonstrating the tonal qualities of both the acoustic and electric cellos, Gideon explains the mathematical aspects of music such as how music is divided into beats, measures and phrases, and acoustic qualities including sound vibrations, pitch, and timbre. Using the electric cello and real-time digital effects, he shows how notes can be echoed, repeated, distorted, and augmented in many exciting and unexpected ways.

LEARNING GOALS:

1. To introduce the history and construction of the cello and other orchestral instruments.
2. To expose listeners to the artistry of the cello from classical music to technologically enhanced improvisational pieces.
3. To show the breadth and flexibility of the instrument and its infusion into various musical arenas.

PRE-ACTIVITY SUMMARY: *Sections of the Orchestra*

What are the instruments in an orchestra? Where do orchestras perform? Divide students into groups, and assign each group a section of the orchestra to study (i.e strings, woodwind, brass, and percussion). Ask each group to make a list of instruments in their assigned section. Have each student select and research one instrument, and then present their research to the rest of the class.

POST-ACTIVITY SUMMARY: *Visualizing Music*

Discuss Gideon Freudmann's performance. Did any musical selections seem familiar or remind students of a particular piece of music? Have students listen to a variety of musical excerpts. As they listen, ask students to write down words the music brings to mind, draw sketches of images, and write a paragraph about what the music expresses to them. Have students share their writing and sketches.

CURRICULUM LINKS:

English Language Arts, Multicultural Studies, Music, Science and Technology