

Music and the Human Brain

Level: High Intermediate - High Advanced

Time: 2.5 - 3 hours (or more if follow-up activities are used)

Warm-Up Discussion

In groups of 4-5, students will discuss the following questions:

1. What kinds of music do you like?
2. Who is your favorite musical artist or group?
3. Why do you listen to music?
4. Is there a song playing in your head right now? If so, what is it?
5. How do different kinds of music affect your mood?
6. Can you play a musical instrument? If so, what is it? How long have you been playing? Are you good? Will you play for us?
7. Do you think people should learn to play a musical instrument? Why/Why not?
8. Why do you think music is so universal?
9. Do you think people who can play a musical instrument are different from people who can't? Why/Why not?
10. Do you think music can be helpful? How?

Grammar (and an introduction to the news story)

The following is a paragraph from a Voice of America news story for English learners. We will use this paragraph to continue thinking about the topic, but also to practice some grammar.

Write on the board:

Ms. Kraus says when we _____ a musical instrument we are _____ and making important _____ connections, or pathways, in our _____. This might even help our brains when we are trying to _____ another language, or a new subject in school. So, if learning to play a simple _____ is good, is it better to try to learn to play something much more _____, like Bach or Chopin, for example? Professor Kraus says she has yet to test that _____.

- * Students copy the paragraph, then work in small groups to determine which parts of speech are possible in each blank (based on context). If they've never done this before, they will need some assistance, but it won't take long for them to catch on. They will begin to see patterns in writing like verbs following subjects and articles and adjectives preceding nouns.
- * When it seems that most groups are finished (or close), solicit responses from the class as to which parts of speech can go where. Write their correct suggestions above the blanks.

* Now give the class a word bank, and have the groups work to put the words in the right places in the paragraph. *(For an added challenge, give all verbs in base form and all nouns in singular form. Students must not only put the words in the right places, but also change them as necessary.)*

exercising

song

play

electrical

complex

proposal

learn

brains

Listening

<http://learningenglish.voanews.com/audio/audio/328897.html>

- * Easier: Write listening comprehension questions on the board for students to answer as they listen.
- * More challenging: Play the story. Students take notes. Then write the questions on the board for students to answer from their notes and memory.
- * Either way, students may need to listen twice.

1. Playing a musical instrument can change two things about the brain. What are they?
2. How many volunteers did Professor Kraus study in her experiment? What question did she want to answer through her research?
3. How did people who had received formal music instruction respond differently to sound than people who had never taken music lessons?
4. How can music lessons early in life help people when they're older and don't hear as well anymore?
5. How can practicing a musical instrument help to improve memory?
6. Can listening to Mozart's music help the human brain? Why/Why not?
7. Is Professor Kraus a supporter of arts education in public schools? How do you know?
8. Professor Kraus says, "We are what we do." What do you think that means?

- * Allow time for students to discuss their answers to the questions in groups.
- * Each group should designate a "secretary" to write down the group's official answers.
- * Check each group's answers, making note of how many/which ones they got right.
- * Call on groups with correct answers to answer each question for the class.
- * *Optional: Give the group with the most correct answers a small prize.*

Reading/Vocabulary

<http://learningenglish.voanews.com/content/music-human-brain-communication/1756857.html>

- * Now that students have heard the story, they can read the transcript (which will make more sense with the knowledge that it contains a lot of sound clips).
- * Since students have already heard the story a couple of times and discussed it, they should have a basic understanding of what it's about. On the first reading, then, they can circle or make a list of words and phrases that are confusing or new for them.
- * Students discuss their vocabulary lists in groups. Often, one student in the group can explain a word on another student's list.
- * Groups make a list of words no one knows. Then, they must choose the 3-5 words they feel are the most important for understanding the story.
- * Each group submits their list, and the teacher compiles them into a master list.
- * *If you feel very confident in your ability to explain vocabulary on the fly, put the words on the board, and go for it. If not, take the list home, and use it to prepare a vocabulary lesson for the next day.*

Follow-Up

- * Vocabulary lesson
- * Class debate: Should the arts be standard in public education?
- * Student research/presentations on the effects of music on the brain, memory, mood, etc.
- * Students conduct a survey of several other classes to find out people's favorite kinds of music, artists/groups, musical instruments played, etc. Then they make graphs to show their findings.
- * Students write a letter to the local school board encouraging them to give more money to arts education (mailing optional).
- * Students write fan letters to their favorite musicians (mailing optional).
- * Students write reviews of their favorite albums/songs.