



Sound of Nature

Teachers Guide and Resource Materials

Symphor!a
THE ORCHESTRA OF CENTRAL NEW YORK

Composers have been touched and inspired by nature throughout the ages. This program, which will be presented in the intimate 500-seat Carrier Theatre in the Civic Center, will include excerpts from some of our best known composers, Beethoven and Vivaldi, to composers of the 20th century. All of these works reflect the composer's love of the natural world, and will inspire listeners of all ages. As Symphoria musicians perform, images of the natural environment that inspired the composer will be projected, and short narratives by climate experts from the SUNY College of Environmental Science and Forestry will introduce each piece.

PROGRAM

Summer

Beethoven, Symphony No.6, "Pastoral" Mvt. 1, and Mvt. 6, (Storm)
Evokes the joy of the countryside in spring, and the power of a summer thunderstorm

Winter

Nickolai Rimsky-Korsakov, Snow Maiden Suite; Dance of the Tumblers
Evocative of the energy and fury of a strong winter storm.

Watersheds – The Great Lakes

Smetana, Die Moldau

Die Moldau describes in music the formation of the longest river in the Czech Republic, which we'll transpose to CNY to reference the Great lakes, Niagara Falls and the St. Lawrence Seaway.

Ocean

Mendelssohn, Hebrides Overture

Evokes the open sea, and a mysterious formation carved by water.

Modern Environmental Concerns

Samuel Coleridge-Taylor, Petite Suite de Concert, Mvt. II Demande et reponse

We are the stewards of the planet, and the popularity of this work led to its arrangement as the song "Question and Answer."

LESSON PLAN (ELA)

Rationale:

The idea behind the lesson is simple; help students to understand the potential disconnect that can occur between music tone/mood and the images' that may accompany it mood/tone. Being that students will be attending a concert where the music is meant to sound like nature and that pictures will accompany said music, it is important to for students to be able to analyze the mood and tone of both the music and the associated images. Therefore this lesson scaffolds on previous understanding of mood and tone as applied to literature, and applies it to music and images.

Student Goals:

1. Be able to determine the mood and tone of a musical piece and discuss it using proper terms and appropriate language
2. Be able to identify the mood and tone of a still picture and discuss using proper terms and appropriate language
3. Be able to identify instances when tone and mood of music do not mesh with that of an image presented with the music and be able to discuss the tone and mood of both pieces in an oral and written manner in great depth.

Materials:

- A selection of three drastically different musical pieces
- A selection of three different still images
- Worksheet (Located at the end of the lesson)
- Videos of movie trailers that have been edited (found online)

Lesson:

The following lesson was completed the day previous to the concert. The literary elements of "mood" and "tone" have previously been discussed in class and are commonly referred to in regular class discussion. The lesson was designed for a 43 minute class period.

Begin class with a question: Why is music important? Allow students five minutes to discuss.

Hand out the worksheet. Explain to students that today, they will be focusing on the mood and tone of music. They will be listening to a total of three pieces. While they are listening to each clip, they will need to write down the emotions the song evokes, as well as try and pair images with what they are listening to. For example, let's say an instrumental version of "Oh Christmas Tree" is playing. There are no words, but the song makes me feel happy, because of the tone of the music; it is light and fun. I associate the song with Christmas trees; big green fluffy ones, covered in multi-colored lights and ornaments.

The following clips of songs were used for the lesson. About 2 minutes was played of each song.

Clip One: Theme from *Schindler's List*

Clip Two: Derezzed: Theme from *Tron Legacy*

Clip Three: Lux Aeterna: Soundtrack from *Requiem for a Dream* (4:36 till end)

After each clip is played, pause for a minute or so to allow students time to finish jotting down ideas. After all three clips have been played, have students share their thoughts about each piece, first starting with the mood/tone of the piece, then following up with what images students associated with each clip. Write these ideas on the board for students to see.

Next, students will be looking at still images, but following the same format as the musical aspect; writing down the mood and tone of each image. Then, they will add what kind of music would be playing with the picture. (Feel free to pick any three images that vary in mood/tone.) Once again, students shared as a group what they felt about each image, and what music they would pair with each still.

Then, ask students how the mood/tone of the image could change if the music changed. What kind of music would need to be playing in order for the mood/tone of the images to change? (Example: What if horror music were playing with the first image? How would the mood/tone of the image change?) Finally, discuss how there can be a disconnect with the mood/tone of music and the images presented with the music. Because the Symphoria concert pairs student taken images from nature with songs about nature, there could be instances where the music playing does not match the images showing. Poll to see how many students are familiar with the film *Mary Poppins*. Ask those who have seen the film to give a quick summary and explain the mood/tone. Then show the trailer "Scary Mary" (Mary Poppins as a horror film) and discuss after the viewing how the simple changing of the music changed the mood/tone.

There are many other re-cut trailers, the Mary Poppins one is the most dramatic in mood/tone, although the "Harry Potter as a Teen Romance" is mildly comical and does show some differences, although not as drastic.

As class comes to a close, explain to students that they will be taking notes on each piece of music and the images paired with them while at the symphony, much like they did today. They should focus on the mood/tone of the music as well as the mood/tone of the images. When the performance is over, students are to write a reflection answering the prompt: Was the overall performance effective? Use details from notes to support your response. Students will write the prompt in their journals before leaving class in preparation for the concert.

Following the Concert:

The day following the concert, 10 minutes of the beginning of class are to be dedicated to discussing the experience of attending the symphony, as well as discussing student thoughts/reactions to the music and the journal reflections following the performance.

Thanks to Kailee Plucknette-Kurzen for this lesson plan!

LESSON PLAN: Symphoria Presents Soundscapes by Bernie Krause

Rationale:

Natural sounds have been music to our ears since before we were humans. Bernie Krause has spent more than 40 years building a massive database of recordings created by capturing the sounds from ecosystems. In this activity, Symphor!a musicians relate human impact on the environment to biophony of an ecosystem – the natural sounds made by all of the living things in a region.

Student Goals:

1. Be able to explain how Geophony, Biophony and Anthrophony create Soundscapes.
2. Be able to relate soundscapes to biodiversity and overall ecosystem health.
3. Be able to interpret soundscape recordings and/or examination of spectrogram data to determine the extent human activity has impacted an ecosystem.
4. Be able explain how a pristine environment may appear visually unchanged, yet sound completely different after human-related activity in an area.

Topics/Vocabulary

Geophony

Biophony

Anthrophony

Biodiversity

Ecosystem

Spectrogram

Materials:

Slide show with sound examples

Lesson:

Using supplied slide show and sound examples, play slide show with sounds for students.

- introduce topic
- contrast natural, rural, suburban and urban areas
- Spectrograms (visual representation of a Soundscape recording) are displayed for various examples

Soundscapes as a measure of the impact of humans on an area is introduced by investigating Lincoln Meadow – an area that was selectively logged in the late 1980's. Pictures of the area before and after show little difference, but the audio recordings are vastly different.

This can be further analyzed by playing Soundscapes that have loud anthropogenic sounds interrupting the biophony.

NYS MST Standards

Intermediate Level Science

Standard 4

Key Idea 7 Performance Indicator 7.1

Key Idea 7 Performance Indicator 7.1

Standard 6

Key Idea 1 Interconnectedness: Common Themes: System Thinking

Key Idea 2 Interconnectedness: Common Themes: Models

Regents Living Environment

Standard 4

Key Idea 1 Performance Indicator 1.1

Key Idea 6 Performance Indicator 6.2

Key Idea 6 Performance Indicator 6.3

Key Idea 7 Performance Indicator 7.1

Key Idea 7 Performance Indicator 7.2

Related Documents and Links

Bernie Krause Websites

<http://www.wildsanctuary.com/>

<http://www.thegreatanimalorchestra.com/>

TED Talk

http://www.ted.com/talks/bernie_krause_the_voice_of_the_natural_world

Print Media

http://www.nytimes.com/2012/07/29/opinion/sunday/listen-to-the-soundscape.html?_r=0

Soundscapes Videos

<https://www.youtube.com/watch?v=j8TSIC13WR8>

Thanks to David Amidon for this lesson plan!

COMPANION ACTIVITY

Intended for grades 6-9 musical groups:
Orchestras, Bands, Chorus, or General Music Class

Final Products:

- A student composed Theme and Variation based on and inspired by the Education Concert "Sound of Nature" performed by Symphoria
- A music video of original compositions in the form of Theme and Variations.

This activity has many components and can be implemented on many different levels to any degree deemed fit for the particular group and time frame.

Project Procedure:

1. Each student will write, by hand, an 8 measure phrase following the NYSSMA sight-reading guidelines for their particular discipline.
(See document(s) #1)
(See standards met under COMPOSING)
 - The LMS students did this activity during one orchestra rehearsal and finished up at their group lessons
 - They all used the Key of D Major and were advised to start and end on the note D and to use scales and arpeggios to get the most desirable/usable phrase for our project
 - They were told to use only levels 1&2 as guidelines, but several added things from level 3.
 - You can write your specific directions above the staves.
2. Sight-reading strategies will be reviewed, and students will trade their completed phrases and "grade" each other sight-reading abilities.
(See sight-reading (strings) rubrics document #2)(See standards met under SIGHT-READING)
 - The phrases can be adjusted to sound like the composer intended and corrected so there are the correct beats per measure etc. at this time. (What they wanted it to sound like may not be what they have written!)
 - Once the composer is pleased with their phrases they hand in their final product.
 - The phrases will then be entered into a composing program and transposed for each instrument involved to be sight-read as a group at the next full group rehearsal.

3. The group will sight-read the phrases together and vote on their favorites.
(See example full score of phrases document #3)(See standards met under Sight-Reading)
 - Each stand will receive a copy of the compiled phrases written in their clef.
 - The votes will be tallied and the “winning” two phrases will create the 16 bar phrase that will be the theme for the ‘Theme and Variations’ composition.
4. The group will view the YouTube videos of the concert pieces that will be performed at the SYMPHORIA concert. (see below)
(See Response to videos form document #4)
(See standards met under Listening and Responding to music)
 - Each student will write down their responses to the videos. (refer to doc.#4)
 - The responses will be shared verbally with the group, and then collected for later use.
 - The LMS students did this listening/responding activity over a three day period.

Enjoying the beauty of nature:

Beethoven, Symphony No.6, “Pastoral” Mvt. 1, and Mvt. 6, (Storm)

Mvt. 1 - <https://youtu.be/m81VOP6dEV8>

Mvt. 4 - <https://youtu.be/jHFje0sKhr4>

Arctic environment and winter storms:

Nickolai Rimsky-Korsakov, Snow Maiden Suite; Dance of the Tumblers

<https://youtu.be/KUxtBbrEmL4>

Watersheds (A watershed describes an area of land that contains a common set of streams and rivers that all drain into a single larger body of water, such as a larger river.):

Smetana, Die Moldau

<https://youtu.be/HJWmMhJkhDk>

Ocean:

Mendelssohn, Hebrides Overture

<https://youtu.be/Ed1pmhHXFwY>

6. Students will form seven composing groups and will be assigned one of the concert pieces to use as their inspiration for their variation on the theme. The writing process will begin.

(See standards met under Listening and Responding to music, and Composing)

- LMS assigned the pieces using a raffle system.
- The main theme will be handed to each group written in the clef that they use along with a sheet of blank staff paper. (The teacher can do this for each student on Finale or Sibelius, or the students can copy the theme directly onto their staves)
- Individually, and then brain-storming as a group, the students will start putting down their ideas for their variation the staff using penciled in notes, imagery with words, pictures, and/or a story line.

7. Students will meet in their groups and compose a 16 measure variation on the theme.

(See sample composition A Day Gone By document #5)

Story-line for A Day Gone By: The sun rises, the birds chirp and the squirrels run around. We play outside and then the sun sets.

(See standards met under Composing)

- Students share and discuss their ideas. What part of nature will be imitated? What will the mood be? Major? Minor? Happy? Scary? Sad? What instruments will be used?
- Teacher(s) help organize their ideas into a four part story-line that will become the 4 four measure sections of their final composition. The stories could be written down and shared with audiences before the variation is performed.
- The main theme will be projected on a screen by the teacher, (LMS used a computer, Sibelius composing program, and an Epson to do this) and the teacher will play their ideas back to them and alter/edit the theme as the group dictates until they are satisfied with the end result.
- LMS accomplished this part in 2 weeks. We suggest 3-4 weeks if you have time.
- If a group has unlimited time the students could do the actual entering of the notes on the computer, or write the notes out by hand. This was our initial plan, but the time factor forced us to enter their notes for them.

8. The score and parts will be printed and handed out to each group to be rehearsed and performed.

(See standards met under Rehearsing and Performing)

- It is suggested that the two students who originally composed the theme perform their part of the theme for the audience followed by each variation.
- The symphonic piece that inspired each variation should be mentioned, and the story or idea of the piece should also be shared.
- LMS made a video of each variation and of the entire process of this project. The video was shown at the actual SYMPHORIA concert and was well received. If you would like to view this video, go to: _____
- If you would like to make your own video, the procedure we used follows.

MAKING THE VIDEO

1. Students signed up for the following ROLES before making the video:

Director, Editor, Videographer, Still Photographer, Story Board Creator, Sign Makers, Performing Musicians, and the rest of the group are Team Members.

2. The STORY BOARD was created so that there was an order to each picture and recording. We used sticky notes and a huge piece of poster board for this so we could add, subtract, or move around the order of the picture/videos as we went.
3. The story board included the messages that were to be written on papers/signs that explained each part of the whole process. Students created these signs for each slide in the video. The description signs as well as the introductory signs can also be put into the video digitally depending on the software being used.
4. The students who wrote the original eight bar melodies, were recorded playing their composition.
5. After the student groups rehearsed the variations, each group recorded the composition. This usually took a few takes. If needed, a teacher can stand off camera and conduct the group. (This part will take them longer than you think!)
6. Once all of the pictures and videos were taken, the editors input them into a movie making software, always referring to the story board. While iMovie is suggested, other software programs will work as well.
7. Next, the editors added in background music for all of the still pictures. In this case, the first movement of Beethoven's Pastoral Symphony was used.

8. The editors also went through to make sure that each sign was on screen long enough to be easily read by the audience. They also can add rolling credits at the end with the students' first names.
9. Depending on the recordings, the audio may need to be adjusted.
10. Finally, the movie can be converted to a writable file that then can be burned to a CD.

Making a video takes up a lot of time, but it is an invaluable experience! My students have NEVER been so aware of the written notes and the composer's intent as they are now. We used orchestra rehearsals and lessons to accomplish this goal in about 6 weeks. When we do this again I will dedicate about 3 months to this project. I had NO previous experience doing a project such as this. Everything we did was a learning experience for me. I had a terrific student teacher and cooperative students to show me the way!

Some of the standards met in this activity:

Framework for 21st Century Learning

Core Subjects and 21st Century Themes covered by this total experience:

- Civic Literacy
- Environmental Literacy

Learning and Innovation Skills

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration

Life and Career Skills

- Flexibility and Adaptability
- Social Skills
- Productivity and Accountability
- Leadership and Responsibility

National Standards for Music Education

Composing

4. Composing and arranging music within specified guidelines
5. Reading and notating music
6. Listening to, analyzing, and describing music
7. Evaluating music and music performances

Sight Reading

2. Performing on instruments, alone and with others, a varied repertoire
5. Reading and notating music
7. Evaluating music and music performances

Listening and Responding to Music

6. Listening to, analyzing, and describing music
7. Evaluating music and music performances
8. Understanding relationships between music, the other arts, and disciplines outside the arts.
9. Understanding music in relationship to music and culture

Symphonia visit

6. Listening to, analyzing, and describing music
7. Evaluating music and music performances
8. Understanding relationships between music, the other arts, and disciplines outside the arts.
9. Understanding music in relationship to music and culture

Rehearsing and Performing

2. Performing on instruments, alone and with others, a varied repertoire
5. Reading and notating music
7. Evaluating music and music performances

Making a Video

2. Performing on instruments, alone and with others, a varied repertoire
4. Composing and arranging music within specified guidelines
5. Reading and notating music
6. Listening to, analyzing, and describing music
7. Evaluating music and music performances
8. Understanding relationships between music, the other arts, and disciplines outside the arts.
9. Understanding music in relationship to music and culture

Thanks to Becky Dodd for this Activity Plan!