DSO ECS Fall 2015

Building the Orchestra

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Welcome to the Detroit Symphony Orchestra’s 2015-16 Educational Concert Series. The Detroit Symphony Orchestra is committed to providing students an experience that will increase their understanding of music and the many ways that music plays a central role in the lives of all people. We want each audience member, whether live at Orchestra Hall or part of our much larger virtual audience viewing in classrooms throughout Detroit, to feel connected with the music through this program. The musical selections were designed specifically in collaboration with an advisory board of leading educational experts in order to provide strategic educational opportunities, and to be consistent with national music education standards.

The program themes selected for the DSO’s Educational Concert Series, while seemingly traditional, are comprised of music that represents a blend of the familiar and novel. The inclusion of traditional educational works, such as Bernstein’s West Side Story and Tchaikovsky’s Symphony No. 4 are juxtaposed with accessible contemporary works including acclaimed American composer Michael Daugherty’s Motown Metal. Based on the experiences of your students, these programs are designed to allow for the exploration of simple and single elements of music, or multifaceted and cross-curricular components.

Many programs targeted toward school-age students are designed to be entertaining with an educational component, but our aim is to create something that is first wholly educational so that through preparation, exploration and inquiry, the experience will be incredibly entertaining as a result of active engagement and learning. The flexibility afforded by these materials will allow you to combine a live concert experience along with any number of educational components.

Through the study of the connections between these pieces of music, the similarities and differences of the composers and their goals, and the relationships of these works to other disciplines, students will be able to participate in individual and group projects and discussions that will lead to a culminating event: hearing a live performance as a more informed, intelligent listener.

The Teacher Resource Guide includes biographical information about the composers and historical information about each work. This will provide some insight into the unique relationships of the composers and works, despite their seemingly diverse historical, cultural and social differences. This guide will also contain many things you may already know, but will hopefully serve to frame the information in a way that will allow you to determine how to best include the facts into your existing curriculum when applicable. There are also several levels of activities for students that are designed to be practical, yet provide multiple opportunities for students to transition from simple concepts and skills to more advanced explorations of music, language arts, and science. The core components of these will be centered on three of the basic elements of music: rhythm, form and pitch.

We look forward to having you join us live or via webcast in this season’s Education Concert Series, and hope that this will be a highlight for your classroom this year.
Bringing the concert experience to your students: Transform your school into Orchestra Hall

Even though your students may not be attending our performance at Orchestra Hall, we want to try and help them feel as if they are indeed part of a live performance. Great detail has gone into planning the webcast to include the many viewers beyond the concert hall. You will notice the conductor and musicians will often even direct questions or statements to you — our virtual audience! It is absolutely appropriate to encourage students to participate, just as if they were in the live audience. There are many ways to help recreate a concert atmosphere in your school, and some or all the following points can be used to guide the students as they participate and engage in active listening.

Make copies of the specially designed program provided in the appendix for your students. You can even select students to serve as “ushers” and hand programs to students as they enter the room where you will view the webcast. This will help the students follow along during the performance and allow for them to have a keepsake that will hopefully encourage them to discover these pieces of music again on their own.

Explain in advance that it is traditional for the concert hall lights, or the “house lights” to be dimmed during performances to help listeners concentrate on the music. As the opening moments of the webcast begin, if possible dim the lights in the room where you will be viewing to allow for the same concert atmosphere.

Review the concert etiquette sheet with your students, and the following would be appropriate to include at your school:

Times/situations when it is appropriate to clap:
• When the concertmaster (violin) walks onto the stage
• When the conductor walks onto the stage
• After the completion of each piece and at the end of the performance

Several moments in the webcast will be directed specifically to your students. Speak with the students in advance, and encourage them to actively participate as the conductor and musicians engage them through asking questions or asking participation in structured activities such as making specific sounds with their voices, clapping, feeling their vocal cords vibrate with their hands, and even conducting along with some music.
NATIONAL STANDARDS AND MICHIGAN STANDARDS

NAFME NATIONAL STANDARDS

While the National Association for Music Education (NAfME) has now adopted new core standards, there are many similarities between the content in the “old” standards and the new standards. The most striking difference is the new National Core Arts Standards are easily aligned into Anchor Standards, which are organized in four major areas:

Creating
Performing/Presenting/Producing
Responding
Connecting

No matter which set of standards your specific school system uses, it is easy to align the criteria into these four new categories. Based on feedback from you, the teachers, we are using the four broad areas above to inform the curricular units contained in this resource guide. Specific information about these standards, and the Anchor Standards that fit within these categories can be found at:

► nationalartsstandards.org

National Standards for music education

1. Singing, alone and with others, a varied repertoire of music.
2. Performing on instruments, alone and with others, a varied repertoire of music.
3. Improvising melodies, variations, and accompaniments.
4. Composing and arranging music within specified guidelines.
5. Reading and notating music.
6. Listening to, analyzing, and describing music.
7. Evaluating music and music performances.
8. Understanding relationships between music, the other arts, and disciplines outside the arts.
9. Understanding music in relation to history and culture.

Michigan Standards for music education

1. All students will apply skills and knowledge to perform in the arts.
2. All students will apply skills and knowledge to create in the arts.
3. All students will analyze, describe and evaluate works of art.
4. All students will understand, analyze, and describe the arts in their historical, social and cultural contexts.
5. All students will recognize, analyze, and describe connections among the arts; between the arts and other disciplines; between the arts and everyday life.
First Violin
Yoonshin Song
Concertmaster
Katherine Tuck Chair
Kimberly Kaloyanides Kennedy
Associate Concertmaster
Alan and Marianne Schwaerzler and Joan Shapers (Shapero Foundation) Chair
Hai-Xin Wu
Assistant Concertmaster
Walker L. Cisler/Detroit Edison Foundation Chair
Jennifer Wey
Assistant Concertmaster
Marguerite Deslippe*
Laurie Landers Goldman*
Rachel Harding Klaus*
Eun Park Lee*
Adrienne Rönmark*
Laura Soto*
Greg Staples*
Jiamin Wang*
Mingzhao Zhou*

Second Violin
Adam Stepniewski
Acting Principal
The Devereaux Family Chair
Ron Fischer*
Will Haapaniemi*
Hae Jeong Heidi Han*
Seryul Hwangbo*
Hong-Yi Mo*
Alexanders Sakarellos*
Joseph Striplin*
Marian Tanau*
Jing Zhang*

Viola
James Van Valkenburg
Acting Principal
Julie and Ed Levy, Jr. Chair
Caroline Coode
Acting Assistant Principal
Hang Su
Glenn Mellow
Shanda Lowery-Sachs
Hart Hollman
Han Zheng
Alexander Mishnaevski
Principal Emeritus

Cello
Wei Yu
Principal
James C. Gordon Chair
Robert Bergman*
David LeDoux*
Peter McCaffrey*

Bass Violin
Haden McKay*
Una O’Riordan*
Paul Wingert*
Victor and Gail Giroldi Chair
Dahae Kim
Assistant Principal
Dorothy and Herbert Graebner Chair

Bass
Kevin Brown
Principal
Van Deusen Family Chair
Stephen Molina
Assistant Principal
Linton Bodwin
Stephen Edwards
Isaac Toplansky
Larry Hutchinson

Harp
Patricia Masri-Fletcher
Principal
Winfred E. Polk Chair

Flute
David Buck
Principal
Women’s Association for the DSO Chair
Sharon Sparrow
Assistant Principal
Bernard and Eleanor Robertson Chair
Jeffery Zook

Piccolo
Jeffery Zook

Oboe
Alexander Kinmonth
Principal
Jack A. and Avisca Robinson Chair
Geoffrey Johnson+
Maggie Miller Chair
Brian Ventura
Assistant Principal
Monica Fosnaugh

English Horn
Monica Fosnaugh

Clarinet
Ralph Skiano
Principal
Robert B. Semple Chair
Marc Gurnow+
PBS Chemicals Inc./Jim and Ann Nicholson Chair
Lauren Liberson
Assistant Principal
Shannon Orme
E-Flat Clarinet
Laurence Liberson

Bass Clarinet
Shannon Orme
Barbara Frankel and Ronald Michalak Chair

Bassoon
Robert Williams
Principal
Victoria King
Michael Ke Ma
Assistant Principal
Marcus Schoon

Contrabassoon
Marcus Schoon

Horn
Carl Pittch
Principal
Bryan Kennedy
Scott Strong
Johanna Yarbrough
David Everson
Assistant Principal
Mark Abbott

Trumpet
Hunter Eberly
Principal
Lee and Fley Barthal Chair
Kevin Good
Stephen Anderson
Assistant Principal
William Lucas

Trombone
Kenneth Thompkins
Principal
David Binder
Randall Hawes

Tuba
Dennis Nulty
Principal

Percussion
Joseph Becker
Principal
Ruth Ruby and Alfred R. Glancy III Chair
Andrés Pichardo-Rosenthal
Assistant Principal
William Cody-Knicky Chair
Joshua Jones
African-American Orchestra Fellow

Timpani
Jeremy Epp
Principal
Richard and Mona Alonzo Chair

Librarians
Heather Hart Rochon
Orchestra Personnel Manager
Patrick Peterson
Assistant Orchestra Personnel Manager

Stage Personnel
Dennis Rottell
Stage Manager
Steven Kemp
Department Head
Matthew Pons
Department Head
Michael Sarkissian
Department Head

Legend
* These members may voluntarily revolve seating within the section on a regular basis
+ substitute musician
~ extended leave
^ on sabbatical

For photos and full bios of DSO musicians, go to dso.org/orchestra
The Detroit Symphony Orchestra was founded in 1914 with the purpose of providing world-class performances for the people of Detroit and it quickly became recognized as one of America’s top orchestras. Orchestra Hall had its first opening at the beginning of the 1919–1920 DSO season and since then has had several re-openings to mark different phases in its life.

Until 1939, Orchestra Hall hosted what seemed to be an unending stream of memorable performances featuring the likes of Fritz Kreisler, Igor Stravinsky, Enrico Caruso, Jascha Heifitz, George Gershwin and Pablo Casals, to name but a few. In 1939, the DSO ended what was to be its final season in the Hall and moved into Detroit’s Masonic Temple, where operating costs were considerably lower during a time greatly affected by the Depression years. After two years of silence, Orchestra Hall – renamed Paradise Theatre – reverberated with music once more, but not of the genre it had once hosted. The hall played host to jazz, bebop and blues. Renowned artists such as Charlie Parker, Ella Fitzgerald, Dizzy Gillespie, Louis Armstrong, Sarah Vaughan and Nat King Cole performed at the Paradise Theatre, thus adding to the long and illustrious list of names to have performed in the venue. The popularity of television and diminishing interest in jazz led to the venue’s second closing in 1951.

The hall was slated for demolition in the fall of 1970. Immediately following the demolition announcement, a group of dedicated musicians and supporters led by DSO bassoonist Paul Ganson worked to save the hall and quickly saw the passage of historic landmark status for Orchestra Hall and in 1971 had the venue registered on the National Register of Historic Sites. Nearly twenty years and $6.8 million later, Orchestra Hall was finally ready for its most recent reopening. On September 15, 1989, the Detroit Symphony Orchestra returned to Orchestra Hall, a gesture that signified the reunification of Orchestra Hall with the ensemble for which it had been built, the Detroit Symphony Orchestra. Orchestra Hall and the areas surrounding it have continued to grow. In 1996, the DSO announced plans for the Orchestra Place Development Project, an educational, performing arts and office/retail complex located on eight acres of land surrounding Orchestra Hall.

The project has led to the creation of the Max M. and Marjorie S. Fisher Center, which includes a multi-story atrium lobby and a 550-seat recital hall known as The Music Box, as well as the Jacob Bernard Pincus Music Education Center. The new Detroit School of Arts, which opened in February 2005, was built on land tangent to and donated by the DSO. The relationship between the Detroit Public School system and the Detroit Symphony Orchestra is unique in the nation and flourishing.
INSTRUMENTS OF THE ORCHESTRA

STRING FAMILY
The strings have made up the backbone of the western orchestra for more than three hundred years. The four major instruments in the string family, the violin, the viola, the cello and the double bass, are built the same way. The instruments are made of many pieces of wood, which are glued — never nailed — together. The bodies of the instruments are hollow, making them a resonating box for sound. Four strings made of animal gut, nylon, or steel are wrapped around pegs at one end of the instrument and attached to a tailpiece at the other. They are stretched tightly across a bridge to produce their assigned pitches. The body of the violin alone consists of over 70 parts that must be put together by a master craftsman.

The violin is the smallest member of the string family and is known for its extraordinary musical versatility. Its versatility along with its four-octave range has inspired composers to write extensively for the instrument. It is played with a bow and held under the chin. It plays the highest notes and is recognized by its beautiful singing tone.

The viola is slightly bigger than the violin and is also played with a bow and held under the chin. The sound of the viola can be distinguished from that of the violin because of its darker, warmer and richer tone qualities.

The cello is also played with a bow. Unlike the violin or viola, it is too large to be placed on the shoulder, so it is played sitting down, resting on its “end pin.” Because of its size and the thickness of its strings, the cello can produce beautiful, rich deep tones.

The double bass is the largest and lowest-pitched bowed string instrument and must be played standing up. In orchestras and other musical ensembles it has a rather special role — it is often given the job of being the “foundation of the orchestra.”

One of the oldest instruments, the harp, dates back as early as 3500 BC. The modern concert harp typically has 47 strings and is six feet tall. It has pedals around its base that allows the performer to alter the pitch of the strings so different notes be played on the same string. Smaller harps, and even lyres, are still used today in the performance of folk music around the world.

WOODWIND FAMILY
The woodwind family got its name because they were originally all made of wood (the flute is now made of metal) and air, or wind, is needed to play them. Woodwind instruments make sounds in three different ways. The flute makes a sound by blowing air through an opening in the headjoint. The clarinet uses a single reed, made of one piece of cane, to produce sound. When air is blown against the reed, which is attached to a mouthpiece, it vibrates to make sound. The oboe and bassoon use a double reed, or two pieces of cane vibrating against each other, to make a sound. All instruments in the Woodwind family come in different sizes.

The flute was originally made of wood. It has no reed and sound is produced when air is blown against a hole in the headjoint (opening). This sends vibrations into the attached tube to produce sound. A shorter version of a flute, about half of its size, is called a piccolo. It plays the highest notes of all of the woodwinds.

The clarinet looks much like an oboe — made of a hard wood, with metal keys. The difference is that the clarinet uses a single reed. The standard Bb clarinet is just over 2 feet long.

The oboe is smaller than the clarinet and uses a double reed. It is made of a hard wood and has metal keys. The oboe is responsible for tuning the orchestra before each concert.

The bassoon uses a double reed and is about four times the size of an oboe. If the curved tubes in the bassoon were straightened, it would be about nine feet long! The bassoon sounds in the tenor and bass registers.
BRASS FAMILY

Brass Family instruments produce their sound when the player buzzes his/her lips while blowing air through a metal, cup-shaped mouthpiece. The mouthpiece connects to a length of brass tubing that ends in a bell. The smaller instruments have less tubing and produce a higher sound. The bigger instruments have more tubing, which produces a lower sound. Most of the brass instruments have valves, which open up different lengths of tubing, changing the pitch. The members of the brass family are the loudest in the orchestra and can trace their ancestry back to herald trumpets, hunting horns and military bugles.

The trumpet plays the highest notes in the brass family. Some types of trumpet-like instruments were some of the earliest artifacts of man! Trumpets come in many different sizes and keys.

The French horn consists of up to 18 feet of narrow tubing wound into a circle. It evolved from 16th century hunting horns.

The trombone is played with a mouthpiece, is larger than the trumpet, and changes pitch by shortening or lengthening a large slide. Its sound is lower than a trumpet but higher than a tuba. The trombone has about nine feet of tubing!

The tuba is the lowest in the brass family and can have up to 18 feet of tubing! Along with the string bass, it helps provide a foundation for the orchestra.

PERCUSSION FAMILY

The instruments in the percussion family are played by being struck, shaken, or scraped. There are two types of percussion instruments, tuned and untuned. The tuned notes play specific pitches, like the timpani. The untuned produce a sound with an indefinite pitch, like the cymbals. Percussion instruments add much color, variety and excitement to the orchestra. Drums are among the earliest instruments. Their ancestors can be found in Africa, Asia, the Americas, Europe and the Middle East. Percussion instruments can range from bells to drums to everyday household items, but a few examples of the most commonly used percussion instruments are:

The snare drum has two drumheads, one on the top and one on the bottom. Bands of metal wires are pulled across the bottom head to produce a buzzing or snapping sound when the drum is struck, giving it a rattling sound. The snare is an untuned instrument and is played using a variety of techniques.

Cymbals are two large, metal discs that can be played by crashing one against the other or by hitting or scraping one or both with sticks or mallets. Cymbals come in different sizes and can produce a large variety of sound effects. Cymbals are an untuned percussion instrument.

The timpani, often called a kettledrum because of its look, has a pedal mechanism which allows the musician to adjust the tension of the drumhead. This allows it to play different pitches. The timpani helps the orchestra with harmony, melody and rhythm. Most often, there are four timpani tuned to different pitches, played by one person.

Perhaps the most recognizable and popular musical instrument, you might think the piano would belong to the string family, but it is actually a member of the percussion family because of how the instrument creates sound. The piano has a keyboard with 88 keys — the black and white bars you see — and each key is attached to a small, felt covered hammer. When a key is pressed, the hammer pops up and strikes the strings, which then vibrate creating specific pitches.
YOUR CONDUCTOR

Michelle Merrill

Rapidly rising conductor Michelle Merrill is currently in her second season as Assistant Conductor of the Detroit Symphony Orchestra. A passionate and dynamic artist, Merrill was recently named as one of Hour Detroit Magazine's 3 Cultural Organization Leaders to Watch, and made her debut with the DSO conducting an educational webcast that has reached over 50,000 students to date in classrooms throughout the nation.

Recent and upcoming engagements include the Jacksonville Symphony Orchestra, Symphoria (Syracuse), Orlando Philharmonic, Sacramento Philharmonic, Great Lakes Chamber Orchestra, and the Northeastern Pennsylvania Philharmonic, where she formerly served as Assistant Conductor before coming to Detroit. As the Assistant Conductor of the Detroit Symphony Orchestra, she helps plan and conduct over 30 concerts per season, including her classical subscription debut at Orchestra Hall in April 2016. Merrill also gives pre-concert lectures, leads adult music education seminars, engages with students in and around Metro Detroit, speaks on behalf of the DSO throughout the community, and participates in hosting Live from Orchestra Hall, the DSO’s free concert webcast that launched in 2011 and is now watched in more than 100 countries.

In March of 2014, Merrill stepped in on short notice with the Meadows Symphony Orchestra for their performance of Shostakovich’s Symphony No. 4, which music critic Scott Cantrell of the Dallas Morning News described as “stunning” and later named to his list of Top Ten Classical Performances of 2014. She was awarded in 2013 the prestigious Ansbacher Conducting Fellowship by members of the Vienna Philharmonic and the American Austrian Foundation, which enabled her to be in residence at the world-renowned Salzburg Festival. During the summer of 2012, praise came from her conducting of Schubert’s Symphony No. 5 with the Rochester Philharmonic on a summer program featuring young conducting talent: “with the natural grace of a prima ballerina, Merrill knows what she wants and how to achieve it. Merrill’s conducting took her full body in wide sweeps, making connections, seemingly, with each individual musician. Merrill’s phrasing of the Schubert was utterly proper in style and form.”

A strong advocate of new music, Merrill recently collaborated with composer Gabriela Lena Frank and soprano Jessica Rivera on Frank’s work La Centinela y la Paloma (The Keeper and the Dove), as a part of numerous community programs related to the Diego Rivera and Frida Kahlo exhibition at the Detroit Institute of Arts. She made her debut in June 2015 at the St. Augustine Music Festival, where she conducted the world premiere performance of Piotr Szewczyk’s “St. Augustine Suite”, written in honor of that city’s 450th anniversary. Additionally, her work in the 2011/12 season with Voices of Change, Dallas’s professional contemporary music ensemble, was part of a program later named as one of Dallas Morning News critic Scott Cantrell’s Top Ten Classical Performances of 2011.

Born in Dallas, TX, Merrill studied conducting with Dr. Paul C. Phillips at Southern Methodist University’s Meadows School of the Arts, where she holds a Master of Music Degree in conducting and a Bachelor of Music in performance.

YOUR HOST

D.J. Oliver

A Detroit native, D.J. Oliver attended Wayne State University and received a Bachelor’s of Fine Arts. D.J. has worked as a lead performer for Carnival and Norwegian Cruise Lines. In addition to his theatre and live performances, D.J. has booked many Commercials and Industrials films as well TV shows. His most recent credit was on the ABC show Detroit 187. He currently hosts the Detroit Public Television Series “Detroit Performs.” D.J. is thankful and humble to make his DSO debut!
CONCERT ETIQUETTE

Attending or listening to a concert is a wonderful experience. If you are watching live at Orchestra Hall, or live via webcast, the following guidelines will help make this more enjoyable for you and other listeners.

• Be sure to turn off any electronic devices that might make noise.

• Use the restroom before the performance begins so you don't miss any of the music or disturb other listeners.

• Remember that the most important goal of the event is that you listen carefully to the performance. Talking — even quietly — can distract others from the concert.

Musicians love applause. Here are some times when it is appropriate to clap:

• When the concertmaster (violin) walks onto the stage.

• When the conductor walks onto the stage.

• After the completion of each piece and at the end of the performance.

Even though you are going to hear lots of things, there are also lots of things to see. Here are some interesting things to keep your eyes on:

• Watch the conductor carefully and see how he or she communicates with the orchestra, letting them know how fast/slow, loud/soft to play.

• Keep an eye on the “moving” parts of the orchestra. Notice how all of the string bows in each section move at exactly the same time.

• Notice how the percussion players move around at the back of the orchestra getting to play lots of different instruments.

REMEMBER:
Even if you are watching via webcast — we want to you applaud and participate as an audience member — make your classroom just like Orchestra Hall!
PROGRAM

Detroit Symphony Orchestra
Leonard Slatkin Music Director
A COMMUNITY-SUPPORTED ORCHESTRA

Featuring the Orchestra:
Piotr Ilyich Tchaikovsky  Symphony No. 4 in F minor, Finale: Allegro con fuoco

Featuring the Percussion Section:
Aram Khachaturian  “Sabre Dance” from Gayane
arr. James Moore

Featuring the Brass and Percussion Sections:
Michael Daugherty  Motown Metal

Featuring the Woodwind Section:
John Williams  Suite from Harry Potter and the Sorcerer’s Stone: “Nimbus 2000”

Featuring the Woodwind, Brass and Percussion Sections:
John Philip Sousa  Washington Post March

Featuring the String Section:
Piotr Ilyich Tchaikovsky  Symphony No. 4 in F minor, Scherzo: Pizzicato ostinato

Featuring the Orchestra:
Richard Wagner  Lohengrin: Prelude, Act III
Leonard Bernstein  West Side Story: Overture
Georges Bizet  Carmen Suite No. 1: Les Toreadors
Adapted by Maurice Peress
Benjamin Britten  The Young Person's Guide to the Orchestra: “Fugue”
ARAM KHACHATURIAN

SABRE DANCE

Armenian composer Aram Khachaturian (1903-1978) was influential in the Soviet Union, but also throughout Asia and South America. Influenced by folk music at an early age, he played in wind bands and studied composition in several schools, including the Moscow Conservatory. Given his early influences, it is not surprising that he would compose many songs heavily influenced by folk music traditions.

The *Sabre Dance*, from his ballet *Gayane* is perhaps one of the most recognized tunes in all of classical music, despite only lasting a few brief minutes. The middle section is inspired by an Armenian wedding song, and the dance-like outer sections are much more active and rhythmic. In 1948 *Sabre Dance* was even used as an album title by the Chicago Symphony Orchestra, and because the piece was so popular, the album was their first to sell over a million copies.

MICHAEL DAUGHERTY

MOTOWN METAL

Michael Daugherty (1954-), who lives here in Michigan, is one of the most performed and influential living American composers, having won 3 Grammy awards. Daugherty teaches music composition at the University of Michigan and he also has a wonderful relationship with our very own Detroit Symphony Orchestra, having served as our composer in residence from 1999-2003. Much of his music is based on images of Americana, including works about superheroes such as Superman and cultural icons such as Desi Arnaz and Elvis.

Receiving its world premiere here in Detroit in 1994, Motown Metal uses only instruments made of metal, and is inspired by the Detroit automotive industry and the popular Motown music of the 1960’s. It is intended to be a cross between an assembly line in a factory, with rapidly moving music lines alongside big band riffs and chords.

JOHN WILLIAMS

HARRY POTTER AND THE SORCERER’S STONE: NIMBUS 2000

John Williams’s (1932-) early music instruction was similar to that of many traditional composers of art music, when at the age of 8, he began to study piano. His family moved to Los Angeles in 1948, allowing him to work with the pianist and arranger Bobby Van Eps. Later Williams would serve as an orchestrator/arranger and conductor in the US Air Force bands, and in 1954, he moved to New York, to continue study at the Juilliard School and earned money playing in jazz clubs and recording studios. Two years later, he would return to Hollywood as a studio pianist and he began a career composing and arranging.

History will most likely look back on the partnerships of John Williams and film producers Steven Spielberg and George Lucas as two of the most important artistic relationships of the 20th century. These producers realized works that served as inspiration for some of the greatest film scores ever composed, including early works such as *Jaws*, *Close Encounters of the Third Kind*, *Star Wars*, *Superman*, *The Empire Strikes Back*, *Return of the Jedi*, *Raiders of the Lost Ark*, *E.T.: the Extra Terrestrial* and *Schindler’s List*. Later works better known to a younger audience include *Jurassic Park*, the *Star Wars* prequels, the *Harry Potter* series, and the newest *Star Wars* film to be released in 2015. Additionally, Williams has composed signature tunes for NBC and several official Olympic fanfares.

In the wizarding world of Harry Potter, the Nimbus 200 was not your average witch or wizard broom. It was “one of the Nimbus Racing Broom Company’s most successful models. Highly reliable with good speed and exceptional handling — not for beginners!” This was not just a broom for transportation, it was designed to be used in the wizardly world’s most popular sport, quidditch, a type of aerial soccer game. Listening to the incredibly facile wind section, you can imagine riding a broom at top speed, wind in your face, and aerial acrobatics!
JOHN PHILIP SOUSA
WASHINGTON POST MARCH

Composed in 1889 while serving as leader of the US Marine Band, John Philip Sousa (1854-1932) wrote this march at the request of a struggling, recently established newspaper — the Washington Post. It was an immediate hit, and became popular in America and interestingly in Europe, not only as a “march” but also as a popular two-step dance tune. This march, along with other favorites such as Semper Fidelis, Sabres and Spurs and the national march of the United States, Stars and Stripes Forever have guaranteed Sousa’s lasting legacy.

Initially an aspiring composer of operetta, Sousa’s fame would be made as a composer of marches and as a bandleader. Called “The March King,” Sousa led the US Marine Band from 1880-1892 and he composed 136 marches. The trio sections of his marches — many of which are very song-like — can often be traced to melodies or stylized influences from his operetta arias. The symphony orchestra without strings, while creating a wind band much smaller than would be typical today, more closely reflects the size of some wind bands during the Sousa era.

PIOTR ILYICH TCHAIKOVSKY
SYMPHONY NO. 4, SCHERZO AND FINALE

Pyotr Il’yich Tchaikovsky (1840-1893) was the first Russian composer to fully embrace the Western European composition tradition in symphonic form. He was the second of five siblings, and while his family members were not musicians, they did support his early education and musical endeavors. Quite an intelligent boy, Tchaikovsky showed an affinity for languages and was an avid reader, so by the age of six he could speak and read in French and German, which is remarkable in the mid nineteenth century in rural Russia. He would eventually graduate from the School of Jurisprudence (Law School) in St. Petersburg, and earn a job in the Ministry of Justice, but during this time, he was still avid in his musical pursuits.

Tchaikovsky left his job in the Ministry and enrolled in the music conservatory in St. Petersburg, which would begin an illustrious musical journey that would see him rise to the very top of the Russian music hierarchy. He would write in almost every musical genre, and his compositions are among some of the most frequently performed works in the world. These include works inspired by his love of literature such as the concert overture Romeo and Juliet, or influenced by his travels like the popular Capriccio Italian.

Two important and often performed works were composed close together in 1877-78 — the Fourth Symphony, and the virtuosic Violin Concerto. The symphony contains many moods, but none is as uplifting and jovial as the scherzo. Only the string section performs the first part of this particular movement, with every note played using pizzicato, or by plucking instead of bowing the strings. This effect requires precision and virtuosity, but creates an effortless sounding image of joyfulness that is not imitated in other portions of the work. From the lowest notes of the basses to the highest notes of the violin, the music simply dances and sparkles. The first piece you will hear on the program is the final music you would hear in Tchaikovsky’s symphony. It is fast, energetic, and very much like the swirling and frantic music of the Nimbus 2000. In the brief passage of music you will hear, literally thousands of notes fly by at a torrential pace. The Finale is a real showpiece for the orchestra and will be a wonderful way for you to hear everyone playing music before we begin building an orchestra for you one section at a time.

RICHARD WAGNER
LOHENGRIN: PRELUDE, ACT III

Richard Wagner (1813-1883) is the central figure in opera during the late 19th century. He was a student at the Leipzig Conservatory, but had numerous other musical experiences that aided his education. He viewed himself as the musical heir to Beethoven’s symphonic tradition, but one that would be realized through his grand and dramatic operatic staging instead of with purely orchestral works.

Perhaps best known for his “Ring Cycle,” four operas performed in series that tell the stories of Wotan, king of the gods, and Siegfried, hero of Norse and German myths. One could think of it similarly as an opera version of The Lord of the Rings although the stories are not related. In addition to this enormous dramatic work, heroes of legend and literature served as inspiration for other operas including the Holy Grail seeking knight, Parsifal (Percival), and the medieval Germanic story of Tristan and Isolde. His opera Lohengrin is similar in inspiration, as Lohengrin, also a grail knight, is the son of King Parsifal. The Prelude to Act III is the music immediately preceding the Bridal Chorus and Wedding scenes in the opera, however Wagner wrote the music to stand alone because he would often perform these symphonic portions in concert to serve as a “commercial” for his operas.
LEONARD BERNSTEIN

WEST SIDE STORY: OVERTURE

One of the 20th century’s most versatile figures, Leonard Bernstein (1918-1990) was active as a conductor, composer of musical theater and concert works, and musical educator. Perhaps best known for his Broadway musical West Side Story, his compositions are still performed around the world. His influence as an educator stems mainly from his involvement in numerous television broadcasts, especially the Young People's Concerts which were broadcast from 1958-1972. These programs had a profound influence on an entire generation of American children, especially future musicians.

Bernstein did not grow up in a musical family, but when he displayed talent for music his parents did take pride in his accomplishments and supported his efforts, even having young Leonard play piano in a radio commercial for his father’s business. His career as a composer did not really become established until 1944 with the recognition of his Jeremiah Symphony, and his score for the ballet Fancy Free. This ballet was eventually transformed into the Broadway musical On the Town.

West Side Story was created in collaboration with choreographer Jerome Robbins, with whom he completed several other projects including the popular early works Fancy Free and On the Town. West Side Story, perhaps one of the most famous Broadway musicals, is a modern setting of Shakespeare’s Romeo and Juliet. The music represents the jazz influenced styles popular in 1950 New York. In the operatic tradition, the overture contains music from musical including the famous tunes Maria, Tonight, and the ever-energetic Mambo!

GEORGES BIZET

CARMEN SUITE NO. 1: LES TOREADORS

While Georges Bizet (1838-1875) did not compose as much music as many other famous composers, his influential work Carmen is perhaps the most popular opera ever written. Like many composers of his era, Bizet was interested in exoticism, or bringing the music of other cultures and countries to his audiences. Interestingly, Bizet never visited Spain, but such is the immense popularity of the music from Carmen, which is set in Seville, that his music has influenced Spanish style as much as traditional Spanish folk music.

Les Toreadors from Carmen is the music used to introduce one of the main characters in the opera — Escamillo, the handsome bullfighter who is in love with the beautiful Carmen. In the aria, Escamillo sings about bullfighting, the energy of cheering crowds and the fame that comes from victory in his sport.

BRITTEN, BENJAMIN

YOUNG PERSON’S GUIDE TO THE ORCHESTRA: FUGUE

Benjamin Britten (1913-1976) was one of the most influential English composers of the 20th century. Widely traveled, he spent time in America, Canada, and was also greatly influenced by Asian culture and especially, Balinese Gamelan. Britten is perhaps best known for his revival of English opera through the success of Peter Grimes in 1945 and after that success there was a flurry of compositional output, including the frequently performed Young Person’s Guide to the Orchestra.

One of Britten’s most popular works, the Young Person’s Guide to the Orchestra, is a wonderful way to conclude our building of the orchestra, as it is designed to introduce the listener to individual instruments and their families, or consorts. The work is actually a commission for a film that was reworked into a concert setting with narrator and based on a dance tune by the English Baroque composer, Henry Purcell. The movement heard here in performance is the fugue, which features each family of instruments in a virtuosic and flourishing finale.
CROSS CURRICULAR RELATIONSHIPS

Music offers many opportunities to explore other areas of a traditional core curriculum. The inspiration for a piece of music can come from a poem or painting, a person or place, or historical events. Music can serve as social, political or cultural commentary, or it can express emotions or ideals. In this packet, two cross-curricular areas will be explored: science and language arts.

SCIENCE

There are many ways to classify instruments, and their timbre — or tone color — is often part of our description. For example, brass instruments are typically made of metal and the performer “buzzing” their lips together to make them vibrate creates sound. These types of classifications and definitions work for most instruments, but sometimes it can be confusing! For example, a saxophone is made of metal, but uses a wooden reed to create sound, so it is a brass instrument that is really a woodwind. It also can be confusing if we build our orchestra and then realize there are lots of other instruments that might not be included, so there are different ways to classify instruments beyond the traditional brass, woodwind, percussion and string families so that we can build an even bigger group of instruments without leaving anyone out! This classification system is a bit simpler, so let’s look at how we can group instruments by the science of sound.

Aerophone: any musical instrument that produces sound primarily by causing a body of air to vibrate, without the use of strings or membranes, and without the vibration of the instrument itself adding considerably to the sound

Examples of aerophones are trumpets, clarinets, saxophones, harmonica and even a conch shell and a vuvuleza!

Membranophone: any musical instrument which produces sound primarily by way of a vibrating stretched membrane (like a drumhead)

Examples of membranophones are snare drum, bass drum, timpani, and kazoo

Idiophone: any musical instrument that creates sound primarily by the instrument as a whole vibrating—without the use of strings or membranes

Examples of idiophones are xylophone, cymbals, chimes, hand bells and even the bell you hear in a bell tower

Chordophone: a musical instrument that makes sound by way of a vibrating string or strings stretched between two points.

Examples of chordophones are violin, piano, and guitar

Electrophone: any instrument that uses electricity to create sound

Examples of electrophones are DJ Mixer, electric guitar, and electric bass

Writing and Drawing Activity: We’re building the orchestra in our concert, but you get to build a brand new instrument! It can be a mix of instruments you know, or can be a completely new creation. Is it an aerophone, membranophone, idiophone, chordophone or an electrophone? Draw a picture of your new instrument, and be sure to give it a new name and explain how it makes sound and what it sounds like! Use the appendix guide to copy and distribute to students to complete this activity.

LANGUAGE ARTS

We know that music can tell a story — either through the sounds and images it creates, or through words in a song. Many of the pieces of music for this performance are drawn from the opera or stage. The story may be about the toreador, Escamillo, or Harry Potter racing through the air on a Nimbus 2000, but each particular story uses music to enhance the experience for the audience.

In operatic tradition, or in Broadway theatre, there is a specific name for the story the music accompanies. It is called a script in Broadway productions, or a libretto in opera. The script/libretto contains all of the lyrics that will tell the story that happens on stage. These can be inspired by events or persons, much like Escamillo and the toreadors, or they can be directly influenced by other literature, such as West Side Story, which is a modern version of Shakespeare’s Romeo and Juliet.

Another popular use of music to enhance a story is found in movies. Composers work collaboratively with the scriptwriters to create music that is appropriate. We have already learned about Harry Potter and his special broom, but there are many, many more instances where music is used specifically to help the narration or make situations more exciting. Think of the scary music from the film Jaws, the Darth Vader theme for Star Wars. In each case, the story is enhanced by the music.

Terms for Language Arts:

Libretto: the lyrics and story written for an opera production

Script: the lyrics and story written for Broadway plays, or movie productions

Words are not used only in classical music to tell a story. Do you have a favorite pop song that uses words to tell a story? Does the music match the story the words tell?
FUNDAMENTAL ELEMENTS OF MUSIC

There are seven fundamental elements of music: melody, harmony, rhythm, texture, timbre, dynamics and form. These materials will focus on three specific musical elements.

Depending on the age of the students, or their current work in the curriculum, you can use any or all of the examples as a starting point to describe the specific musical elements. The examples are included separately in a resource index if you wish to copy for use in the classroom. In this packet, three elements will be explored: rhythm, form and pitch.

Rhythm

Rhythm is understood as an organization of sounds in a recognized pattern in music and is the active moving part of the music that you hear. A term related to rhythm is beat, which is the steady pulse of music that you might tap your foot to when you listen.

Another term related to rhythm is syncopation, or when strong pulses in music are not located on strong beats.

Have the students clap out the rhythm of simple children's songs they would know—like "Twinkle, Twinkle Little Star" in which the rhythm is very regular and the notes all happen on steady beats.

If you tap your foot to Twinkle, Twinkle notice that every note is on the steady beat or when your foot taps the floor.

A common type of rhythm used by many composers, especially in jazz influenced music is syncopation. Syncopation is when a note is played with an emphasis on a weak beat. The example below is where a strong note is not on the steady beat.

When music has regular beats and you tap your foot, syncopation is when some of the important notes might be when your foot is not tapping!

You might remember last year's performance of Scott Joplin's popular tune Maple Leaf Rag, which contains lots of syncopation. In the first measure, the syncopation exists because the actual notes during beat two happen on unaccented beats. This is the most common form of syncopation.

Listen to the DSO's ECS performance of Maple Leaf Rag and tap your foot to the steady beat. Did you notice how often the louder or accented notes happen when your foot is not tapping? That's syncopation!

Leonard Bernstein's Overture to his musical West Side Story contains a very popular tune from the show titled Mambo! The mambo is a Latin dance that developed in Cuba in the 1930's and became popular in America in the 1940's and 50's.

In the following clip from a production of West Side Story, you can see some of the dancing that would have accompanied the mambo, and you can hear the syncopation in the music.

https://www.youtube.com/watch?v=kokbJvSEMUY

https://www.youtube.com/watch?v=uxWD9QLDRoE

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**Form**

Form is the fundamental element we use to describe how pieces of music are organized. There are many ways we can organize music, and composers use form to allow listeners to better follow along as they listen by having familiar melodies return.

**Ternary (ABA) Form**

If we return to the example of *Twinkle, Twinkle*, notice how the first line of music and the third line of music are identical. Since they are the same, we would label those lines as the “A” part of our form. The middle line, which is different and contrasting, would be labeled as “B” so our overall form is A-B-A. The ABA, or ternary form, meaning three-part form, is one of the most popular formal designs. It provides balance and allows the listener to know a piece of music is about to be completed.

![Ternary Form Example](https://www.youtube.com/watch?v=mUQHGpxrz-8)

This type of ternary, or ABA form can happen in a short piece like *Twinkle, Twinkle*, or can be in a much larger piece. In the DSO's ECS performance you will hear Aram Khachaturian's *Sabre Dance*. You probably recognize the music, but you might not recognize the ternary form. If you listen carefully, you will notice the music at the beginning and the end are the same, and there is a contrasting section in the middle that is more smooth and song-like. Those are our A and B sections of music arranged into an ABA form. See if you can hear the different A and B sections in the following performance: ![ABA Form Example](https://www.youtube.com/watch?v=uxWD9QLDroE)

**Fugue**

While ternary form relies on contrasting music and the same music eventually being repeated, a fugue has the same melody repeated over and over again, but in a very special way. Every fugue, like a written or spoken sentence, has a subject. In a fugue, the subject is the main melody, and the repeating melody is what creates the structure of the music.

A single melody, or subject is performed, and when the complete melody is finished, another voice or instrument begins the melody all over again, while the original starting voice continues with different music. Fugues are VERY active pieces of music because you can have 2, 3, 4 or even 5 or more melodies happening at the same time! The music is simply organized by the entrance of the original melody.

During the ECS performance you will hear a very complex fugue written by Benjamin Britten, but you won’t have any problem following along if you know what to listen for in the music. Below is an example of a fugue that is a bit simpler by the Baroque composer, JS Bach (1685-1750) who wrote many pieces of music for keyboard instruments such as the organ. As you listen and watch, because the melodies are color coded, you can both see and hear when the melody begins to repeat, and other melodies continue with new music at the same time.

![Fugue Example](https://www.youtube.com/watch?v=uxWD9QLDroE)

Now that you have watched and listened, try this activity: have students arranged into groups of 3 and give each group a football, basketball, etc. and have them listen carefully while you play the fugue. Each time the subject, or melody enters have them pass the ball to the next person.

For real challenge, try and do the same activity for the Benjamin Britten Fugue from *The Young Person's Guide to the Orchestra.*

**Pitch — the element of SCIENCE!**

We don't need to just listen to musical instruments to appreciate music. We can also use science to examine the orchestra we are building. In each family of instruments you will notice the sizes range from large to small and instruments of different sizes typically produce different ranges of tones we call pitches. A pitch is a technical scientific term we use to describe the frequency something is vibrating. The faster something vibrates the higher the pitch. Because of that, small instruments are capable of producing faster vibrations and higher pitches than larger instruments. This can be easily seen if you compare a string bass and a violin, or a trumpet and a tuba.

The size of the instrument is not the only thing that matters. While it is easy to see that really large instruments would sound lower than really small ones, did you know that temperature influences pitch? If we think about the 3 forms of water – solid, liquid and gas – remember the molecules are closest together in solid water, or ice, and farthest apart in water vapor, or gas. Cooler air is heavier because the molecules are a little closer together than in warmer air – so when those sound waves that we hear as pitches are moving from the instruments to our ears, the temperature of the air matters.

Imagine that the air around us is like a racetrack, except instead of real racecars we are racing with sound waves – cold air is like a racetrack made of mud, while the warmer air is a racetrack made of pavement. The cars will definitely be able to travel faster on the pavement – just like those sound waves can travel faster through warm air. The colder the air gets, the harder it is for sound waves to travel, and the vibrations begin to slow down, so the pitch gets just a bit lower. As temperatures warm up, the sound waves can travel faster, so the vibrations and the pitch gets just a bit higher.
Print this for your students for the webcast performance. You can even have students assigned as ushers to hand these to students as they enter the room, just like we do at Orchestra Hall.

Featuring the Orchestra:
- Piotr Ilyich Tchaikovsky  Symphony No. 4 in F minor, Finale: Allegro con fuoco
- Richard Wagner  Lohengrin: Prelude, Act III
- Leonard Bernstein  West Side Story: Overture
- Georges Bizet  Carmen Suite No. 1: Les Toreadors
  Adapted by Maurice Peress
- Benjamin Britten  The Young Person’s Guide to the Orchestra: “Fugue”

Featuring the Percussion Section:
- Aram Khachaturian  “Sabre Dance” from Gayane, arr. James Moore

Featuring the Brass and Percussion Sections:
- Michael Daugherty  Motown Metal

Featuring the Woodwind Section:
- John Williams  Suite from Harry Potter and the Sorcerer’s Stone: “Nimbus 2000”

Featuring the Woodwind, Brass and Percussion Sections:
- John Philip Sousa  Washington Post March

Featuring the String Section:
- Piotr Ilyich Tchaikovsky  Symphony No. 4 in F minor, Scherzo: Pizzicato ostinato
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Project Team:
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Detroit Symphony Orchestra
Max M. & Marjorie S. Fisher Music Center
3711 Woodward Ave. Detroit MI, 48201
dso.org/classroom