YOUNG PEOPLE’S DISCOVERY CONCERTS

Introduction to the Orchestra
Teacher’s Guide

7330 Highland Road
Baton Rouge, LA 70808
225-383-0500 ext. 123
www.brso.org
Lesson Plans

Lesson Goals

By the end of the four lessons, each student should know and be able to:

- Identify instruments and instrumental families by sight & sound
- Critique music and instruments, i.e., like the best, least, etc.
- Identify the conductor and musicians
- Hear changes in the music, i.e. loud/soft, fast/slow, etc.
- Identify terms associated with an orchestra
- Know what to expect at a live concert and exhibit appropriate concert etiquette

Overview of Lessons

Lesson 1 – Introduction to the Symphony Orchestra
- Difference between symphony and a band
- Identify conductor and concertmaster
- Overview of the four instrumental families that make up the orchestra

Lesson 2 – Instruments of the Orchestra (Part One)
- Recognizing and identifying sounds of string instrument family
- Recognizing and identifying sounds of wind instrument family

Lesson 3 – Instruments of the Orchestra (Part Two)
- Recognizing and identifying sounds of brass instrument family
- Recognizing and identifying sounds of percussion instrument family

Lesson 4 – Listening to the Symphony Orchestra
- Listening to excerpts from the Young People’s Discovery Concert repertoire
- Concert expectations and etiquette

1 Excellent online resources are available at www.playmusic.org for all topics addressed in this Teacher’s Handbook.
Lesson 1 – Introduction to the Symphony Orchestra

Objectives:
- Recognize difference between a band and an orchestra
- Understand role of conductor and concertmaster
- Recognize the four instrumental families and their seating arrangement in the orchestra

Materials:
- Student worksheet: Where Do They Sit?

Procedures:
1. Discuss the differences between a band and an orchestra. As you read, discuss important facts about the orchestra, conductor, and concertmaster. Lead students to identify any major or minor differences. Discuss where you might see or hear each one.
2. Introduce names of the four instrumental families and show diagram of their seating arrangement in the orchestra.
3. Review the names of instruments found in each family.
4. Browse to www.dsokids.com and listen to the sound of each of the four instrumental families.

Activity:
- Distribute index cards with labeled pictures of orchestral instruments and band instruments. Designate a space on the floor for students to stand with instrument cards and be placed within the correct family according to the orchestra diagram. Set aside a space for instruments that are not in the four traditional orchestral families.
Differences between an Orchestra and a Band

A **band** is a group of musicians usually playing various brass, wind and/or percussion instruments together. They frequently perform outdoors, and some are also marching groups.

An **orchestra** is a large group of musicians who play string, wind, and percussion instruments. It is different from a band because a band **does not** have any string instruments. Large groups of stringed instruments (more than ten) became popular in the 1600’s and the term “orchestra” was first given to these groups. By the late 1700’s, the orchestras were expanded to include a few wind and brass instruments. Though the saxophone is a woodwind instrument, it is usually not seen in an orchestra.

A **symphony** is a piece of music with several sections called movements. It is written for a large group of mixed instruments. Thus, the term **symphony orchestra** describes a group of musicians that plays pieces of music written for a lot of different kinds of instruments. The modern symphony orchestra consists of about 65 to 100 instruments classified into four separate groups by how they are played, what they are made of, and the types of sound they produce. These groups of families are the **strings, woodwinds, brass, and percussion.**

The Concertmaster

“**A**” is not just a good grade; it is the note against which every member of the orchestra checks their instrument before they can play together. Shortly before the concert begins, you will see the Concertmaster enter, take a bow, receive your applause, and begin to tune the orchestra. She/he will look first at the person playing the oboe, and then ask this musician to play the note “**A**.” Then, each musician checks the pitch of their musical note “**A**” by listening to the oboe. Everyone must have their notes exactly matching in pitch or the music will not sound right. The pitch is designated **A - 440 Hz**, which is the number of sound waves that occur per second. (Use a tuning fork to demonstrate the tone.)

The **concertmaster** is the leader of the string section and next in importance to the conductor. At the beginning of a concert, the concertmaster quiets the orchestra so that the players will be completely prepared and paying attention when the conductor steps up to the “podium.” The audience always applauds when the concertmaster comes onto the stage.

The Concertmaster of your Baton Rouge Symphony is Borislava Iltcheva. On the surface, it seems as if the Concertmaster’s job is pretty easy. All she has to do is walk on stage and point to the principal oboe player, and she gets applause. Her duties, however, extend far past that. Here are some of the things the Concertmaster has to do:

1. Make sure that all the string players are moving their bows in the same direction at the same time.
2. Make sure all the string players are playing the notes the same way.
3. Play the solo violin passages when they occur.
The Conductor

The **conductor** is the leader or director of the musicians; he is a lot like a coach is to a football team. With his left hand, he gives special signals to the musicians, such as cues on when to enter, indications concerning the volume of the music, motioning loud or soft, etc. With his right hand, he indicates the beat and controls the speed or tempo of the music, and lets the players know exactly when to start or stop. In his right hand he uses a long, thin stick called a “baton” so that the players can see the movement of his hand more easily. If you watch the baton closely, you will see that his movements reflect what you hear in the music.

The conductor has to know a lot of things so that the whole orchestra will sound as it should. He must be able to read and understand a musical score, and have a working knowledge of all the instruments, including their range and capabilities. The conductor must have a good ear, which is very important, so that he can pick out any tone in the orchestra that needs to be corrected. He must use motions clearly so the players know exactly what he wants from them. While all of these things are very necessary for a conductor to know, it is also important that he be a true leader, earning the respect and inspiring the enthusiasm of both players and listeners.

Sometimes, the conductor is called **Maestro** [My-stroh], which is Italian for “teacher” or “master.”

David Torns is currently the Music Director/Conductor of the Louisiana Youth Orchestra and the Assistant Conductor for the Baton Rouge Symphony. He will conduct the Baton Rouge Symphony when you go to the Discovery Concert. To meet Mr. Torns, go to the Symphony website [www.brso.org](http://www.brso.org), click on “About Us”, then on “Conductors”.

The Four Different Instrument Families of the Orchestra

An orchestra consists of a very specific group of instruments that when they play together can make the most incredible sounds. These instruments are divided up into four sections.

**FOUR FAMILIES:**

1. Brass
2. Strings
3. Woodwinds
4. Percussion

Each family contains many different instruments! Some of these instruments are closely related, like brothers and sisters, and some are more distant relatives like cousins or aunts and uncles. Listen to the sounds that each of the “families” makes!

**BRASS**

Fanfare from *La Peri*  
Paul Dukas (1865-1935)

This piece was written to be the beginning of a much larger piece of music: an entire ballet called *La Peri*! Although the whole orchestra is used during the ballet, this fanfare part was written for the **Brass Family** alone: 4 trumpets, 4 french horns, 3 trombones and tuba. All brass instruments make their sound the same way, the player blowing air through his lips to make them vibrate. That lip vibration makes a buzzing kind of sound, sort of like an insect flying past your ear. But when the players put that buzz through their horns, the metal tubing amplifies and changes the sound, making it richer and louder.
**STRINGS**

Serenade for Strings Peter Tchaikovsky (1840 – 1893)

Movement 1 – *Pezzo in forma di sonata*

This piece is only the first of four movements that Tchaikovsky wrote, and he wrote it for the **String Family** only: violins, violas, cellos, and string basses. All string instruments make their sound the same way, either by pulling their bows across the strings to make them vibrate, or by plucking their strings with their fingers (called *pizzicato*). When listening to the music, see if you can spot when the strings are playing *pizzicato*. In general, strings are not as loud as other instruments, so in an orchestra, many individual players play exactly the same thing at the same time, as a section. This way they can balance better with the other instrumental families. This means that up to 16 or more players have to stay perfectly together throughout the music; if they don’t, the music would sound like a mess. What a job!

**WOODWINDS**

Opus Number Zoo Luciano Berio (1925 – 2003)

Movement 1 – *Barn Dance*

The **Woodwind Family** makes sound by different methods. Some make a reed vibrate at one end of their instrument (clarinet and saxophone); some make two reeds vibrate (obo, English horn, and bassoon). The flute creates its sound by blowing across a hole at one end, similar to blowing across the end of a bottle to make a sound. In this piece, not only are the players playing woodwind instruments but they are reciting a poem as well. The composer was trying to create a musical representation of the words that they are speaking. Do you think the music helps to depict the poem?

*The fox took a chicken out on the floor; Poor silly chick didn’t know the score.*
*And as they whirled in their joyous dance, Oh she admired how the fox could prance.*
*She never noticed when the lights went out…*
*She skipped to the beat with head held high; she bowed to the fox as he circled by.*
*He winked at her with a high-dee-hoe. And then they engaged in a do-see doe.*
*She never noticed when the lights went out…*
*He swung her to the left, he swung her to the right, he swung her around with all his might.*
*The air grew heavy, the lights grew dim but she felt no fear as she smiled at him;*
*He turned her again and she held him tight as she smiled and whirled in the fading light,*
*She felt no fear, she knew no doubt and she never noticed when the lights went out.*
*That’s all, folks.*

**PERCUSSION**

*Ku-Ku-Ilimoku* Christopher Rouse (b. 1959)

The Percussion Family is the biggest family because it has so many different instruments. All of them make their sound by being struck by either a mallet or the percussionist’s hands. The beginning of this piece is very soft. See how many different instruments you can hear in this piece.

**Where Do They Sit?**

Study the following chart (Dallas Symphony Orchestra: [www.DSOKids.com](http://www.DSOKids.com)) and learn where each of the instrumental families sits in the orchestra.
New Instruments
First Violins
Second Violins
Violas
Violas
Double Basses
Trombones
Tuba
Trumpets
Flutes and Piccolos
Percussion
Timpani
Drums
French Horns
Clarinets
Bassoons
Oboes
Printed Orchestra Seating Chart
Modern Period
Lesson 2 - Instruments of the Orchestra

Part 1 - Strings and Woodwind Families

Objectives:

- Recognize each of the instruments found in the Strings and Woodwinds families by sight.
- Become familiar with the sounds each instrument makes.
- Identify each instrument by name.

Web Resources can be found at:

- [http://www.nyphilkids.org/main.phtml](http://www.nyphilkids.org/main.phtml)

Procedures:

1. Study background information on each instrument, and listen to the sounds made by the instrument by linking to the above website. Briefly describe the materials each is made of and how it is played.
2. Discuss the sound each produces.
3. Repeat procedures for woodwind family.
Meet the Strings

The string family is the largest family of the orchestra. You will notice that more of the orchestra consists of string instruments. A string instrument is played by moving a bow across the strings of the instruments. This type of playing is called arco. One can also play a string instrument pizzicato. This means that the player plucks the string with his or her finger. The instruments of the string section include:

- **Violin**: The smallest and highest member of the string family. It is played by holding the instrument on the shoulder. The concertmaster plays the violin.
- **Viola**: The viola is also played on the shoulder! It, however, is a bit bigger and plays lower notes than its higher and smaller sibling.
- **Cello**: The cello is even larger and lower than the viola. So large, in fact, that is played while being held in between the knees.
- **Bass**: The bass looks like the cello. It, however, is even bigger and slower. You will see them standing or sitting on high stools so that they can reach the top of the instrument.
- **Harp**: The harp is also a member of the string family, although it is not played with a bow. It is played by plucking the strings and pressing one of the seven pedals.

Meet the Woodwinds

The woodwind family also contains four main types of instruments and a fifth one that may surprise you. A woodwind is played by breathing air into the instrument.

- **Flute**: The flute is made of metal, and for a woodwind, that doesn’t make sense. Well, in the 17th century it was made out of wood. The new metal makes this instrument project more so it can be heard over an orchestra! The flute has a younger sibling, the piccolo, which is smaller than the flute and plays the highest notes of the woodwind section.
- **Oboe**: The oboe is played by blowing air through a reed! Before each concert, the oboe player plays an “A” so that the entire orchestra can tune their instruments. The oboe also has a cousin: the English Horn which is bigger and plays lower notes than the oboe.
- **Clarinet**: The Clarinet looks a lot like an oboe, but it sounds a bit different, a little mellower. The clarinet has a lot of brothers and sisters, including some that play higher notes (the soprano clarinet), and some that play lower (the bass clarinet).
- **Bassoon**: The Bassoon is the largest and lowest member of the woodwind family. When the bassoonist is sitting down, the bassoon reaches all the way from the floor to the top of the player’s head!
Lesson 3 - Instruments of the Orchestra
Part 2 – Brass and Percussion Families

Objectives:
- Recognize each of the instruments found in the Brass and Percussion families by sight.
- Become familiar with the sounds each instrument makes.
- Identify each instrument by name.

Web Resources can be found at:
- http://www.nyphilkids.org/main.phtml

Procedure:
1. Study background information on each instrument, and listen to the sounds made by the instrument by linking to the above website. Briefly describe the materials each is made of and how it is played.
2. Discuss the sound each produces.
3. Repeat procedures for percussion family.
Meet the Brass

To make a sound on a brass instrument, you use your breath and buzz your lips in the mouthpiece. The brass family contains four main types of instruments.

- **Trumpet**: Out of all the brass instruments, the trumpets can play the high notes. They are also the smallest member of the brass family.

- **French Horn**: The French Horn is a little bigger than a trumpet. Its tubes are curled around in a circle, and if they were stretched out straight, they would be longer than the trombone. It is also played with the hand inserted into the bell. The bell is the part of the instrument where the sound comes out.

- **Trombone**: The Trombone is the longest member of the brass family, and it is played by sliding the “slide” in and out. The Trombone’s brother is the Bass Trombone which can play notes almost as low as the tuba!

- **Tuba**: The Tuba is the Biggest and Lowest member of the brass family. It’s so big that sometimes you can’t even see the tuba player behind the “bell” of the instrument.

Meet the Percussion

The Percussion family consists of many different instruments. There are instruments to shake, rattle, beat with a mallet, rub together or hit with a stick. Some percussion instruments can be tuned to a definite pitch, while others are indefinite and do not change pitch.

Almost anything can be a percussion instrument: pots and pans, a piece of wood, and even a typewriter! Here are a few of the more traditional types.

- Pitched Percussion Instruments
  - Marimba, Glockenspiel, Xylophone, and Timpani

- Non-Pitched Percussion Instruments
  - Bass Drum, Tambourine, Cymbal, Triangle, and Snare Drum
Lesson 4 - Listening to the Symphony Orchestra

Objectives:

- Listen to excerpts on the web (www.brso.org) of works being played at the Discovery Concert.
- Utilize critical thinking skills to compare/contrast and personally evaluate selections and interpretations heard.
- Review what to expect at the concert
- Tips on concert etiquette
What to Expect at the Concert

Cacophony is defined as “a collection of sounds not related to each other, but sounding at the same time and making a horrible noise.” Don’t be surprised when you arrive at the concert if the first thing you hear is a cacophony. The first thing you see will be the musicians coming on stage, opening their music folders, and preparing their instruments. They often practice some of the difficult parts of the music they will be playing. Since each musician is practicing different music at the same time, the musical warm-up can sound like an amazing mess!

While the concertmaster tunes the orchestra, the conductor is backstage listening to see when the musicians are ready. Once everyone has tuned to the oboe’s “A”, the conductor walks onto the stage, takes a bow, shakes hands with the concertmaster, and steps up to his special stand, the “podium.” He waits for complete silence and watches to see that the eyes of all the musicians are with him. As he brings his baton downward, the music begins!

Previewing the concert music

1. Research each composer. Listen to excerpt of each selection. Composer biographies and audio excerpts for each selection on the program are available on the Discovery tab under Education on the Baton Rouge Symphony web site at www.brso.org.
   - Example: Smith: “The Star Spangled Banner”
     http://vids.myspace.com/index.cfm?fuseaction=vids.individual&videoID=21689194
     http://en.wikipedia.org/wiki/The_Star-Spangled_Banner#Media(1:25)

2. Discuss instruments featured, playing styles, changes in tempo/dynamics, unique characteristics, etc. List student responses on board or chart.

3. Have students rate compositions heard using a 1-10 scale and explain why they liked or disliked each. (Brain storm vocabulary that would help students explain their preferences.)

4. Review what to expect upon arrival at the theater.
   a. Entering the theater
   b. Finding seats
   c. Watching the orchestra tune
   d. Applauding the concertmaster
   e. Maintaining absolute silence during tuning
   f. Applauding the conductor
   g. Listening attentively
   h. Applauding the orchestra

5. Review and emphasize the rules of Concert Etiquette.
**Tips on concert etiquette**

1. **Listen:** It is difficult to hear and enjoy the music if the people around you are talking and laughing or humming along. Even if you are whispering, it can be very distracting for both the other audience members and the musicians.

2. **Know when to applaud:** At the end of each piece, when the conductor lowers his hands, you may congratulate the musicians with a hearty round of applause. Sometimes a piece of music is made up of more than one section called movements. Each movement of a piece may come to a complete stop and sound like the end. It may be tempting to applaud in that silence between movements, but it is best to wait until the end of the last movement to applaud. Remember; *watch the conductor and you will know.*

3. **Stay in your seat:** The student should follow the teacher to the seats and remain there until the teacher has given you permission to leave. During the concert, sit with your back against the seat. Leaning forward, getting on your knees, or holding onto the seat in front of you obstructs the view of the person behind you. If you must leave your seat during the performance, it is best to wait for a break in the music, or while the audience is applauding. This will be less disruptive to those sitting around you and to the orchestra. Remember: The orchestra has trained for many years and practiced for many hours to be able to perform the music. They are concentrating very hard, and need an atmosphere free of disruptions in order to play their best for you.

**Back in the Classroom**

We would like to think that the students attending the Young People’s Discovery Concerts will become “instant” classical music fans, but many may not. Even if some of the students did not like something they heard, we are certain that the experience of having attended the concert will have been a positive one for all. Remember – this concert performed by the Baton Rouge Symphony Orchestra was *just for them!*  

*Group discussions about the concerts can include such topics as:*  
- How the stage looked  
- How musicians acted while they were playing, and while they were not playing  
- How important they thought the conductor really was  
- How loud and soft the orchestra could play  
- What the music made them think of. This could be simply sounds and volume, a story they could write, a place that they have visited, people they know, etc.  
- What instrument was their favorite to see and hear?  
- Who was their favorite musician to watch and why  
- What was their favorite piece and why  
- Whether anyone enjoyed the concert who expected not to  
- If they would like to come back to hear the Baton Rouge Symphony
The following are some suggestions for the teachers to consider as post-concert activities:

**ON THE STREET INTERVIEWS**

The students become television reporters, interviewing their classmates “on camera”, asking questions about their reactions to the concert they’ve heard by the Baton Rouge Symphony. Questions can be about the theater, the orchestra, observations about the musicians and the conductor, and about the music.

**GUESS THE INSTRUMENT**

Have students stand in front of the group and play an “air instrument” while trying to mimic the sounds that instrument makes. Whoever guesses correctly gets to be “it”.

Examples include making a tooting sound and pressing down three buttons for a trumpet player; moving arms back and forth straight out in front and making a “thrumming” sound for the harp; and sitting down and making “sawing” motions back and forth for the cello.

**LOST AND FOUND**

Make up lost and found classified ads. Have a student read theirs. Whoever can “answer” the ad then gets to read their ad to the class.

*Examples:*

- **Lost:** Musical instrument. All wood, except for four metal wires attached. Also has long wood stick with long white ribbon or horsehair on it. *(answer: violin, viola, cello, bass)*

- **Found:** Black wood tube. About two feet long. Has silver buttons on it. Don’t know what it is. *(answer: oboe, English horn, clarinet)*

- **Found:** Shiny silver pipe with lots of round buttons. Comes apart in sections, but is three feet long when you put all the pieces together. Does not have a power cord with it. *(answer: flute)*

- **Lost:** Musical instruments that come in a set of two. Round, brass and look like large, flat pie pans. *(answer: cymbals)*

- **Found:** Large and heavy item. Took six guys to pick it up. Inside has hundreds of what look like long electric wires. Open end has 88 black and white push buttons or keys. *(answer: piano)*

**FINALLY!**

Everyone at the Baton Rouge Symphony wants to hear from students about how they liked attending the Young People’s Discovery Concert. Not only do we like to get cards, letters and notes, we like artwork done by the students. And of course, comments from teachers are always especially welcomed! Please feel free to send any correspondence to:

**Baton Rouge Symphony**
**7330 Highland Road**
**Baton Rouge, LA 70808**
**Telephone: (225) 383-0500, Education Extension 123**
**Fax: (225) 767-4609**
THANK YOU FOR ATTENDING THE YOUNG PEOPLE’S DISCOVERY CONCERTS

Young People’s Discovery Concerts are sponsored by

Albemarle Corporation
The Arts Council of Greater Baton Rouge
Baton Rouge State Fair
Blue Cross Blue Shield Louisiana
Raising Cane’s
Capital One Bank
Christian Life Academy
Junior League of Baton Rouge
Ourso Foundation
Powel Group
Target
The Louisiana Division of the Arts
The Paula Manship Education Endowment

With Special Thanks to

Dr. Timothy Bergman
Sherry Barron
Dr. Ron Bermingham
Susan Chernetz
Dr. Cason Duke
Naomi Hill
Bertha Hinojosa
Lynn Lastrapes
Rebecca Oropesa
Vonda Rogers-Cooper
Betty Schwartzberg