LESSON 2
What is Your Musical Preference?

musicurious
2019/20 EDUCATION PROGRAMS OF THE COLORADO SYMPHONY
Bringing the youth concert experience and the story of Beethoven’s life through real-world topics
LESSON 2:
What is Your Musical Preference?

SUMMARY
In this lesson, students will grapple with how several factors, including culture, identity, biology, and neuroplasticity — inexplicably interact to shape distinct musical preferences. Students will also consider the possible benefits of expanding their musical palate, such as providing opportunities to communicate and connect with others in different, yet meaningful ways. Music will be explored as a tool that has the potential to unite and heal both individuals and communities, but also poses the power to divide and exclude people.

LESSON CONNECTIONS
- Colorado Academic Standards
- Learning Objective
- Essential Questions
- Enduring Understandings
- Vocabulary
- Materials & Resources
- Guiding & Extension Questions

INSTRUCTIONAL FRAMEWORK [putting lessons into practice]
- Connection
- Teach
- Demonstration
- Active Engagement
- Independent or Small Group Work
- Share
- Link
- English Language Learner Tips
- Additional Resources
- Home Practice

LEARNING OBJECTIVE
- Students will consult current scientific research to gain a better understanding of why it is difficult to establish musical preferences across cultures.
- Students will examine the relationships between musical preferences, culture, identity, biology, and neuroplasticity.
- Students will aurally discriminate the difference between consonant and dissonant sounds and listen to examples of "rough" sounds (i.e., major and minor second intervals).
- Students will compare and contrast their musical preferences to those of their classmates.
COLORADO ACADEMIC STANDARDS

GRADE 3
Colorado Academic Standards in Music: Grade Level Expectation
Standard 4. Aesthetic Valuation of Music
Grade Level Expectation:
2. Identify differences and commonalities in music from various cultures.

2020 Colorado Academic Standards // Grade Level Expectation: Reading, Writing, and Communicating
Oral Expression and Listening
1. Participate cooperatively in group activities.
2. Communicate using appropriate language in informal and formal situations.

GRADE 4
Colorado Academic Standards in Music: Grade Level Expectation
Standard 4. Aesthetic Valuation of Music
Grade Level Expectation:
2. Articulate contributions of various cultures to music from American historical periods.

2020 Colorado Academic Standards // Grade Level Expectation: Reading, Writing, and Communicating
Oral Expression and Listening
1. Pose thoughtful questions after carefully listening to others.

GRADE 5
Colorado Academic Standards in Music: Grade Level Expectation
Standard 4. Aesthetic Valuation of Music
Grade Level Expectation:
2. Identify differences and commonalities in music from different historical periods and different cultures.

2020 Colorado Academic Standards // Grade Level Expectation: Reading, Writing and Communicating
Oral Expression and Listening
1. Collaborate in discussions that serve various purposes and address various situations.
2. Present to express an opinion, persuade, or explain/provide information.
**LESSON CONNECTIONS**

**LEARNING OBJECTIVE**
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**ESSENTIAL QUESTIONS**
- In what ways does music serve as a system of communication?
- What are the connections between musical preferences, culture, identity, and neuroplasticity?
- How does music create and shape community?
- How can music be both inclusive and exclusive?

**ENDURING UNDERSTANDINGS**
- Music making is a system of communication.
- Musical preferences seem to be both cultural and biological in origin, and are subject to change as a result of neuroplasticity.
- Music is connected to one’s individual and collective identity.
- Music influences the development of a community, just as community influences the development of music.
- Music can be a uniting or divisive force among people.

**VOCABULARY**
- Anthropologist
- Consonance
- Cultural universals
- Globalization
- Inclusive
- Neuroplasticity
- Symphony (literally “sounding together”)
- Auditory
- Culture
- Dissonance
- Harmony
- Inate
- Pitch
- Tradition
- Biology
- Cultural diffusion
- Exclusive
- Identity
- Neuron
- Preserve
- Trait

**MATERIALS & RESOURCES**
- Devices with Internet access
- Classics for Kids: Classical Music in Commercials (~5 minute podcast) classicsforkids.com/shows/shows.php?id=185
- What’s in a News Theme? (YouTube, ~3.5 minute video) youtube.com/watch?v=suMPl0K6SQ youtube.com/watch?v=41fysQkA7qc youtube.com/watch?v=kxnpQ1qAA_Y
- Major second interval
- Minor second interval
GUIDING & EXTENSION QUESTIONS

- What is culture?
- What are cultural universals? Provide at least two examples.
- How does music affect your life?
- What makes music powerful? (e.g. ability to communicate personal/national/global scale joys and struggles, evoke emotions, serve as an emotional outlet and an instrument for self-expression, provide physical and emotional healing powers, unify people within and across communities, a voice to overcome oppression and fight injustice, promote empathy)
- How can music unite people? (e.g. to help overcome a national tragedy)
- How can music be divisive? (e.g. controversial sounds or lyrics)
- What is an example of a pro and a con of music that celebrates nationalism?
- Is it important to protect musical traditions? Why or why not?
- How can traditional music be preserved in a continuously globalizing world?
- How can exposure to a wide range of music create a broader musical palate?
- How can a broader musical palate open one up to a wider range of experiences, interactions, and friendships?
- How does music promote appreciation and understanding of other cultures?
- What is the difference between understanding and empathy? (Note to teachers: This is an important distinction, as these definitions are often conflated. Psychologists Daniel Goleman and Paul Ekman break down the concept of empathy into three categories: cognitive, emotional, and compassionate empathy.

Read more here: [inc.com/justin-bariso/there-are-actually-3-types-of-empathy-heres-how-they-differ-and-how-you-can-develop-them-all.html](https://inc.com/justin-bariso/there-are-actually-3-types-of-empathy-heres-how-they-differ-and-how-you-can-develop-them-all.html)

- How can music raise our awareness of what’s happening in other communities?
I. CONNECTION

We hear and use the word “culture” all the time, but its meaning is difficult to define. Depending on whom you ask, you may get many different responses. Even if you were to ask a group of anthropologists — who study human biology and behavior — you would get a range of answers.

Culture is made up of many elements that are passed down from one generation to the next, including:

• Language
• Religion
• Attitudes and beliefs
• Values
• Food
• Social norms
• Tools
• Clothing
• Music
• Symbols
• Behaviors
• Worldview

Culture is both complex and dynamic. It is continuously changing as a result of many factors including technological advancements, globalization, and cultural diffusion.

Although each culture is unique, there are several cultural universals, or traits shared by all humans. The cultural universal we will focus on today is music as a tool for communicating and understanding one’s identity in place and time (e.g. personal identity, regional identity, national identity, ethnic identity, religious identity, etc.).

II. TEACH

Culture affects how we communicate. Communication takes many forms including spoken language, written language, the arts, symbols, body language (e.g. mannerisms, facial expressions), and music.

Although we know that numerous factors contribute to our musical likes and dislikes, we do not know exactly how these factors combine and interact to affect our musical preferences. Although the list below is far from exhaustive, it includes a number of variables that affect the music we choose to listen to:

■ Culture (This includes language.)
■ Biology (There are more similarities than differences in musical preferences and practices across cultures, which leads scientists to believe that the way our brains are wired plays a role in shaping our musical preferences. There is a lot of research and debate about how much our preferences are influenced by biology or our environment. It is difficult to distinguish what is influenced exclusively by nature versus nurture.)
■ Geography (Where you live affects what you listen to.)
■ Time period in which you live.
■ Exposure (Opportunities to hear different combinations of sounds, which is also related to the time and place you live, affect the style of music you will gravitate towards.)
■ Peer group (The music your friends listen to influences the music that you listen to.)
■ Parents and upbringing (Research shows that the music listened to inside the home growing up and played during family traditions, ceremonies, and rituals influence the music you will relate to later in life.)
■ Musical training (Individuals who have received musical training are more likely to be interested in listening to music of greater complexity that requires listening to repeatedly to gain a better understanding of what the music is trying to communicate.)

In spite of all these contributing factors, our musical tastes are subject to change, perhaps many times, throughout our lifetime.

■ What might contribute to a change in musical preferences?
■ What is neuroplasticity?
■ How might our musical preferences be affected by neuroplasticity?

Dr. Robert Zatorre (Director of The Auditory Cognitive Neuroscience Laboratory at McGill University) points out that whether you enjoy Beethoven, hip-hop, punk rock, or the sound of a kazoo, our brain responds in the same way, regardless of culture. Music influences the reward circuit of the brain, making us feel good when we listen to music we like.

SIDE NOTE #1A

Compare the expansion of the auditory palate to the taste palate (i.e. food preferences). Studies indicate that infants have a “flavor window” that is open from about the time they are four months until they reach 18 months. Although this flavor window may never completely close, toddlers can be trained to enjoy a new food by introducing it 5-10 times, whereas 3-4 year-olds may need to try the same food 15 times before developing a taste for it.

Teachers: Read this short article to learn more:
Andrew Zimmern Explains How to Acquire a Taste:
time.com/4187760/andrew-zimmern-acquiring-taste/

SIDE NOTE #1B

The same can be said of the body’s fear response. The nervous system cannot differentiate whether you are scared and anxious because your life is in danger from the pursuit of a tiger, or stressed over a big exam (or performance). The same fight, flight, or freeze response is triggered, in the nervous system.
PUTTING THE LESSON INTO PRACTICE

III. DEMONSTRATION
Share the study of the Tsimane people, located deep in the Bolivian Amazon rainforest. (Show students where this is located on the map.) It is one of the few cultures that has not been exposed to or influenced by the West, largely due to geographic isolation. The study found that the Tsimane did not find certain dissonant sounds to be unpleasant. These findings seem to indicate that our like or dislike of certain sounds may not necessarily be hardwired into our auditory system.

Prior to this study, scientists had assumed that there was a universal response to consonant and dissonant sounds, rooted in our biology. Now, scientists are more receptive to the idea that one's musical perception, including consonance interpreted as pleasant and dissonance as unpleasant, may be related to the spread and influence of Western culture (i.e. cultural diffusion).

Although this is considered a groundbreaking study, it does not necessarily mean that humans do not have some innate musical preferences. Although the Tsimane did not have a preference for either consonant or dissonant sounds, they did report a similar dislike to “rough” sounds as Westerners.

This rough sound is created by two tones that are close together in frequency, particularly minor and major seconds. This finding suggests that there may be some musical preferences determined by culture and environment and some determined by our shared biology.

For more information about this study read:

IV. ACTIVE ENGAGEMENT
Play the following 30-second YouTube video for students to hear the difference between consonant and dissonant sounds:
www.youtube.com/watch?v=b1PhdsoGzG0

Elicit a few student reactions to the consonant and dissonant sounds.

Have students listen to examples of minor and major second intervals:

- Major second interval:
youtube.com/watch?v=41FysQkA7qc
- Minor second interval:
youtube.com/watch?v=kvnpQLTAA_Y

Elicit a few student reactions to the major and minor second intervals.

For fun, you may choose to share, Songs to Help You Identify Intervals:
youtube.com/watch?v=VYxzCjksA

V. INDEPENDENT OR SMALL GROUP WORK
Divide students into small groups to collaboratively answer the following questions:

- What does it mean that musical beauty is in the eye of the beholder?
- What music do you enjoy listening to now? What did you enjoy listening to when you were younger?
- What are the connections between the music you listen to and your culture?
- How has music shaped your identity?
- How has your identity influenced the music you choose to listen to?

VI. SHARE
Have students compare and contrast their musical preferences with those of their classmates.
What is your musical preference?

VII. LINK

Although there are many contributing factors that mysteriously combine to shape our musical preferences, it is clear that culture is a significant influencer. Perhaps one effective way to connect and create cross-cultural understanding is to open your mind, heart, and ears to new musical sounds and experiences.

Expanding your musical palate may also be compared to the way babies have an advantage when learning new languages because they have the capacity to hear a wide range of distinct sounds. Babies tend to lose this special ability to discriminate many different sounds as they get older and acquire their first language. Just as it is easier to learn a foreign language when you are young, it is also easier to develop and change your taste in music when you are young.

This does not mean the window of opportunity to appreciate and enjoy new styles of music completely closes. Your brain has the remarkable capacity to continuously make, break, and reorganize the connections between brain cells (called neurons) as you experience and learn new things. This process of reorganization in the brain is called neuroplasticity. Even though our musical tastes are not set in stone, they do not tend to change too dramatically because we never replace all of our neuronal connections.

Taking all of this into account, it is clear that if we don’t expose ourselves to new sound experiences, our brain has no opportunities to draw distinctions between sounds, or to fully appreciate the beauty of different combinations of notes (called pitches). More importantly, we might miss out on connecting with people from different cultures who could teach us new things and enrich our lives.

The next time you listen to Beethoven, keep in mind that his music is not always easy listening. It can demand a lot from the listener. It can raise questions and stir up strong, sometimes difficult emotions. But like most things of value, effort is required. This effort may take the form of listening to the same piece several times, various interpretations of a piece, different pieces written by the same composer, or pieces written by other composers from the same time period, to develop an understanding of and appreciation for what and how the piece communicates a communal experience.

ENGLISH LANGUAGE LEARNER TIPS

While it is beneficial to positively encourage ELLs to participate in class discussions, it is important to be aware that it is common for some ELLs to go through a transitional phase in which they maybe less willing to verbally contribute until they feel more confident about their ability to effectively communicate in English. Support and encourage ELL engagement, but avoid placing too much pressure on ELLs to speak in front of the group until they are ready. Have them buddy up with other students so they can be engaged and supported as a group.

ADDITIONAL RESOURCES

- Yo-Yo Ma’s Days of Action
  newyorker.com/magazine/2018/12/17/yo-yo-ma’s-days-of-action
- Why culture, not race, determines taste in music
  theconversation.com/why-culture-not-race-determines-tastes-in-music-46639
- Blame your ‘environment’ for your taste in music
  scienengnewsforstudents.org/article/blame-your-environment-your-taste-music
- Music is universal – but the way it makes us feel may not be
  washingtonpost.com/news/speaking-of-science/wp/2016/07/13/music-is-universal-but-the-way-it-makes-us-feel-may-not-be/?utm_term=.6edd80636d95
- Culture, not biology, may define which musical chords sound sweet – and which don’t
- The musical harmonies you like depend on where you’re from
  newsscientist.com/article/2097333-the-musical-harmonies-you-like-depend-on-where-youre-from/
- New research reveals why some harmonies sound good, but others don’t
- The Surprising Musical Preferences of an Amazon Tribe
  theatlantic.com/science/archive/2016/07/music-to-our-western-ears/491081/
PUTTING THE LESSON INTO PRACTICE

- Musical Tastes: Nature or Nurture?
  [the-scientist.com/notebook/musical-tastes-nature-or-nurture-31922]
- Neuroplasticity of Music
  [sites.bu.edu/ombs/2013/12/06/neuroplasticity-of-music/]
- How Culture Wires Our Brains: Insights from cultural neuroscience
  [psychologytoday.com/us/blog/between-cultures/201701/how-culture-wires-our-brains]
- The science of getting your kids to eat more vegetables
  [qz.com/701128/the-science-behind-getting-your-kids-to-eat-everything/]
- Andrew Zimmern Explains How to Acquire a Taste
  [time.com/4187760/andrew-zimmern-acquiring-taste/]
- Resources addressing how and why musical preferences may change over time
  a. [scienecenewsforstudents.org/article/blame-your-environment-your-taste-music](http://scienecenewsforstudents.org/article/blame-your-environment-your-taste-music)
  d. [sciencedaily.com/releases/2013/10/131015123654.htm](http://sciencedaily.com/releases/2013/10/131015123654.htm)

HOME PRACTICE

Share several clips of music in the news, on commercials, and in movies intended to make the audience experience a particular emotion or desire. Lead a class discussion about how music is used to not only elicit certain emotions, but also to persuade the audience to purchase a product or service.

Music in the news:
- What’s in a News Theme? (YouTube, ~ 3.5 minute video)
  [youtube.com/watch?v=suMPiLoKrSQ](http://youtube.com/watch?v=suMPiLoKrSQ)

Music in advertisements:
- Classics for Kids: Classical Music in Commercials (~5 minute podcast)
  [classicsforkids.com/shows/shows.php?id=185](http://classicsforkids.com/shows/shows.php?id=185)

Music in the movies (or movie trailers):
Additionally, select several excerpts from John Williams’ movie scores which can be found on YouTube. John Williams is featured in the Beethoven’s Birthday Bash program. Examples of his movie scores include: Harry Potter, Star Wars, E.T., Superman, Indiana Jones, Jaws, and Jurassic Park.