

music builds

2013-2014 Education Guide

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All Lexington Philharmonic programs are made possible through the generous support of LexArts. The annual Fund for the Arts has raised millions of dollars to support the visual, literary and performing arts in Lexington.



The Dupree Initiative is an investment in the artistic vision exemplified by LexPhil.



The Kentucky Arts Council, the state arts agency, provides operating support to the Lexington Philharmonic with state tax dollars and federal funding from the National Endowment for the Arts



The Saykaly Garbulinska Composer-In-Residence Program generously brings Adam Schoenberg to LexPhil for the 2013-2014 season.

To learn more about LexPhil partnership opportunities, contact Ellen Gish at development@lexphil.org or call 233-4226.

Lexington Philharmonic Discovery Concert Education Guide

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THE LEXINGTON PHILHARMONIC

R. Scott King, President

Scott Terrell, Music Director & Conductor

Allison Kaiser, Executive Director

Dear Educators,

If we look around cityscapes, landscapes, and our neighborhoods – we are often confronted with changes. Rarely does a city, for example, not evolve and grow over time. Buildings of all shapes and sizes, all built with the elements of cement, metal, glass, and most importantly, the architectural design, evolve. The building of city structures in many ways matches the building of musical performances. Music has elements of rhythm, colors, harmony, and most importantly, the composer and the performers to bring all of these elements into a unified and spectacular sonic world – also one that continually evolves.

This October, the Lexington Philharmonic Discovery concerts, titled *Music Builds Discovery*, will explore this juxtaposition. We are proud to showcase a program highlighting the different components it takes to envision a building and a community, and how it relates to the building blocks of an orchestra and music, plus all of the people it takes to perform an orchestral piece. In this guide you will find that music and architecture are two very similar worlds that both rely on structure and harmony. You will explore the relationship between the elements of rhythm, harmony, color, and texture in music and how those exact same words are used in architecture with only a slightly different meaning. The literal relationship between building an orchestra and building a city are of course important, but we will also explore the other things music can build- community, imagination, curiosity, and more!

This curriculum-based guide is useful and rich in activities for your students. It will serve as a valuable resource both in preparing students for attending this program as well as continuing the learning process afterward. This guide was designed to strongly connect LexPhil's *Music Builds Discovery* program to other curriculum areas such as science, technology, engineering and math (STEM). If you attend the Lexington Philharmonic's Discovery Concerts, this guide will give you insight to what I do as the conductor with the orchestra, how the members participate in music making, and how music builds – much like the way we construct the many things necessary to our lives.

We hope you will join us for "Music Builds". It will be a great resource!

Musically yours,



Scott Terrell
Music Director



THE LEXINGTON PHILHARMONIC

R. Scott King, President

Scott Terrell, Music Director & Conductor

Allison Kaiser, Executive Director

Dear Educators,

The Lexington Philharmonic is excited to introduce new education initiatives including **Music Builds...** during the 2013-2014 season. *Music Builds* will provide the framework on which LexPhil's education programs develop and serve multiple arts education and cross curricular needs. It will also provide the framework for LexPhil's entrance into the educational initiative, STEM to STEAM.

The STEM to STEAM movement is devoted to broadening the basic curriculum standards for **Science, Technology, Engineering and Math** by adding **Arts**: STEM + Art = STEAM. This educational initiative includes the Arts as a tool to strengthen the critical thinking skills needed for students to excel in all areas. There is a large body of research which articulates how music supports cross curricular learning and LexPhil is finalizing a composite of this research to help communicate music's effect on learning and STEAM.

We have even more exciting news! This year we are taking our Discovery Concerts on the road! The ECU Center for the Arts in Richmond, KY will be welcoming LexPhil this year for a special added performance of our *Music Builds* Discovery Concerts. Check out the concert schedule below:

Wednesday, October 23, 2013
Lexington Opera House
Concerts at 10am and 11:30am

Friday, October 25, 2013
EQU Center for the Arts
Concert at 10AM

Reservation forms are available on the LexPhil website (www.lexphil.org) for the Lexington Opera House. ECU reservations may be made directly through the ECU Center for the Arts at 859.622.7469. Also available online, for qualifying classes, is the form to apply for ticket and/or bus subsidy.

Please visit our website and download your free copy of this year's Education Guide. Here you will find helpful information about the concerts, bus funding, and more! You will find lessons coinciding with each piece represented in the concert program as well as sections introducing students to the orchestra, conductor, and concert etiquette. Each section of the guide contains information that can be presented as a stand-alone lesson or supplemental material to your own classroom curriculum, and throughout each section there are activity ideas for you to engage in with your students. There are printable pages that can be taken from the guide and given to the students with activities, as well as an interactive Music Listening Guide that I encourage you to use with each of the pieces on the Discovery program. While educators may certainly use the material without attending a concert, and while the concert itself is very educational on its own merit, we encourage you to use the guide and concert as a complete package.

Efforts have been made to tie the lessons to the Kentucky Department of Education Program of Studies and the Program Review Guide. It is our goal for LexPhil to offer enhancing resources and opportunities for your classroom.



THE LEXINGTON PHILHARMONIC

R. Scott King, President

Scott Terrell, Music Director & Conductor

Allison Kaiser, Executive Director

Please feel free to use this guide in any way you feel will best suit your needs and those of the students and school. Allow the ideas contained herein to stimulate your own creativity. I welcome any feedback you have and appreciate your input. Feel free to email me at education@lexphil.org or call 859-233-4226 with any questions or comments.

Thank you for all that you do to enrich students, and I hope to see you at the Discovery Concerts and/or any of the other educational programs offered by the Lexington Philharmonic throughout the year.

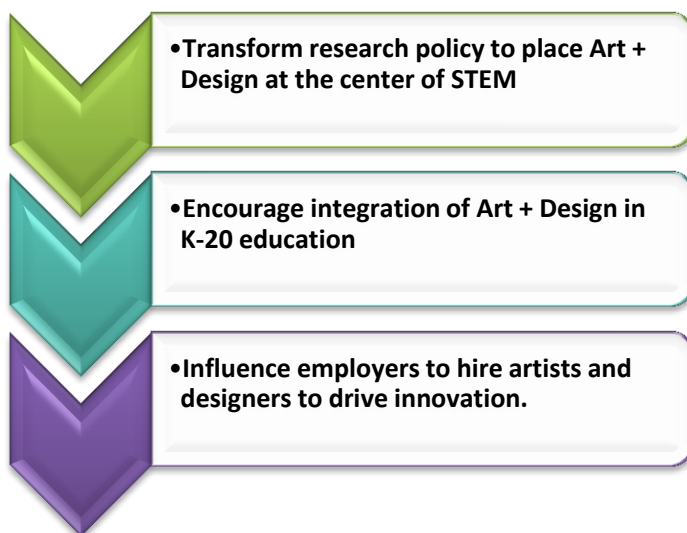
Sincerely,

Micha Hughes
Education & Outreach Coordinator
Lexington Philharmonic

S.T.E.M. to S.T.E.A.M – A Closer Look

The Lexington Philharmonic is excited to introduce new education initiatives including **Music Builds...** during the 2013-2014 season. *Music Builds* will provide the framework on which LexPhil's education programs develop and serve multiple arts education and cross curricular needs. It will also provide the framework for LexPhil's entrance into the educational initiative, STEM to STEAM. This movement is devoted to broadening the basic curriculum standards (**Science, Technology, Engineering and Math**) to add the element of **Arts & Design**: STEM + Art = STEAM.

STEM to STEAM Objectives:



1

Music Builds will provide the basic framework for LexPhil's educational programs and this season will include modules such as *Music Builds... Literacy*, *Music Builds... Community*, *Music Builds... Imagination and Music Builds... Confidence*. LexPhil is building modules to compliment STEAM, such as *Music Builds... Science*, and *Music Builds... Technology*. This October, during LexPhil's education month, LexPhil will feature **Music Builds... Discovery** in its Discovery Concerts for school groups. This program will explore how music relates to the roles of architecture and engineering to build communities.

Arts integration is defined as “teaching ‘through’ and ‘with’ the arts, creating relationships between different art disciplines and other classroom skills and subjects.”² A well-rounded education that includes arts integration is absolutely vital to the success of today's students. When one thinks of *Music Builds*, think of how music builds self-esteem, leadership, confidence, community, literacy, and so much more. Students of arts integration have higher test scores, greater social skills, lower drop-out rates, lower substance abuse, and greater long-term success in higher education. LexPhil is a strong advocate for arts integration and is enthusiastically charting a path for music's involvement in a regional movement of STEM to STEAM.

¹ <http://www.stemtosteam.org> (accessed May 2013)

² President's Committee on the Arts and Humanities, *Reinvesting in Arts Education: Winning America's Future Through Creative Schools*, Washington, DC, May 2011.

In The Know

Tickets

Reservation forms for the *Music Builds Discovery* concerts in Lexington can be found on our website at www.lexphil.org. Remember the reservation deadline is October 15, 2013 and all seating is done on a first come first serve basis. All pricing information is on this form, which can be turned in via email to tickets@lexphil.org or can be mailed to:

Lexington Philharmonic
ATTN: Ticketing
161 N. Mill Street
Lexington, KY 40507

Reservations for *Music Builds Discovery* concerts at the EKU Center for the Arts may be made directly through the EKU Center for the Arts at 859.622.7469.

Printable Materials

The entire Education Guide is free and available for download and printing directly off our website. However, based on feedback from last year we have added in printer icons throughout the guide to assist you with determining what to print. These icons are located in key spots where you may want to print off a specific activity or lesson to pass out to your students, rather than printing the entire guide or the entire section. Just look for this symbol throughout:



Educator's Discount

All educators in the state of Kentucky will receive a 20% discount to all of our regular season concerts. You must reserve your tickets by phone at 859-233-4226, and mention to our ticketing manager that you are a teacher, and at which school you are currently teaching.

Questions?

If at any time during the school year you have questions, please contact Micha Hughes, Education & Outreach Coordinator, directly. She can be reached via email at education@lexphil.org and via phone at 859-233-4226, x207.

Lexington Philharmonic

Discovery Concert Program

Wednesday, October 23, 2013 – 10am; 11:30am
Lexington Opera House

Friday, October 25, 2013 – 10am
EKU Center for the Arts

Joyeuse Marche

Emmanuel Chabrier

Eine Kleine Nachtmusik

W.A. Mozart

Serenade for Winds

Richard Strauss

La Peri Fanfare

Paul Dukas

Thrill of the Orchestra

Russell Peck

*Note: These pieces may not be performed in this order

Concert Etiquette

Attending a concert is an exciting and fun experience! It can also be a bit intimidating the first few times, especially if you're not sure what's going to happen or when to clap.

The first thing you will notice will be the musicians on stage. Even though they may be playing their instrument, the concert has not yet begun. Just as athletes warm up before a game, musicians warm up before a concert. If you listen carefully, you might hear bits and pieces of the music that is going to be performed.

When the orchestra becomes quiet, they are waiting on the concertmaster (or concertmistress) to take the stage. This is the violinist who sits at the front seat of the orchestra and acts similar to a team captain on a sports team. He or she is a liaison between the conductor and the orchestra. The concertmaster/mistress will then signal to the oboe player to play an "A" for the rest of the orchestra to tune.

After the orchestra is in tune, the concertmaster sits. The conductor comes out and the concert begins!

When Do I Clap?

It can be very confusing for audience members to know when to clap. Even people who have been attending concerts for a long time clap when they shouldn't!

- ♪ When the concertmaster/mistress comes out – clap! This shows respect for him or her and the orchestra. After he or she bows, the orchestra needs to tune, so this is when you stop clapping.
- ♪ After the orchestra tunes, the conductor comes out – clap! This shows respect for the conductor and typically he or she will also acknowledge the orchestra. After the conductor bows and gets on the podium, the audience stops clapping so the music can begin.
- ♪ When the orchestra finishes playing a piece of music – clap! But be careful, sometimes pieces of music are made up of a number of sections called movements. It may seem that the musicians are finished playing, but there is really more to be played. Applause for pieces like this comes after the final movement. If you're not sure, wait for others around you to start clapping.

If you make a mistake, don't worry! The musicians are just glad that you're there to share music with them.

The most important thing to remember is that the other audience members are there to enjoy the concert, too. Try not to distract others by coughing or talking. Please turn off cell phones.

Try This Out!



- ♪ Have your students take turns pretending to be a conductor, entering to the other students' applause and bowing.
- ♪ Why is it important to have good concert etiquette? Ask your students to write what they think.

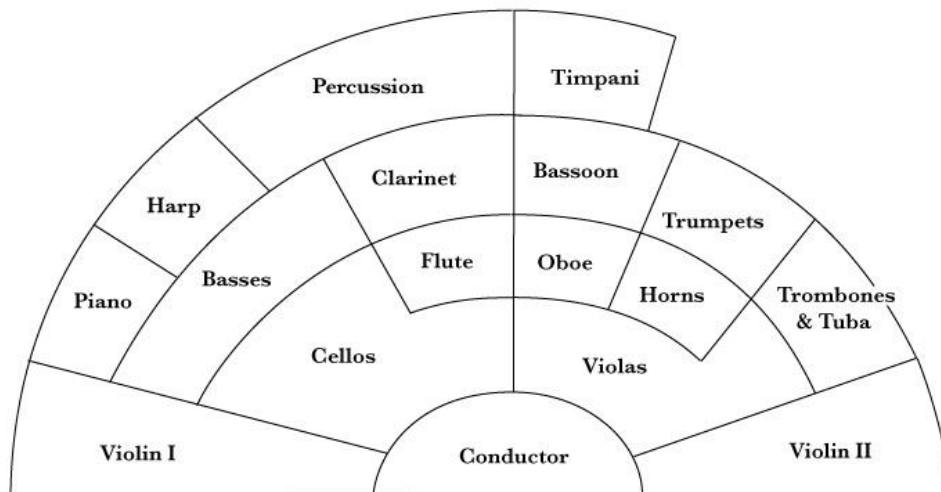
An Introduction to the Orchestra



The Lexington Philharmonic presents approximately 100 concerts and educational programs annually that are designed to reach a variety of musical tastes and a vast range of ages. The Philharmonic's mission statement is to foster excellence and innovation in the performance and presentation of great music; to enrich the lives of our diverse citizenry; to educate current and future audiences and to bring distinction to our community through the orchestra's presence and standing.

Similar to how the United States of America is made up of separate states, an orchestra is made up of separate families of instruments. These families include the strings, woodwind, brass, and percussion instruments. Each family works together to create music. Not every piece of music requires all the instruments, or even all of the families.

Lexington Philharmonic Orchestra Seating Chart



The instruments that are considered **string** instruments in the orchestra include the violin, viola, cello, bass, and harp. The string instruments make up the majority of the orchestra, and are found sitting closest to the conductor and audience. String instruments are played by drawing a bow made of horsehair across the strings to make them vibrate. Musicians can also produce a sound by causing vibrations by plucking or tapping the strings.



The violins are the smallest of the string instruments. The viola looks similar to the violin but is a little bigger. The cello is even larger and the bass is the largest of all! The cello is played while sitting down and the bass is so large that it needs to be played while standing! The bigger the instrument, the lower the pitch (sound) it produces. So, the violin plays the highest notes of the string family and the bass the lowest. The harp has a wide note range, with very long and very short strings that are plucked.

Woodwind instruments include the flute, oboe, clarinet, and bassoon. Other instruments in this family include “cousins” of these main instruments such as the piccolo (related to the flute), English Horn (related to the oboe), bass clarinet, and contrabassoon. Saxophones are also considered woodwinds. The term *woodwind* is used for this family of instruments because many used to be made of wood and the sounds are produced by air. Today, these instruments are made of wood or metal or a combination of the two.



Woodwind instruments are narrow tubes with holes. Most of these holes have covers over them called keys. When you place your fingers over these holes or keys and close/open them, you can change notes. Each woodwind instrument, except for the flute, uses a thin piece of wood called a “reed” which vibrates when the player blows across it in order to make a sound. In single reed instruments like the clarinet, there is one reed that vibrates against a mouthpiece. Instruments like the oboe and bassoon use double reeds (two reeds that vibrate against each other). In a flute, the air vibrates inside the metal tube.

The **brass** family includes the horn, trumpet, trombone and tuba. Brass instruments are long metal tubes that have a “bell” at the end where the sound comes out. Horn players put their hand in the bell to manipulate the pitch. To produce a sound on a brass instrument, the player must vibrate (“buzz”) their lips onto a mouthpiece.



Like the woodwinds’ keys, most brass instruments have valves that are pressed with the player’s fingers that open and close

parts of the instrument, creating different notes. Trombones do not have valves, but rather a long slide that is moved back and forth. The amount of air through the instrument also affects notes (faster air = higher notes) as well as dynamics (how loud the instrument sounds).

Another way to change how brass instruments sound is by adding a mute into the bell. Mutes are made of different materials (wood, metal, plastic) and can soften or sharpen the timbre (tone) or create sound effects.

The family of instruments that is the farthest away from the conductor is the **percussion** family. There are many instruments that make up this family. Some that you may see often in an orchestra include snare drum, timpani, cymbals, and bass drum. When struck, these instruments vibrate to produce the sounds.



Percussion instruments are helpful for keeping rhythm in an orchestra, making special sounds, and even playing melody or harmony. Instruments like the timpani and xylophone are tuned to make specific notes unlike instruments such as the tambourine or a triangle.

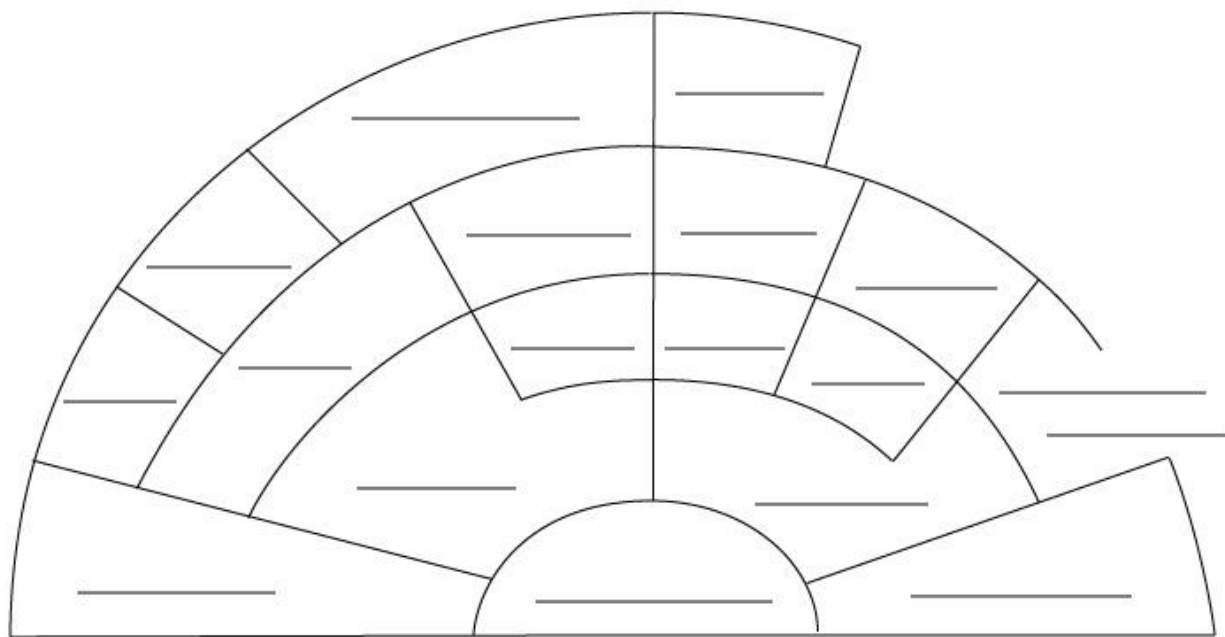
Other instruments you may see in an orchestra are **keyboard** instruments like the piano, organ, celesta, or harpsichord.

When a key is pressed on the piano, a hammer inside the piano hits a set of strings to produce a note. In a harpsichord, the hammer plucks the strings, and a celesta's hammer hits metal bars. An organ is essentially many woodwind instruments put together; when you press the keys, air is forced through specifically tuned pipes with vibrating pieces in them.



Now that you are familiar with the instrument families take a look at the blank orchestra seating chart below. Where do you think the different groups of instruments should sit? Fill in the chart, and then compare your ideas to the included sample of how the Lexington Philharmonic sits.

Lexington Philharmonic Orchestra Seating Chart



Who is the Conductor?

When you attend an orchestra concert, the person on stage who might stick out the most to you is the conductor. He or she comes on alone after the orchestra tunes, stands in front of the group, leads the musicians and seems to control the music. But, who is this person? Let's start by introducing the Lexington Philharmonic's Music Director and Conductor, **Maestro Scott Terrell**.



This Fall conductor **Scott Terrell** launches his fifth season as Music Director of the Lexington Philharmonic Orchestra. In his last four seasons with the orchestra, he has re-invigorated the ensemble, challenging its musicians and audience alike with a greater variety of repertoire, all the while maintaining a steady footing in the classics. Maestro Terrell has simultaneously maintained a healthy schedule as a guest conductor for the Charleston Symphony Orchestra, the

Jacksonville Symphony Orchestra, Portland Symphony in Maine, and the Aspen Music Festival.

Terrell has led performances with many prestigious international organizations including Opera Colorado, Minnesota Opera, Minnesota Orchestra, Rotterdam Philharmonic, Hong Kong Sinfonietta, Milwaukee Symphony, Spoleto Festival, Colorado Symphony, Naples Philharmonic, Eugene Symphony, Richmond Symphony, South Dakota Symphony, Sun River Music Festival, Kalamazoo Symphony, Piccolo Spoleto Festival, Wheeling Symphony, Greater Boston Youth Symphony, Western New York Chamber Orchestra, Amarillo Symphony and the Musical Offering of San Antonio. Recent debuts include the Rochester Philharmonic, Bloomington Camerata Orchestra and El Paso Opera.

Previously, Terrell served as Resident Conductor of the Charleston Symphony Orchestra where he was artistic director and conductor of the Backstage Pass Series, Pops Series, and Out of the Box concerts. While Assistant Conductor of the Minnesota Orchestra from 1998-2003, Scott conducted hundreds of the Minnesota Orchestra's performances including Casual Classics, Pops, Family Concerts, Young People's Concerts, Composer's Institute, and Sommerfest Concerts.

Learn How to Conduct!

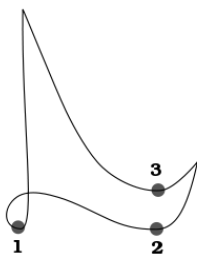
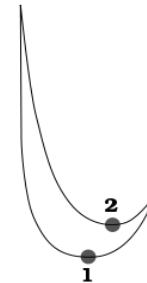


The conductor is the only musician on-stage who does not make a sound. Instead, it is the conductor's job to help the musicians play their individual parts. He or she does this by showing them *when* and *how* to play through non-verbal communication using his or her baton (the long stick held in their right hand), their left hand, and even their whole body. When you watch a conductor, or when you try it yourself, you may sometimes be reminded of dancing!

Showing "When to Play"

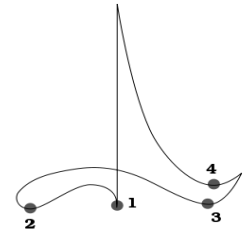
Part of conducting is showing the musicians when to start and stop playing. Conductors sometimes are like traffic cops at an intersection – bringing some people in, holding others until the right time, etc. One of the ways they do this is by showing established patterns with their baton. Musicians recognize them and can follow along. If someone gets lost, it's easy to look up and figure out where everyone is by watching the conductor. The conductor also helps the orchestra stay together with a steady pulse, especially in music that is very rhythmically complicated. Conducting patterns are much like dancer's choreography and they show the pulse of the music.

When the music is in a feeling of 2 beats per measure (time signatures of 2/4, 6/8, cut-time, etc.), the conducting pattern is simply down then up. Beat 1 is always down, and it often feels a bit "heavier" than 2. Sousa's "Stars and Stripes Forever" march is an example of music felt in 2.



Music felt in 3 beats per measure (3/4, 3/2, etc.) has a pattern of down, right, and up on beats 1, 2, and 3. Again, many times (though not always) the "heaviest" beat is the downbeat. Waltzes like Strauss' "Blue Danube" are a great example of music in 3 and the emphasis in the music corresponds a great deal to the dance steps. Some music in three is so quick that it is conducted in 1 (down and up in the same beat).

A common pulse in music is 4 beats per measure. The time signature 4/4 is so natural that it is also called “common time”. The conducting pattern for a feeling of 4 is down, left, right, and up. The nursery song “Old MacDonald Had a Farm” is felt in 4.



Sometimes, it’s not enough information for the players if the conductor only “beats time” (shows the pattern). Not all of the musicians in an orchestra play at the same time, so sometimes the conductor needs to cue their entrance. He or she can do this by making eye contact with them, pointing or gesturing in their direction, etc.

Showing How the Music is Supposed to Sound

Some conductors move a lot when they perform, using their entire bodies to show the music. Others stand very still, only moving their hands and arms in the patterns above. Just like dance, conducting is a form of expression – not only of self, but also of the music being performed. The conductor’s personal style affects this a great deal in *how* they show the music, as does the type of music being performed.



Non-verbal communication is where someone tells you something without using words. Body language is a special type of non-verbal communication where a person’s body shows how they are feeling. Conductors use this to portray the mood of the music being performed. Like actors and actresses playing characters, conductors must “become the music”. For happy music, a smile on their face and an energetic beat might do the trick, while for sad or lonely music an upset face with raised eyebrows would help.

A lady attending a concert for the first time once said, “If you watch that man in front, you can almost tell what the music is going to sound like before it happens!” That was an effective conductor.

Teachers are encouraged to show the following video links to accompany the education guide:

Conducting in 2

http://youtu.be/GpEtX6_5OkU

(Sousa's "Stars and Stripes Forever")

<http://youtu.be/NEs8yqhavtI>

(Bernstein's "Mambo - West Side Story")

Conducting in 3

<http://youtu.be/Jt1ihVeZznI>

(Mozart's "Jupiter Symphony, 3rd Mvt.")

<http://youtu.be/sUgoBb8m1e>

(Elgar's "Nimrod from Enigma Variations")

Conducting in 4

<http://youtu.be/oglFXqYFYd8>

(Shostakovich's "Symphony No. 5, Mvt. 4")

<http://youtu.be/5Zcxx7fNqIs>

(Wagner's "Die Meistersinger Overture")

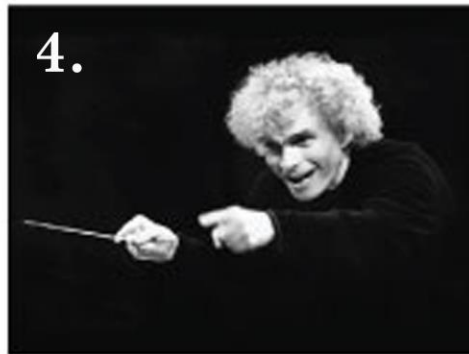
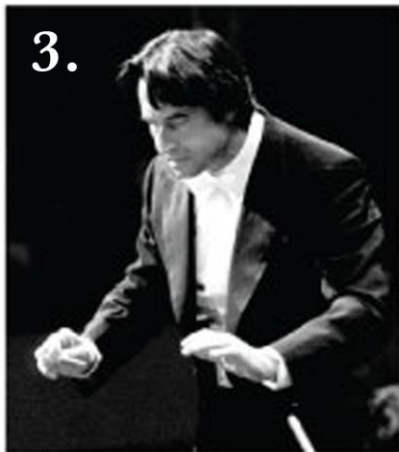
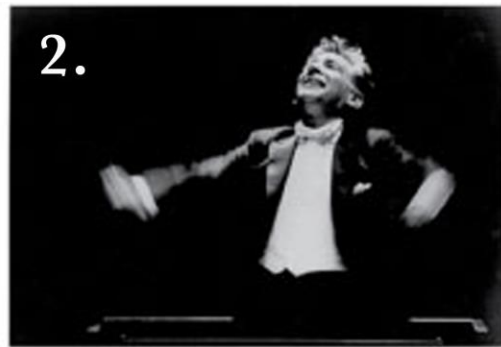
Activities and Responses

Activities:

1. Teach students the basic conducting patterns. Have them practice to recordings, the sample video resources, or, if they are learning to sing/play songs in class, leading other students.
 - a. If students have difficulty conducting the beat from the rhythms (i.e., trying to conduct the fast notes), have others clap the beat while one conducts.
2. Have students experiment with showing different moods while conducting.
 - a. Without music, have them conduct and show an emotion. Have other students guess what type of music the "conductor" is conducting.
 - b. Sing a happy song while the "conductor" tries to convey sadness and vice versa. Have them experiment with other emotions.
3. If your students attend the Lexington Philharmonic Discovery Concert, *please don't* discourage them from conducting along if it does not distract other students.

Responses:

1. Have students look at the included photos of conductors at work. Ask them to write a description of the music they are conducting, just based on the emotion in the picture. Also, ask what the conductor seems to be saying. Discuss why they chose the adjectives they did.
2. If your students attend the Lexington Philharmonic Discovery Concert, have them watch Maestro Terrell. Ask them to pay attention to his patterns and watch for when he cues instruments. Afterwards, ask them to write about what they saw.
 - a. How did the conductor's gestures affect the music?
 - b. Were the pieces in feelings of 2, 3, 4, or a combination?



MUSIC BUILDS TEAMWORK



Just like Strauss, he also was influenced by Wagner as a young student.

Born in
Ambert, France

He began his music lessons at age 6 and composed his first piece at age 8!

He was very good friends with the artist Claude Monet, and therefore had a huge collection of art that he used for inspiration!

Emmanuel Chabrier: *Joyeuse Marche*

January 18, 1841 - September 13, 1894

When thinking of what it takes to build an orchestra, some of your first thoughts may be instruments, a conductor, music to be performed, a stage and an audience. When thinking of what it takes to build a building, some of your first thoughts may be a hammer, nails, wood, an architect, and construction workers. You would be right in both instances of course; it takes many people and many things to put together an orchestra or to build a building. But after all those people and all of those materials come together, did you ever think about what it takes to make what they created work within itself?

For example, just because you have a room full of musicians and instruments does not mean you have an orchestra. And just because you have a bucket of a hammer, nails, and wood does not mean you have a house. The most important aspect of creating something is that all the many people and parts must work in harmony to create the final product.

Chabrier's *Joyeuse Marche* is a wonderful example of how all the different instrument families in the orchestra shine individually, and as a result they shine as one. Chabrier uses **woodwinds** (flutes, piccolo, oboes, clarinets, and bassoons), **brass** (horns, cornets, trumpets, trombones, and a tuba), **strings** (violins, violas, cello and double bass), and **percussion** (bass drum, cymbals, side drum, and triangle) to create this lively music setting. The work is presented in instrumental sections, with each individual section creating different tempos, colors, rhythms, dynamics and textures that all combine to work together. (Check out the *What's*

MUSIC BUILDS TEAMWORK

That Word?! section of this guide to explore these terms even further!) Chabrier intentionally isolates the groups then puts them together.

There is something to take note of here, however: even in isolated sections, all of the instruments are playing portions of the same **theme** – the theme is the main melody on which the entire work is based. The strings play the theme in a very smooth legato fashion, offering a whimsical and light rendition. The woodwinds play the theme very light and bouncy. The brass plays the theme very strong, loud, thick and heavy. But regardless of which section you are listening to, the listener can still tell it is the same piece of music.

Music Builds...Teamwork!

***Team work** [teem-wurk] (noun)*

cooperative or coordinated effort on the part of a group of persons acting together as a team or in the interests of a common cause.

Discuss with your class the ways teamwork is needed to play a piece like Chabrier's Joyeuse Marche. How is teamwork needed in general to have a successful orchestra, to build a city, or even in small things – like singing a duet together in the activity below.

Try this...

Imagine that you were singing a familiar song, perhaps the Star Spangled Banner, with a friend. One of you chooses to sing the first verse – sing this verse very loud and make each note short and staccato. Now, the other chooses to sing the second verse very quietly, with long legato notes that connect together. You are both still singing the same song, and ultimately your choices both work to perform the same piece.

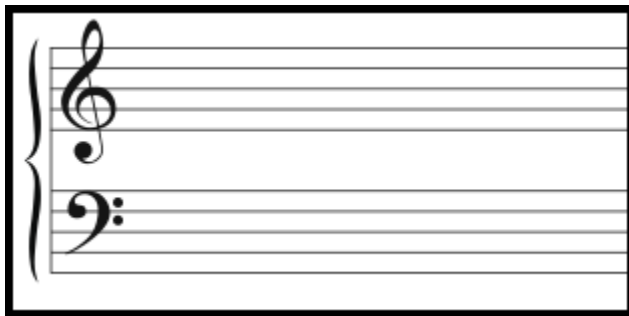
Now let's take it a step further. Grab the same partner, or a different one, and sing in your same style. This time, however, instead of taking turns, start at the beginning and sing it through at the same time. Keep the same tempo, and see how you end up together, even with different style choices.

MUSIC BUILDS TEAMWORK

A CLOSER LOOK

All of these moving parts need a way to be organized so that the conductor and the musicians can understand when to play and how to play. The composer writes his music down on what we call *sheet music*. This is lined staff paper that is used as a blank slate for the composer to begin to write down his music.

For example, this:



May turn into this:



But as we have learned, there are many, many parts to a full orchestra. So the composer takes all of the different parts and combines them into a musical *score*. You may think of the word *score* in relation to a basketball game or a football game. A *score* helps to keep track of something – who is winning or who is losing. In music, a *score* also helps to keep track of something: a *score* is a large book that combines all of the different musical instruments, voices, and instructions in one place and helps keep them in order. The conductor uses the *score* to read all of the parts at once so that he knows when to cue each instrument family, an instrument solo, and, ultimately, the entire orchestra!

Take a look at the first page of Chabrier's *score* for *Joyeuse Marche*. Look at how many different moving parts it takes to put this piece together! Each piece has its own rhythm, dynamic markings, and set of instructions for how to play the piece. By just looking at this *score*, can you figure out which instrument family is the first to play the theme all by themselves?

MUSIC BUILDS TEAMWORK

JOYEUSE MARCHÉ

À VINCENT d'INDY

EMMANUEL CHABRIER

Tempo di marcia, molto risoluto e giocoso.

2 1^{res} Flûtes.
1^{re} Flûte.
2 Hautbois.
2 Clarinettes en SI \flat .
4 Bassons.
4 Cors en FA.
2 Pistons en UT.
2 Trompettes en FA.
1^{er} et 2^e Trombones.
3^e Trombone et Tuba.
Timbales en SOL-DO.
Tambour.
Triangle.
Grosse Caisse et Cymbales.
Harpes.
Violons.
Altos.
Violoncelles.
C. Basses.

Tempo di marcia, molto risoluto e giocoso.

ff, *sf*, *dim*, *p*, *ppp*, *f*, *arc.*, *pizz.*, *arco.*

Paris, ENOCH & C^{ie} Editeurs.




E. P. & C. 1730.

MUSIC BUILDS TEAMWORK

It All Adds Up!

Chabrier's *Joyeuse Marche* had each instrument enter at a specific time to play a very specific rhythm. Aside from being able to know *which* note to play, musicians must know *how long* to play the note – this structured pattern of sound, sometimes regular and sometimes irregular, is called rhythm. Musicians must count very carefully to play all of the notes for the correct amount of time, and they must also count rests to make sure they don't play too soon or too late. Music requires an understanding of basic math.

Look at the chart below and familiarize yourself with how many beats each note gets. Based on that, can you solve the math problems below?

Quarter Note		=	1 Beat
Half Note		=	2 Beats
Whole Note		=	4 Beats

$$\text{Quarter Note} + \text{Quarter Note} =$$

$$\text{Quarter Note} + \text{Whole Note} =$$

$$\text{Quarter Note} + \text{Whole Note} =$$

$$\text{Quarter Note} + \text{Quarter Note} + \text{Quarter Note} =$$

$$\text{Quarter Note} + \text{Whole Note} + \text{Half Note} =$$

$$\text{Whole Note} + \text{Whole Note} + \text{Quarter Note} =$$

MUSIC BUILDS TEAMWORK

BONUS QUESTIONS!

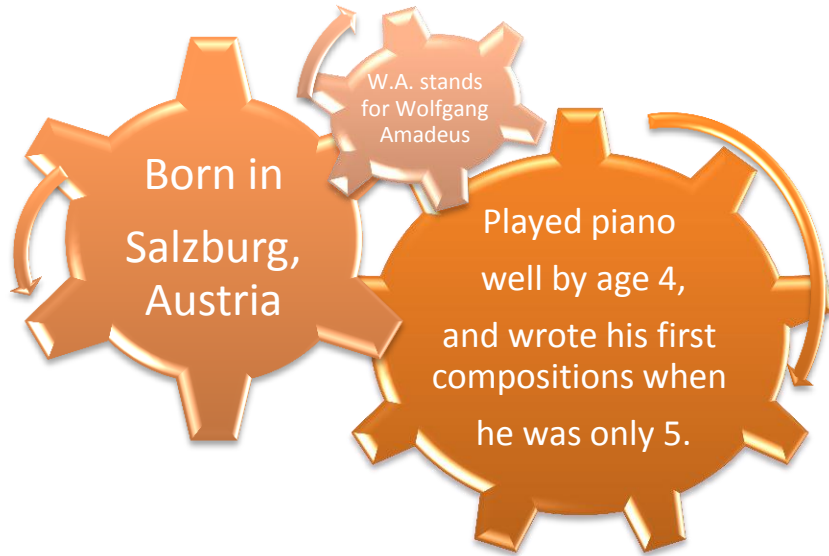
Can you solve the equation below? It has a couple surprises in it.

$$\text{♩} + \text{♩} + \text{♩} + \text{♩} + \text{♩} + \text{♩} + \text{♩} + \text{♩} + \text{♩} + \text{♩} = ?$$

Now, try one step further. Each measure below needs to have 4 beats within the measure. Can you arrange the notes below to fit in the measures?



MUSIC BUILDS INSPIRATION



W. A. Mozart: *Eine Kleine Nachtmusik*

January 27, 1756 - December 5, 1791

Have you ever thought about what inspires a composer to write a new piece of music? Composers today may be inspired by something they see on TV, watch in a movie, or hear at another concert. But during Mozart's lifetime, many of these things did not exist. So where did Mozart get his inspiration? Architecture! Mozart was heavily influenced by the magnificent structures throughout Europe. Renaissance, Gothic, and Baroque architecture were overflowing with details. Structures such as castles, bridges, churches and even homes were constructed by hand and included ornate designs in even the tiniest features.

Mozart was inspired by all of these surroundings. His music was played live by trained musicians – and where better to play than inside these larger than life works of architecture? The architecture of these buildings played an important part in how his music would sound. The towering cathedral walls and ceilings that were as high as skyscrapers served as a musical backdrop for much of his work. The architecture of the building became an instrument in the work itself, allowing the sound to bounce back and forth and echo throughout the space.

MUSIC BUILDS INSPIRATION



Above: Germany Cologne Cathedral
Image source: imagesbyar.com

Just as a composer may seek inspiration from an architect, an architect may seek his inspiration from a composer! One theory even suggests that music and architecture are like sisters, because they share many of the same traits – imagination, design, structure, space, rhythm, and many more! Architecture can create a mood and fill a space just like a piece of music can.

Mozart's *Eine Kleine Nachtmusik* translates as “a little serenade” or “a little night music.” Instead of using all of the instruments, he wrote this piece for just one family of the orchestra – the string family. Violins, violas, cellos, and double basses make up the rhythmic driving force behind this piece. Composers sometimes write pieces for smaller groups of instruments within the orchestra. Think of this as featuring one of the many building blocks it takes to put a larger ensemble together. Utilizing only the string section would be similar to an architect building a home using only wood. It allows the listener, and the viewer, to appreciate and focus on one texture or type of sound.



Above: The main theme from *Eine Kleine Nachtmusik*. It is written for violin, but encourage your students to clap out the rhythm, or perhaps even try it out on a piano!

MUSIC BUILDS INSPIRATION

What's That Word?!



Music and architecture share a lot of the same vocabulary! Take a look below at some of our favorite music words and see how they relate to the world of architecture.

Music

- **Rhythm** – Patterns of sounds in relation to a beat, sometimes regular and sometimes irregular
- **Texture** – Layers of sounds and rhythms produced by combinations of different instruments
- **Harmony** – Balance of sound between different parts and different musicians
- **Proportion** – The distance between notes or intervals, or the relationship between sections of the piece
- **Dynamics** – The level of loud or soft and everything in between!

Architecture

- **Rhythm** – The repetition of elements such as openings, shapes, structure. Architecture, just like music, can have regular or irregular rhythms or patterns.
- **Texture** – The feeling of different materials used such as wood, metal, glass or rubber
- **Harmony** – The balance of parts
- **Proportion** – The relationship between the different aspects of the building so that they all fit together equally
- **Dynamics** – The size of a building's façade or mass

MUSIC BUILDS INSPIRATION

Music Builds...Inspiration!

in-spi-ra-tion [in-spuh-rey-shuhn] (*noun*)

1. an inspiring or animating action or influence: *I cannot write music without inspiration.*
2. something inspired, as an idea.
3. a result of inspired activity.
4. a thing or person that inspires.

1. How does music make you feel? Have you ever seen a building that makes you feel something or inspires you? Maybe a really tall skyscraper that makes you say “Wow!” or make your stomach drop when you ride to the top? Write a short story about a time when a piece of music made you feel something, and a time when a building or work of architecture inspired you.
2. Composers often give their pieces a name, and so do architects, designers, artists and sculptors. Naming a piece can add meaning. Look around your city and find familiar buildings that have names (i.e. Rupp Arena, or even your own school!). Have the children rename the buildings to fit their character – come up with a name that’s accurate, funny, poetic, or even musical! You can expand this even further by renaming your favorite songs – songs you sing in the classroom, or listen to on the radio. What would you have named the “Star Spangled Banner” ?
3. Mozart’s music and architectural influences both rely heavily on structure – but what happens when that structure is shaken? The building below is often referred to as the “melting building” – it is fully functional on the inside, but on the outside it looks like a mess. Discuss with the students the idea of irregular rhythm, texture, and proportion and how sometimes they are used to make things work! (Looking for a composer to help? Check out Charles Ives!)



Architect Frank Gehry's Cleveland Clinic Lou Ruvo Center For Brain Health in Cleveland, Ohio.
Image source: huffingtonpost.com

MUSIC BUILDS CURIOSITY



Wrote this first composition at the age of 6!

Born in Munich, Germany

Strauss learned to play the piano when he was 4 and the violin when he was 8 years old.

Richard Strauss: *Serenade for Winds*

June 11, 1864 - September 8, 1949

When we think of architecture in relation to the idea of “Music Builds” it is very easy to think only of literal things we can see and touch. Architecture is about building skyscrapers, schools, hospitals, and more. We have talked about how music can be made with different instruments, musicians, composers, and many other working parts. But what about all the other things music can build? Music builds imagination. Music builds confidence. Music builds community.

Music Builds...Curiosity!

cu-ri-os-i-ty [kyoor-ee-os-i-tee] *noun, plural cu-ri-os-i-ties.*

1. the desire to learn or know about anything; inquisitiveness.

Richard Strauss was a curious young boy for whom music did all of these things. His father was a horn player for the Court Opera, and because of this, he was surrounded by music at a young age. He composed his first work at the age of six years old. He heard his first opera, by Richard Wagner, and wanted to study the music and its story, but his father made him wait until he was a bit older. Strauss' curiosity was sparked by this piece, and it began to shape how he composed his own music. The music helped him build a vivid imagination that would later lead him to compose his own operas, orchestral pieces and smaller pieces like his *Serenade for Winds*. He took this imagination and curiosity, and began carrying it into his life as he grew up, eventually going to school to study Philosophy and Art History. By the age of 17, Strauss composed this serenade for two flutes, two oboes, two clarinets, two bassoons, a contrabassoon, and four horns. He then became a conductor and he traveled all throughout Germany and Austria leading the orchestras in playing the music he composed. His music helped draw communities together.

MUSIC BUILDS CURIOSITY

A CLOSER LOOK

Strauss chose to compose his *Serenade for Winds* for the woodwind and brass families of the orchestra. Why do you think he chose to compose a piece for winds only? Sometimes architects and builders design buildings to use only certain materials. For example, you might see one house made of wood and the one next to it made of brick. This does not make one house better than the other, and both houses are complete. The same applies to music. Strauss designed the piece specifically so that the woodwind family is featured, and even with one family the music still sounds complete and full.

The instruments themselves are part of a design created by someone long before the musician plays the instrument. A wind instrument has a specific architectural layout to it – the way it curves, if it is made of brass or wood, and the size and shape of the instrument all affect how it will sound. Architecture is a part of the design of a musical instrument –even the space inside the instrument where the sound vibrates and is produced is part of the whole experience. The music you hear is a result of the design of the instrument on which it is being played. Do you think Strauss took this into consideration when he was choosing instruments for this piece?

Check out this explanation of how science is used to determine how sound is created and translates to our ears!

(Teachers, you can read this entire article *The Science of Sound and Musical Instruments* by Joe Lewis at <http://www.yale.edu/ynhti/curriculum/units/2000/5/00.05.05.x.html>)

- Sound is created through vibrating objects going through a medium (air) in the forms of sound waves. Sound waves within the atmosphere are invisible. These sound waves reach the eardrum causing them to vibrate. Then the brain perceives these vibrating waves as sound.
- Sound waves travel at different rates of speed and have different intensities and frequencies. The frequency of a sound wave is determined by the number of times an object, or sound waves it produces, vibrates in one second.
- The frequency that sound vibrates determines the pitch of that sound. If a sound wave vibrates rapidly, it will produce a higher pitch. If a sound wave vibrates slowly, it will produce a lower pitch.
- All objects have a natural frequency or period of vibration. If we consider the strings on the inside of the piano, we will find that it is composed of string or wires with its different lengths and thickness. Each of the wires has been tightened so that they will vibrate at a definite frequency.

MUSIC BUILDS CURIOSITY



Try This!

Set a row of bottles out in the classroom, each filled with a different amount of water. Blow across the top of the bottle, causing it to vibrate. As your air travels through the bottle it will touch the surface of the water and then travel back to the opening. This back and forth motion will create sound.

- The flow of air in the bottles with the *less* water has to travel farther inside the bottle producing a larger air column, which causes the air to vibrate slower. The slow vibration produces a lower pitch.
- The flow of air in the bottles with *more* water has to travel a shorter distance inside the bottle producing a smaller air column, which causes the air to vibrate faster. The faster vibration produces a higher pitch.

In the space below, design and draw your own brand new orchestra instrument. Think about all of the things we have talked about and pretend you are designing an instrument for a musician in the orchestra. Write a brief explanation of your design choices.

I chose this design because...

MUSIC BUILDS CURIOSITY

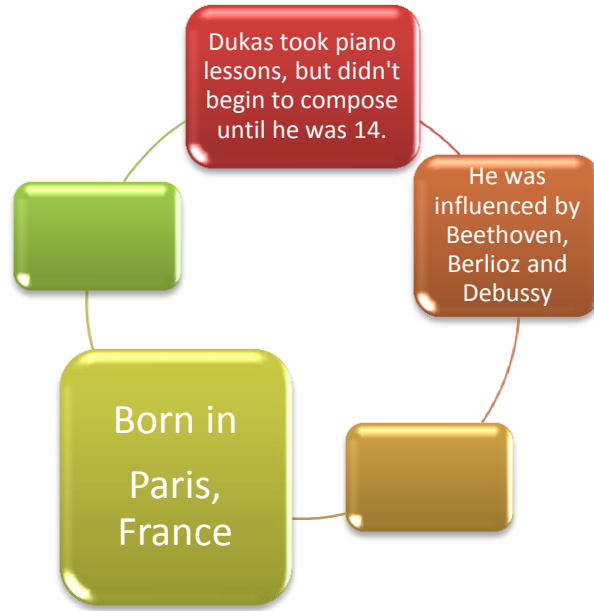
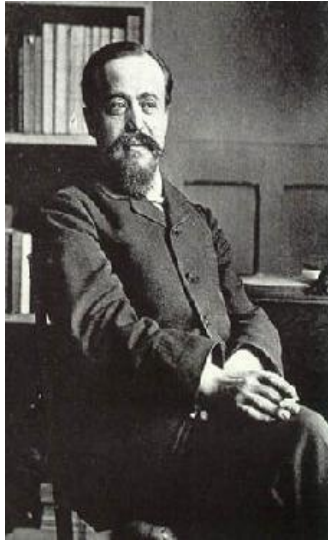


A CONDUCTOR NEEDS TO KNOW...

Strauss was a composer and a conductor. He had to understand all there is to know about an orchestra in order to get them to play his music well. Below is a list of some of the things a conductor needs to know when he steps in front of the orchestra. But be careful – some of these things are not quite right – can you tell the difference?

- ♪ How to hear if one or more of the instruments are out of tune
- ♪ How to keep the musicians playing together in the correct rhythm and time
- ♪ How to paint a house with all the right colors
- ♪ How to read and understand music
- ♪ How to say his alphabet backwards
- ♪ How to name and understand all of the instruments in the orchestra
- ♪ How to lead musicians in a rehearsal
- ♪ How to listen to the music and fix mistakes when they occur
- ♪ How to do all of the steps in the Cha-Cha Slide

MUSIC BUILDS IMAGINATION



Paul Dukas: La Peri Fanfare

October 1, 1865 - May 17, 1935

Dukas' *La Peri Fanfare* makes a very bold statement – a full, loud brass section serves as the foundation for this piece. The music makes it sound like something very important is about to happen, and the brass instruments are loud enough to fill up a very large space. Does some music fit in a certain architectural setting better than others? Do composers write music with a specific audience in mind?

Let's pretend for a moment that you are going to see a concert in a very tiny space – perhaps even in a friend's home. You are there, along with dozens of other people, all together in a small living room with only one small window. If a large group of brass instruments came in and began to play *La Peri Fanfare* you would probably be blown away with sound! Think about how loud that would be. But if a smaller group came in, such as a flute duet, then their sound would fill the space wonderfully; not too loud, not too soft. You may think it sounds silly to have a classical music concert in your living room, but this was often the case with early 17th and 18th century musicians and composers. These chamber concerts were described as “the music of friends” – amateur musicians would gather in their homes and play music together, often with one person on each part. Composers wrote many works with this setting in mind, knowing their audience would be small and intimate.

MUSIC BUILDS IMAGINATION

Still, many composers had larger venues in mind. Great cathedrals with ceilings that soared to over 100 feet high were often the backdrop to performances of new symphonies. After the last note, the sound would ring throughout the tall ceilings and walls, sometimes for ten whole seconds!

The answer then, is yes – composers do often write music with a particular audience and performance setting in mind. Using this same logic, it would make sense that architects design buildings with a certain setting in mind. Check out some of the unique works of architecture below. Each was designed with a very specific audience in mind. The way buildings look, the function they serve, and the people who use them are all part of the overall building and design of a community, and each help define the communities of which they are a part.



Above: **The WonderWorks Museum** is definitely unique! This building houses over 100 educational hands-on activities for children of all ages that are meant to challenge the mind. (Image source: floridaleisureblog.com)

Architect: Terry Nicholson

MUSIC BUILDS IMAGINATION



Above: **The Leaning Tower of Pisa** is very famous, but this building's tilt to one side was actually an accident!
Architect: Bonanno Pisano (Image source: en.wikipedia.org)



Above: No, this isn't a lawn ornament or a picnic for a giant! This building is the corporate headquarters for the **Longaberger Basket Company** located in Newark, Ohio. Inside this basket are seven stories of offices where great ideas happen every day!

Architects: The Longaberger Company designed the exterior and interior of the building. NBBJ and Korda Nemeth Engineering administered the construction process. (Image source: newarkohiolinks.com)

MUSIC BUILDS IMAGINATION



Above: **The Sydney Opera House**, located in Sydney, Australia. This building plays host to some of the most famous performing arts groups in the world – great orchestras, opera singers, and theater companies visit this space every year.

Architect: Jørn Utzon

Music Builds...Imagination!

im-ag-i-na-tion [ih-maj-uh-ney-shuhn] (*noun*)

1. the faculty of imagining, or of forming mental images or concepts of what is not actually present to the senses.

The architects of the buildings above certainly had big imaginations. Discuss with your students the idea of imagination; how it can allow us to “travel” to a different place without leaving our home, how small ideas we imagine can become huge buildings or famous orchestral works – ask them to write about a time when they imagined something happening and it came true! When they listen to Dukas’ *Fanfare* have them close their eyes and describe what they imagine seeing when they hear the music and then draw what they see.

MUSIC BUILDS IMAGINATION

A city is like a living, breathing organism. People live in certain cities because they may like the restaurants there, they may like the schools best there for their children, they may work in a certain profession and they want to work for a certain organization in that city. Some people live in one community their entire life, while others may live in many different cities throughout the country or even the world. This natural ebb and flow is what keeps communities alive and ever-changing.

Music is the same way. Whether or not Dukas wrote his *La Peri Fanfare* with a particular performance setting in mind is not as important as the fact that even today, over 100 years later, this same piece of music is being performed and heard by new audiences. The music is still a living work of art that is different each time it is performed because it will be played by a new set of musicians, heard by a new audience and performed in a new space.

Side Notes



Dukas did have a specific setting and performance space in mind when he wrote this work. *Fanfare* was written to be performed as part of the ballet *La Peri*. A *fanfare* is a loud, important burst of sound often played by brass instruments. It is used to grab the audience's attention and announce that something very important is about to follow. In this case, Dukas wrote a fanfare to be presented at the beginning of this ballet. Want to see another Dukas work in action? Check out Disney's *Fantasia* for *L'apprenti Sorcier*. More commonly known as *The Sorcerer's Apprentice*, you'll likely recognize this famous piece when you see the dancing brooms!

(Image source: berlinippon.com)

MUSIC BUILDS IMAGINATION



Take a look below at some of the world's most famous landmarks. Some works of architecture are so famous that you can simply look at a building or structure and know exactly in which city it is located. Can you draw a line between the famous work of architecture and the city where you would find it?



EGYPT



LONDON



NEW YORK CITY



San Francisco



PARIS

MUSIC BUILDS IMAGINATION



The Science of Sound

As we think of how music is performed in different spaces, and how composers may indeed compose their music with a certain architectural setting in mind, let us take a moment to learn about sound. Even a very small sound can be heard in a large space – for example, the large cathedrals we have mentioned, the Sydney Opera house, and The Cleveland Orchestra's Severance Hall (pictured) are all large performance spaces. So how would it work for just one flute to give a solo performance?

Even the smallest sounds can make a large impact if you have the right sound conductors. We have learned that the conductor of an orchestra is the leader, and is in control of the orchestra. A sound conductor works the same way; rather than a person though, it is any object or matter that leads and controls the distribution of sound. Concerts halls are adorned with special walls and ceilings and architectural designs that help to catch the sound and carry it so that even the last seat in the back of the room can hear well. How does this work?



Take a balloon and blow it up. Then, hold the balloon up right next to your ear and tap *very lightly* on the opposite side. You should be able to hear the noise quite well. When you blew air into the balloon it caused it to expand. As it expands, the slight resistance of the walls of the balloon begins to force the air molecules to remain tightly together. The more closely the air molecules are pushed together, the better conductor of sound they become. When you tap your finger lightly, the vibration bounces not only off the wall of the balloon, but also off the new wall of air molecules. By the time the sound reaches your ear on the other side, the sound has been amplified quite a bit!



Above: Severance Hall, the home of The Cleveland Orchestra, designed by The Cleveland architectural firm of Walker & Weeks
(Image source: jesspink12.wordpress.com)

MUSIC BUILDS HARMONY



He began taking piano lessons in the fifth grade. In high school, he played the trombone.

His music has been performed by orchestras on *five* continents: North America, South America, Asia, Europe and Africa!

He was influenced by Mozart, Beethoven, and even soul music out of Detroit (where he was born).

Russell Peck: The Thrill of the Orchestra

January 25, 1945 - March 1, 2009

Cities are made up of many components – houses, tall buildings, roads, parks, and people are all part of what makes a city. Great orchestras are built in the same way – musicians, instruments, composers, conductors and audiences are all a part of building an engaging orchestral performance. A city without buildings and roads would not be much of a city; an orchestra without instruments or musicians would not be much of an orchestra! Russell Peck's *The Thrill of the Orchestra* helps illustrate the different instruments in the orchestra and how they are played. There are many other aspects involved with building a successful orchestra. Remember the new words we learned when we talked about music and architecture sharing vocabulary – rhythm, texture, harmony, proportion, and dynamics. All of these components are also important to achieve the final product. And most importantly, to build anything you must have a solid foundation of all the different components working together in harmony to create the final effect.

Music Builds...Harmony!

har-mo-ny [hahr-*muh*-nee] *noun, plural* har-mo-nies

1. **agreement**; accord; harmonious relations.
2. a consistent, orderly, or pleasing arrangement of parts;
3. *Music*.
 - a. any simultaneous combination of tones.
 - b. the simultaneous combination of tones, especially when blended into chords pleasing to the ear; chordal structure, as distinguished from melody and rhythm.

To achieve harmony, a structure must be followed. Architects build their buildings based on very detailed designs, just as musicians play very detailed music written by composers who have assigned a certain form to the music. First, let's take a moment and familiarize ourselves with some of the people it takes to build a city or an orchestra – can you spot all of the similarities?

MUSIC BUILDS HARMONY

We Built This City.....

Design Engineer – This person is usually the first person involved with the project. He or she is usually the key person who develops the conceptual, preliminary and design details. This serves as the basic roadmap for all of the other engineers who come in later to work on the project.

Civil Engineer – This person takes the initial design and then becomes responsible for the planning and execution of the design, developing the concept and then later helping maintain the structures and keep them up to par.

Building Engineer - Building engineers acquire knowledge from the Civil Engineers in the planning, design, and construction process. Together with the other engineers, they help identify problems and solutions, explore the design, and then help execute the design through all the phases of the building.

Material Engineer – This engineer makes sure that the materials used in each project are exactly what is needed – insulation, bricks, wood, cement, and many other materials are appropriate for a variety of projects. These engineers specialize in keeping themselves up-to-date with the current materials and the newest ways to work with them.

Residents – After the city and buildings are complete, someone needs to enjoy them! People from all walks of life will move to cities to find jobs, go to school, and live in the buildings created by all of the engineers.

We Built This Orchestra.....

Composer – This person is usually the first person involved with the project. He or she is the person who writes the music, designs the form of the music, knows what it should sound like and assigns the instrumentation. This initial music serves as the roadmap for all of the musicians who later learn and perform the piece.

Conductor – The conductor takes the composed music and then becomes responsible for the planning and execution of how the music will be played. He studies the music very carefully before working with the musicians so that he understands exactly what the composer wants. He or she is able to help maintain the structure of the music and keep everyone together through the movement of his arms or baton.

Musicians – A musician will play the music on their instrument. They will look to the conductor for knowledge and council on the piece as a whole. First they practice alone, then together with other musicians and the conductor; on their own they work through problems and solutions by practicing many hours, learning tempo and style, and then finally performing the music from beginning to end.

Instruments – There are four families that make up an orchestra: Strings, Woodwinds, Brass and Percussion. Each instrument is carefully crafted with different materials such as wood or metal in order to make sure the vibrations and structure result in the ideal sound. Specialized craftsmen spend many long hours selecting the right materials and hand-making each instrument.

Audience – After the music is composed, the musicians are rehearsed and the music is ready to be performed, audience members will buy tickets and come to the performance hall to see the orchestra perform. It is their way of showing appreciation to the composer, conductor, and musicians!

MUSIC BUILDS HARMONY

Story Time



Using the new terms that you now know, read the story below. Wherever there is a blank, fill it in with one of the words on the previous page. Try completing it through one time using only the names of the people involved in building a city. Then, try reading it through a second time and use only the names of the people involved in building an orchestra.

The city of Lexington, Kentucky is a very busy bustling city. Made up of many people, buildings, roads and houses there is always something to do – like going to see The Lexington Philharmonic! One day, a man named John Green moved to Lexington. He was eager to explore the city! John had a job as a _____ . As a _____ he was responsible for being the first person involved with a project. His initial work served as the roadmap for all of the people who come in later to work on the piece. He had a new idea in mind, and all he needed was to find a local _____ . A _____ is someone who takes the initial idea and then becomes responsible for the planning and execution of the design. He will study the work very carefully so that he understands exactly what the _____ wants. After talking with a friend, John was introduced to a man named Scott. Scott was a _____ and could help John with what he needed. Together, they were able to find local _____ . The _____ first met with Scott and looked to him for knowledge and council on the work. Then together, they were able to help identify problems and solutions, explore the idea, and spend many hours working on executing the idea from beginning to end. They were able to find the right _____ needed to ensure they had the best materials available – wood, metal, and all the other materials used to help them out.

Finally, the work was complete and it was time for one last test – find a(n) _____ to enjoy their work and show their appreciation! People came from all over the city to see this amazing new work put together by collaboration between a _____ , a _____ , and (a) _____ . John could already tell he was going to be very happy in his new city!



Music Listening Guide

Student's Name _____

Composer's Name _____

Name of Piece _____

Listen to each of the pieces in the concert program listed in the beginning of the Education Guide. The first time through focus on listening to the music and paying attention to the different instruments used, how loud or how soft the orchestra plays, or how fast or how slow the music sounds. The second time through, while you are listening try to answer the questions below by circling those words you think best fit the music. Did your friends choose the same options?

1. This piece sounds:

Soft (*piano*)

Loud (*forte*)

Somewhere in between (*mezzo piano* or *mezzo forte*)

2. This music is:

Really, really slow (*Largo*)

Slow (*Andante*)

Medium Fast (*Allegretto*)

Fast (*Allegro*)

Really, really fast! (*Presto*)

3. This music makes me feel:

Happy

Scared

Sad

Energetic

Angry

Sleepy

4. I can hear the following instrument families:

Strings

Woodwinds

Brass

Percussion

5. Using 2-3 sentences, describe what this piece sounds like overall and what it makes you feel like. Did you feel differently after listening to it a second time?

What's That Word?

The words in parenthesis above may look a little strange – that's because they are in a different language! Music directions are often written in Italian. Take a look below at some of the words used to describe music. Your teacher will help you out with pronunciations.

Allegro Italian for "happy." To play a piece in a lively manner, at a fast (but not too fast) pace.

Allegretto moderately quick tempo, slightly slower than allegro but faster than andante

Andante Italian for "going." To play a piece at a moderate speed -- not too fast, not too slow.

Forte Italian for "loud"

Largo Italian for "broad." A very slow tempo.

Mezzo piano or ***mezzo forte*** Italian for "half." For example, mezzo forte means half as loud.

Piano Italian for "soft."

Presto Italian for "quick," or "fast."

Curriculum Connections

The lessons, activities and response opportunities contained within the Education Guide align with Kentucky Department of Education standards as indicated in the Program of Studies and reflected by the Program Review Guide.

If you have any questions regarding the curricular connections, please contact Education & Outreach Coordinator Micha Hughes at education@lexphil.org or 859-233-4226.

Resources:

KDE Program of Studies -

<http://www.education.ky.gov/KDE/Instructional+Resources/Curriculum+Documents+and+Resources/Program+of+Studies>

KDE Program Review Guides –

<http://www.education.ky.gov/KDE/Instructional+Resources/Program+Reviews>

Education Guide Curriculum Connections

The Education Guide lessons, activities, and response opportunities incorporate the following Curriculum Connections:

Program of Studies –

- Arts and Humanities
 - Big Idea: Structure in the Arts
 - Big Idea: Humanity in the Arts
 - Big Idea: Purposes for Creating the Arts
 - Big Idea: Processes in the Arts
 - Big Idea: Interrelationships Among the Arts
- English Language Arts
 - Big Idea: Forming a Foundation (Reading)
 - Big Idea: Developing an Initial Understanding (Reading)
 - Big Idea: Interpreting Text (Reading)
 - Big Idea: Reflecting and Responding to Text (Reading)
 - Big Idea: Writing Content
 - Big Idea: Speaking, Listening, and Observing
- Mathematics
 - Big Idea: Number Properties and Operations
 - Big Idea: Measurement
- Practical Living
 - Big Idea: Psychomotor Skills (Physical Education)

- Science
 - Big Idea: Structure and Transformation of Matter (Physical Science)
 - Big Idea: Motion and Forces (Physical Science)
- Social Studies
 - Big Idea: Cultures and Societies
 - Big Idea: Historical Perspective
- Technology
 - Big Idea: Inquiry/Problem-Solving and Innovation

Lexington Philharmonic “Music Builds” Discovery Concert Checklist

- Middle of August – LexPhil Discovery Concert Education Guide available online
- September 1 – Kentucky Arts Council TranspARTation Grant Application due**
- End of September – KAC TranspARTation Grant notification
- October 7 – LexPhil Supplementary Bus Funding Application due**
- October 15 – LexPhil Supplemental Bus Funding decisions
- October 15 – Deadline to turn in LexPhil Reservation Forms**
- October 21 – Deadline to make changes in number of seats reserved to LexPhil**
- October 23 – Discovery Concerts, 10 & 11:30am at the Lexington Opera House
- October 25 – Discovery Concerts, 10am at the ECU Center For The Arts
- After October 25 – Return Discovery Concert Evaluation Form to LexPhil
- November 23 – KAC TranspARTation Grant Final Report DUE**

Please feel free to contact education@lexphil.org or 859-233-4226 with any questions.

Forms and more information on the Discovery Concerts available at: www.lexphil.org

More information on the KAC TranspARTation Grant available at:
www.artscouncil.ky.gov/Grants/TranspARTation.htm



R. Scott King, President

Scott Terrell, Music Director & Conductor

Allison Kaiser, Executive Director

OCTOBER 23, 2013 DISCOVERY CONCERT RESERVATION AGREEMENT

School / Group: _____ Date: _____

Address: _____ Email: _____

City _____ State _____ Zip Code _____

Contact Phone: _____ Contact Fax: _____

Contact Name: _____ Grade Levels Attending: _____

Transportation: (please check one)

Bus Van/Car Walk

Of Buses _____

Please list any special needs: _____

Music Builds

Date:

October 23, 2013

of Seats Requested:

Students _____

Adults _____

Total # of Seats _____

Time:

10:00 a.m.

11:30 a.m.

Amount Due:

Total # of Children _____ x \$4.00 = _____

Total # of Adults _____ x \$5.00 = _____

Method of Payment:

Visa MasterCard Discover American Express

Card Number: _____ Expiration Date: _____

Signature: _____

Check included - Please make checks payable to: **Lexington Philharmonic**

Performance Location: Lexington Opera House

Located at the corner of Short St. and Broadway, Lexington, Kentucky

Agreements must be signed and returned to the Lexington Philharmonic as soon as possible to ensure your reservation. Deadline is October 15, 2013. Late forms will be accepted as space allows. Invoices will be sent upon receipt of this agreement. Payment in full will be required by the performance date. Cancellation of a reservation or alterations to the seat count will only be accepted until October 21, 2013 as available.

The individual listed below acknowledges his/her authority to legally enter into this agreement on behalf of his/her school or organization.

Signature

Title

Date

Submit agreement via regular mail, fax, or e-mail to tickets@lexphil.org



R. Scott King, President Scott Terrell, Music Director & Conductor Allison Kaiser, Executive Director

OCTOBER 23, 2013 DISCOVERY CONCERT
LEXPIL SUPPLEMENTAL BUS FUNDING FORM

Deadline: October 7, 2013

Teachers will be notified of their funding status by October 15.

Contact Name: _____

School: _____ Date: _____

Address: _____ Email: _____

City _____ State _____ Zip Code _____

School Phone: _____ School Fax: _____

Grade Levels Attending: _____ # of Buses: _____ # of Students Attending: _____

Cost per bus: _____

Total funding needed: _____

Did you apply for funds from the Kentucky Arts Council TranspARTation Grant? Y / N

If yes, how much were you awarded? _____

(Reminder: The deadline is **SEPTEMBER 1, 2013** for the KAC Grant Application. You are strongly encouraged to apply for the KAC grant before submitting this application.

More information at www.arts council.ky.gov/Grants/TranspARTation.htm)

Please explain how your school would benefit from these additional funds:

Return this form to education@lexphil.org.



R. Scott King, President

Scott Terrell, Music Director & Conductor

Allison Kaiser, Executive Director

OCTOBER 25, 2013 DISCOVERY CONCERT
LEXPIL SUPPLEMENTAL BUS FUNDING FORM

Deadline: October 7, 2013

Teachers will be notified of their funding status by October 15.

Contact Name: _____

School: _____ Date: _____

Address: _____ Email: _____

City _____ State _____ Zip Code _____

School Phone: _____ School Fax: _____

Grade Levels Attending: _____ # of Buses: _____ # of Students Attending: _____

Cost per bus: _____

Total funding needed: _____

Did you apply for funds from the Kentucky Arts Council TranspARTation Grant? Y / N

If yes, how much were you awarded? _____

(Reminder: The deadline is **SEPTEMBER 1, 2013** for the KAC Grant Application. You are strongly encouraged to apply for the KAC grant before submitting this application.

More information at www.arts council.ky.gov/Grants/TranspARTation.htm)

Please explain how your school would benefit from these additional funds:

Return this form to education@lexphil.org.

Lexington Philharmonic
Discovery Concerts: October, 23, 2013 & October 25, 2013
“Music Builds”
Guide and Concert Evaluation Form

We hope that you enjoyed the Discovery Concerts and/or the accompanying Education Guide. Your input is important to us! Please fill out the evaluation form below so that we may continue to develop our Discovery Concerts and other educational programs in ways that meet your needs. If you have any questions or comments that you would like to discuss, please contact the Education & Outreach Coordinator, by email at **education@lexphil.org** or by phone at **859-233-4226**.

Name: _____ School / Group: _____
Subjects and Grade Levels Taught: _____
Email: _____ Phone: _____

Education Guide

Have you used the Education Guide? (Check one)

- Yes, in conjunction with attending the LexPhil Discovery Concerts
- Yes, separately from the Discovery Concerts
- Not yet, we have attended the Discovery Concerts and plan on using the guide
- No, we did not use the Education Guide

Which sections did you use? (Check all that apply)

- Program / Concert Etiquette
- An Introduction to the Orchestra
- Music Listening Guide
- Who Is the Conductor?
- Music Builds
 - a. Music Builds *Teamwork*: Emmanuel Chabrier
 - b. Music Builds *Inspiration*: W.A. Mozart
 - c. Music Builds *Curiosity*: Richard Strauss
 - d. Music Builds *Imagination*: Paul Dukas
 - e. Music Builds *Harmony*: Russell Peck

Were the activity ideas and response opportunities appropriate and useful for your classroom?
Please explain.

- Yes
- No

Were you able to use one or more activities in the guide in relation to another non-music subject?

- Yes
- No

Please check all that apply:

- Science/Technology
- Math/Engineering
- Language Arts (Reading, Writing, Discussion)
- History
- Social Studies/Geography/World Studies

Art
 Other: _____

What result(s)/impact(s) do you expect from participation in this program?

Which activities and responses were the most beneficial to your class? The least?

What were this guide's strengths and weaknesses? How may we continue to improve the guide so that it serves your needs?

Discovery Concerts

Which concert did you attend?

- October 23 10AM
- October 23 11:30AM
- October 25 10AM

Were your students engaged throughout the entire concert?

- Yes
- No

Please elaborate:

What was the best part of the concert experience for you and your students? The least enjoyable?

What would you like to see improved for the concert experience for future years?

How was your parking experience?

Is the cost of the Discovery Concert an obstacle for your students to attend?

- Yes
- No

If Yes, what do you feel would be a reasonable cost? _____

The following websites were consulted as resources in the creating of this Education Guide:

<http://www.clevelandorchestra.com>

www.dictionary.com

<http://www.sciencekids.co.nz>

<http://www.charlotteviewpoint.org/article/2429/Architecture-and-music--A-duet>

<http://www.next.cc/journey/discovery/music-and-architecture#review>

<http://en.wikipedia.org>

<http://windbandlit.wordpress.com>

www.makingmusicfun.net

<http://www.yale.edu/ynhti/curriculum/units/2000>