

# Music Theory, History and Creativity

## Lessons and Exercises for the Successful String Orchestra

Making it EASY to teach  
the hard-to-reach standards

Christopher R. Selby

### Overview of this session:

1. **Why teach music theory**, history and creativity to orchestra students?
2. The plan for teaching **Tonal Literacy** to string students
3. **Making theory easy**: Tips for reducing the workload for teachers
4. A better method for teaching **Rhythmic Literacy**
5. Teaching **A Brief History** of string instruments and music
6. Using **Creativity Projects** to teach composition, improvisation and synthesize music making

## Why Teach Music Theory to Orchestra Students?

**It is easy to be overly optimistic about what our students know.** Often, we don't bother to check—or even *want* to check for fear that we may be wrong—to find out how many of our students are functionally *illiterate*. These students learn by ear, and they really don't know enough about how the symbols translate to sound to *independently read and perform music*.

### Do your students really know?

(And how do you know unless you've asked or tested them?)

1. What note is a whole step *higher* than B, C, D, E, and F? A whole step *lower*?
2. What are the enharmonic names of sharp/flat notes, like G#, C#, Eb and Bb?
3. Can your students write and quickly name the notes above and below their staff?
4. Can your students finish this diagram to agree with the given key signature?

### Can your string students explain

- What a symphony is, and how it is different from a concerto?
- When were string instruments invented and by whom? How do they differ from each other?
- Who was Beethoven, and did he live before or after J.S. Bach? Can they name two things each of these composers contributed to the world of string music?
- What method would your students use to figure out how to read and perform the rhythm below?

They know the folk song “Mary Had a Little Lamb;” can they write it on a staff:

What is it called when students/people cannot write down even the most basic ideas?

## Category 1: Tonal Literacy (Two-Year Overview)

### First Year

1. Review note names, this time with an explanation of clefs and ledger lines
2. Learn all of the notes are on the fingerboard—including which natural notes are separated by half steps, and what are the notes between the natural whole steps?
3. Write all of these natural and chromatic notes on the staff
4. Learn the rules for accidentals and how they are different from key signatures
5. What are major and minor seconds, and how do key signatures affect finger patterns

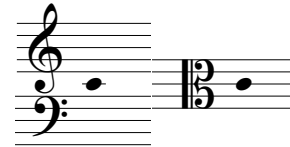
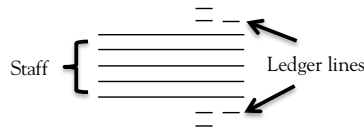
### Second Year

6. Advanced Finger Pattern Study through Tetrachords and Major/minor Thirds
7. Major Scales and Key Signatures in all sharp and flat keys
8. Minor Key Signatures and the Three Forms of Minor Scales

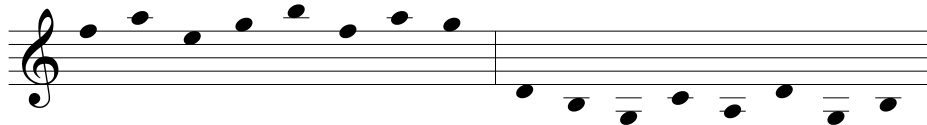
**Many students *want* to learn how to read music better,  
But they are too afraid (or embarrassed) to ask.**

#### Tonal Lesson 1

Explain ledger lines and clefs,



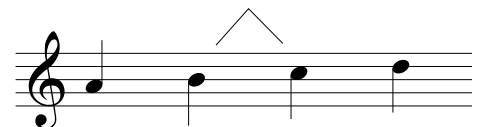
and do speed drills to practice note recognition.



Students who cannot read will tell you they don't need to know the names of the notes—but they will never fully understand how key signatures affect finger patterns until they know the names of the notes.

#### Tonal Lesson 2

Explain which natural notes have half and whole steps between them.



Then, explain what goes in between the natural notes with whole steps between them.



Finally, explain enharmonic notes and teach students to complete a fingerboard map.

- Each space between the natural notes below has a sharp and flat name. Write both names of the notes in one circle as shown below. Between C and D, for example, you would write C# / Db .



- Write the enharmonic spelling for each note below.

A# = \_\_\_\_\_ C# = \_\_\_\_\_ D# = \_\_\_\_\_ F# = \_\_\_\_\_ G# = \_\_\_\_\_  
 Ab = \_\_\_\_\_ Bb = \_\_\_\_\_ Db = \_\_\_\_\_ Eb = \_\_\_\_\_ Gb = \_\_\_\_\_

Students should be able to answer the following questions:

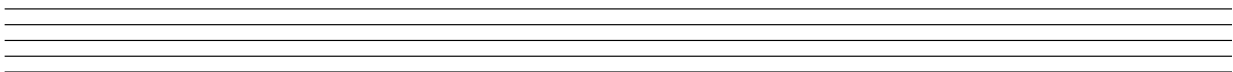
What notes are a half step higher than A, B, C, D, E, F, and G? What notes are a half step lower?  
 What notes are a whole step higher than A, B, C, D, E, F, and G? A whole step lower?  
 What is the enharmonic spelling for A#, C#, D#, F#, G#, Ab, Bb, Db, Eb, and Gb?  
 Complete a fingerboard map for your instrument without any visual aids.

### Tonal Lesson 3

I explain how accidentals work, and how to write chromatic notation on a staff.



Write the one-octave ascending and descending chromatic scale from A to A using sharps and naturals.



### Tonal Lesson 4

Explain how key signatures work, and how they affect finger patterns

Figure A



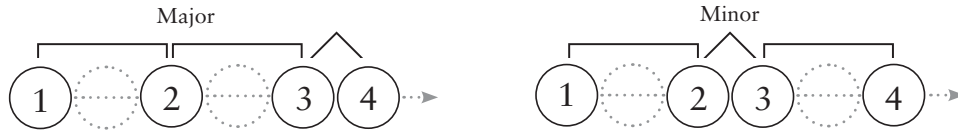
Figure B



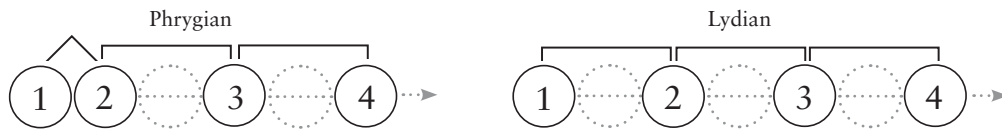
**When a student asks, “Is that a high 2?” your student is telling you “I cannot read a key signature, and I’m not even sure about the note name.”**

**Tonal Lesson 5**

String instruments do not have keys/buttons like wind instruments or pianos, so string students need to learn how major and minor seconds and how tetrachords work. I teach students how to construct major, minor, Phrygian and Lydian tetrachords.



In the Phrygian tetrachord, the minor second is between 1 and 2. Lydian has no minor second at all.



Here is an excerpt from an exercise I have my students do:

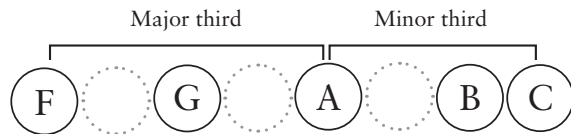
Finish writing the note names in the circles of the tetrachords below. Then in the spaces on the left, write the name and mode of each tetrachord.

\_\_\_\_\_

\_\_\_\_\_

**Students (especially cellists) need to know how to construct major and minor thirds to figure out finger patterns and extensions.**

Major thirds are a half step bigger than minor thirds. A major third is two whole steps, and a minor third is one-and-a-half whole steps, as shown here.



Here is an excerpt from an exercise I have my students do:

In each measure below, write the note that is a *major third lower* than the given note.

## Tonal Lesson 6: Major Scales in Sharp and Flat Keys

I teach my students how sharp and flat scales are constructed (the same way I teach tetrachords).

Diagram illustrating the construction of major scales using tetrachords. The top row shows a sequence of circles representing scale degrees, with the first circle labeled 'D' and the second 'Eb'. Below this are four musical staves showing the scales:

- G Major (1 sharp)
- B Major (5 sharps)
- F Major (1 flat)
- Db Major (5 flats)

And I explain how to read and write the major key signatures in all keys.

Diagram illustrating the major key signatures in all keys:

- D Major (2 #: F#, C#)
- A Major (3 #: F#, C#, G#)
- Bb Major (2 b: Bb, Eb)
- Eb Major (3 b: Bb, Eb, Ab)

## Tonal Lesson 7: Minor Key Signatures and Scales

Explain the differences in relationships between relative minors and parallel minors.

Diagram illustrating the C Major Scale and A Minor Scale. The C Major Scale is shown as a sequence of circles (C, D, E, F, G, A, B, C). The A Minor Scale is shown as a sequence of circles (A, B, C, D, E, F, G, A). Below these are musical staves for the A Major and A Minor scales, with fingerings and arrows indicating the construction of the scales.

Explain the differences in relationships between three types of minor scales.

Diagram illustrating the Harmonic and Melodic minor scales. The Harmonic minor scale is shown with fingerings (1 2 3 4 5 6 7 1 1 7 6 5 4 3 2 1) and accents (A2) on the 6th and 7th degrees. The Melodic minor scale is shown with fingerings (1 2 3 4 5 6 7 1 1 7 6 5 4 3 2 1) and accents on the 6th and 7th degrees.

# THEORY BREAK

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## Making Theory Easier for the Teacher

### **Step #1: Find and use a good music theory workbook *designed for string students*.**

Most teachers don't have time to recreate a curriculum, worksheets and tests.

Tips for making workbooks easier for the teacher

- Have students work in books at the beginning of class, or end of class, or at home.
- Books are also helpful during fund raisers, after concerts, and when there is a sub
- Don't grade every page! Instead
  - Do a quick check by having students hold up their books to show you if they did the work.
  - Then, have students trade books with their stand partner and have students check each other's answers
  - Have students explain concepts, ask questions, and share what they learned

### **Step #2. Use videos to help students learn the lessons in the book.**

Benefits for using video supplements

- Some students struggle with reading lessons, and videos can be viewed in class or at home
- Students can watch the video as a class or individually, and the teacher can answer questions to fill in gaps.

**Step #3. Use educational supplements from a Teacher Edition** to give students more practice and to measure what they really understand.

Tips for using reproducible worksheets

- Copy and distribute worksheets after students have completed the workbook lessons
- Have students do worksheets at the end of class or at home
- Don't grade every page; do a visual homework check, and have students trade papers.
- Have students use workbook and worksheets to review and ask questions before the quiz

Tips for using reproducible quizzes

- Copy and distribute worksheets to make sure students are doing their work and learning each lesson.
- If a student fails a quiz, make them do another worksheet to earn the right to take another quiz
- Give students a B Quiz when a second quiz if necessary

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## **A good theory curriculum can make a string teacher's job easier!**

Armed with good materials, teachers can expect students to do the work and learn the lessons they need to become more well-rounded musicians

## Category 2: Rhythmic Literacy (Two-Year Overview)

### First Year

1. Review rhythmic values (whole, half, quarter and eighth notes and rests), simple meter time signatures and introduce an effective method for marking, counting and independently performing simple meter rhythms down to eighth notes.
2. Learn how to mark, count and perform ties, syncopation and dotted rhythms.
3. Learn compound meter time signatures and learn a method for marking, counting and independently performing compound meter rhythms down to eighth notes

### Second Year


1. Review simple meter time signatures, and learn a method for marking, counting and independently performing simple meter rhythms down to sixteenth notes and rests
2. Review compound meter time signatures, and learn a method for marking, counting and independently performing compound meter rhythms down to sixteenth notes and rests
3. Learn about time signatures with a half note beat (2/2, 3/2, and 4/2) and also 6/4. Learn how to mark, count and independently perform rhythms in these meters.

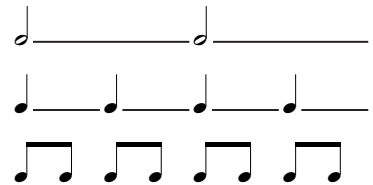
**“How does that go? Can you play that for me?”  
Your student is telling you “I cannot read the rhythmic notation.”**

### Rhythm Lesson 1: Review Basic Rhythmic Principles

Review and explain the parts of notes and how they are written

Example:

A single eighth note (  ) has a flag on the right side of the stem, and multiple eighth notes are connected by a single beam.



Review time signatures

And give students exercises that require knowledge about how time signatures work.

**3**  
**4**

$\frac{2}{4} = \frac{2}{4} = 2$   beats per measure

$\frac{3}{4} = \frac{3}{4} = 3$   beats per measure

$\frac{4}{4} = \frac{4}{4} = 4$   beats per measure

$\text{C} = \frac{4}{4} = 4$   beats per measure

For Example:

$\frac{4}{4}$

|  $\frac{2}{4}$

|  $\frac{3}{4}$

| **c**

|  $\frac{5}{4}$





## Category 3: History of String Music

**Just because your college history book was dull and exhaustively thorough  
Doesn't mean you have to teach music history the same way.**

Each year, I spend a little time teaching a brief unit on each of the artistic/musical eras in which string music was and is important:

- Baroque
- Classical
- Romantic
- Modern (Music of Today)

In each era, my goal is to introduce one to two composers, and help students understand a little about the composer's life and their contributions to the world of string music.

Students also learn about the genres of string music that appeared in each era:

- Baroque: Sonata, concerto, ballet, suite, opera, overture
- Classical: Symphony, string quartet, piano trio
- Romantic: Concert overture/tone poem, musical nationalism
- Modern (Music of Today): jazz, film music, musicals, and strings in popular music

Using an established curriculum like a string theory or music history book can help teachers start a conversation with students about the differences between a symphony and a concerto, or other musical genres or composers. I explain when composers lived and when specific genres first appeared, and I explain the differences between them. It's easy to supplement this conversation with recordings immediately available on YouTube.

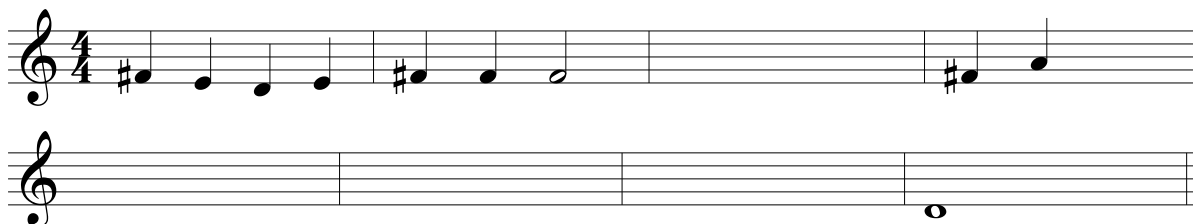
I try to keep it brief and simple, but I want my string students to know a little about the 500-year history string music. And more than just learning who Mozart and Beethoven were, I also want them to know that orchestra music is alive and well today; the most recognizable film music being created today is performed by orchestras.

EXTRA CREDIT: When students miss a concert (for excused reasons) and need to make up the grade—or if students want to earn some extra credit, I usually give them a historical essay assignment with a writing prompt that asks questions like: When and where did the composer live? How did he/she earn money, and for whom did they compose? What contributions did this composer make to the world of string music?

## Category 4: Creativity Projects and Lessons

### Learning to Write Music

Use exercises like the one below to get students started on writing music. Students can/should use their instruments to help them figure out the notes.



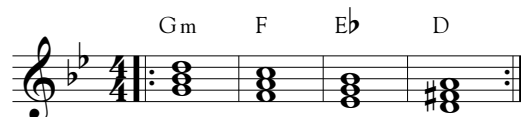
Then, they can write the same melody on a piece of blank staff paper starting on a different note. Activities like this are powerful exercises that help students synthesize all of the tonal and rhythmic lessons they are learning.

### Learning to Elements of Music

Find an orchestra piece that illustrates different musical elements--such as melody, harmony, rhythm, and bass line. Have students play these elements separately and talk about each one. Then, have them play the orchestra piece and discuss how the elements work together.

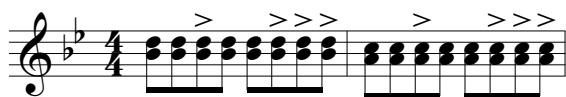
### Learning to Improvise with a Jam Session

Introduce a simple four-bar chord progression like this one:



Explain how students can add rhythmic harmonies, bass lines and chops.

Rhythmic Bowing #2



Bass Line #4



Then give students some direction to help them create their own melodies, improvisations and put together some of the musical elements into a piece all of their own.

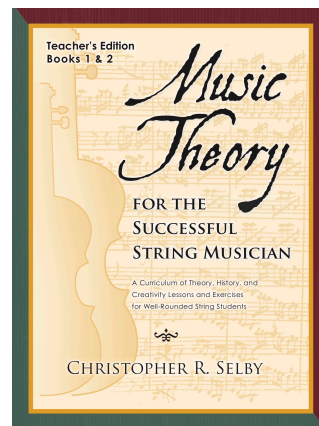
### Additional Creativity Projects

1. Cover Project. Put students into small groups of 3 to 5 kids with varied instrumentation. Help them find a popular song that they like, and guide them as they create an instrumental cover of this song. Have them perform their cover for the class.
2. Arrangement Project. Composing from scratch can be daunting for some young musicians. Arranging a short piece around a melody they already know—folk or holiday melody—can feel more doable and very rewarding for the students.

***Habits of a Successful Orchestra Director***  
***Habits of a Successful String Musician***  
***Habits of a Successful MIDDLE LEVEL String Musician***

**NEW RELEASE: *Music Theory for a Successful String Musician***

*Music Theory for the Successful String Musician* presents a comprehensive and pedagogically sound sequence **specifically for orchestral string students**, and it addresses questions and resolves problems that are unique to the orchestra classroom. This curriculum will help directors teach music theory, music literacy, music history, and creativity—all of those hard-to-reach standards that will ultimately help music students become more well-rounded and better performers, creators and consumers of great music.



**Dr. Christopher Selby is the author of *Habits of a Successful Orchestra Director*, and co-author of the *Habits of a Successful String Musician* series, a collection string method books for middle and upper-level orchestras published by GIA. He is an active clinician and conductor, and he has presented sessions at the Midwest Clinic, the 2016 NAfME National Conference, four American String Teacher Association (ASTA) National Conferences, and numerous state conferences across America. He currently directs the high school orchestras at the School of the Arts in Charleston, SC, where he led the school's Symphony Orchestra to win the 2016 ASTA National Orchestra Festival's top award of Grand Champion in the competitive public school division.**

Dr. Selby earned his Music Education degree from the Hartt School of Music in Connecticut, and Masters and Doctorate of Musical Arts degrees in Orchestral Conducting from the University of South Carolina. Before taking his current job at the Charleston School of the Arts, Dr. Selby taught orchestra in traditional elementary, middle and high schools for eighteen years. He was the Orchestra Coordinator in Richland School District Two from 2001 to 2012, where he taught high school and supervised the district's orchestra curriculum and instruction.

Dr. Selby guest conducts at Regional and All-State Orchestras, and is currently the Chair of the ASTA K-12 Committee on School Orchestras and Strings. Dr. Selby served two terms as President of the Orchestra Division for the South Carolina Music Educators Association (SCMEA), and he was the SCMEA Executive Board President of from 2011-2013. He was named the SC ASTA Orchestra Teacher of the Year in 2009, and has written articles for NAfME and in ASTA's *American String Teacher*.