StringSpeak for the Non-String Player

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Different Foundations

Beginning band and string students are taught similar concepts in a different order from day 1.

The goal of the beginning band class is...
Players must play with characteristic tone. Technique is internal (except Percussion)

The goal of the beginning string class is...
Players must play with correct mechanics and visual setup. Technique is external.
# Different Foundations

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<th>Band</th>
<th>Strings</th>
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</thead>
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<tr>
<td>• Note values-order</td>
<td>• Note values-order</td>
</tr>
<tr>
<td>• Keys-Bb, Eb, F, Ab</td>
<td>• Keys-D, G, C</td>
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<tr>
<td>• Embouchure</td>
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<td>Together</td>
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**THE BASICS**

**Flute**

**Posture**
- Sit on the edge of your chair, and always keep your:
  - Spine straight and tall
  - Shoulders back and relaxed
  - Feet flat on the floor

**Breathing & Airstream**
Breathing is a natural thing we all do constantly. To discover the correct airstream to play your instrument:
- Place the palm of your hand near your mouth.
- Inhale deeply through the corners of your mouth, keeping your shoulders steady. Your waist should expand like a balloon.
- Slowly whisper “too” as you gradually exhale air into your palm.

The air you feel is the airstream. It produces sound through the instrument. Your tongue is like a faucet or valve that releases the airstream.

**Producing The Essential Tone**
Embouchure (em-boo-chur) is your mouth’s position on the mouthpiece of the instrument. A good embouchure takes time and effort, so carefully follow these steps for success:
- Hold the closed end of the head joint in your left hand. Cover the open end with the palm of your right hand.
- Rest the embouchure plate on your bottom lip. Center the embouchure hole on the center of your lips. Check by touching the embouchure hole with the tip of your tongue.
- Gently roll the head joint forward so that approximately 1/4 of the embouchure hole is covered by the lower lip.
- Keep upper and lower teeth spaced slightly apart.
- Draw the corners of your mouth straight back and relax your lower lip.
- Make a small opening in the center of your lips. Blow air partway into and partly across the embouchure hole.
- Practice regularly in front of a mirror. Roll the head joint in or out to find the embouchure position that produces your best clear and full tone.

**MOUTHPIECE WORKOUT**
Form your embouchure and take a deep breath without raising your shoulders. Whisper “too” and gradually exhale your full airstream. Strive for an even tone.

“too” | REST | “too” | REST

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**Violin**

**Take Special Care**
String instruments are delicate. Follow your teacher’s guidelines for caring for your instrument, and it will last forever:
- Follow your teacher’s instructions when removing the instrument from the case.
- Protect your instrument from heat, cold, and quick changes in temperature.
- Always wipe off the instrument with a soft dry cloth. Be sure to remove all fingerprints and dust.
- Place a cloth over the top of the violin before closing the case.

**Accessories**
- Rosin
- Shoulder rest
- Soft cloth
- Extra set of strings

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**THE VIOLIN**

**THE BOW**

- Never touch the bow hair.
- Keep the bow in your case until directed by your teacher.
Flute

Getting It Together

Step 1 Hold the head joint in your left hand and the middle joint in your right hand. Gently twist and insert the head joint into the middle joint. Make sure that the embouchure hole is directly in line with the middle joint's row of keys.

Step 2 Hold the assembled middle joint in your left hand and the foot joint in your right hand. Gently twist and insert the middle joint into the foot joint. The embouchure hole, keys of the middle joint and the long rod on the foot joint should all line up.

Step 3 Rest your left thumb on the underside's long straight key. Keep your wrist straight. Your fingers should arch naturally. Rest your fingertips on the center of the keys.

Step 4 Place the tip of your right thumb on the flute's underside between your first and second fingers. Arch your fingers and rest them lightly on the keys. Put your little finger on the E-flat key.

Step 5 Allow the embouchure plate to press lightly against your lower lip. Hold the flute as shown.

Reading Music

Music Staff

The music staff has 5 lines and 4 spaces where notes and rests are written.

Ledger Lines

Ledger lines extend the music staff. Notes on ledger lines can be above or below the staff.

Measures & Bar Lines

Measure & Measures

Bar Lines divide the music staff into measures.

Violin

Holding Your Instrument

The best way to learn to play your instrument is to practice one skill at a time. Repeat each step until you are comfortable demonstrating it for your teacher and classmates.

Many violin players begin by playing their instrument in guitar position. As you learn the basics, your teacher will help you change to shoulder position.

Guitar Position

Step 1 Place the instrument case flat on the floor with the handle facing you. Open the case and lift the instrument up by the neck. Identify all parts of the violin.

Step 2 Cradle the violin under your right arm. Raise the scroll to shoulder height. Be sure the back of the violin is flat against your stomach.

Step 3 Identify the letter names of each string:
G (lowest pitch), D, A, E.

Step 4 Raise your right thumb over the strings while continuing to hold the instrument. Pluck the strings as directed by your teacher. Plucking the strings is called pizzicato and is abbreviated pizz.

Shoulder Position

Step 1 (Standing) – Stand with feet about a shoulder’s width apart. Sit on the front part of the chair.

Step 2 Turn your left foot to the 10 o’clock position. Slide your right foot back. Adjust your position to place more weight on your right foot.

Step 3 Hold your instrument at eye level parallel to the floor. Curve your left hand around the upper bout. Find the end button with your right hand.

Step 4 Bring the instrument down to your shoulder. The end button should be near the middle of your neck. Turn your head slightly to the left and place your jaw on the chin rest. Be sure the scroll does not point toward the floor.
Flute

7. THE LONG HAUL

Double Bar indicates the end of a piece of music. Repeat Sign: Without stopping, play once again from the beginning.

8. FOUR BY FOUR

Count & Tap: 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

9. TOUCHDOWN

10. THE FAB FIVE

Treble Clef (G Clef) indicates the position of note names on a music staff. Second line is C.

Sharp raises the note and remains in effect for the entire measure.

Flat lowers the note and remains in effect for the entire measure.

Natural cancels a flat or sharp and remains in effect for the entire measure.

Note Names
Each note is on a line or space of the staff. These note names are indicated by the Treble Clef.

Time Signature indicates how many beats per measure and what kind of note gets one beat.

4 beats per measure = Quarter note gets one beat

11. READING THE NOTES

Compare this to exercise 10 THE FAB FIVE.

12. FIRST FLIGHT

13. ESSENTIAL ELEMENTS QUIZ

Fill in the remaining note names before playing.

Violin

1. TUNING TRACK

Wait quietly for your teacher to tune your instrument.

2. LET'S PLAY "OPEN D"

Pizzicato (pizz.) - Pick the strings

3. LET'S PLAY "OPEN A"

Keep a steady beat.

4. TWO'S A TEAM

5. AT PIERROT'S DOOR

The melody is on your CD.
Flute

14. ROLLING ALONG

Go to the next line.

Double Bar

Half Note

1 2

= 2 Beats

Half Rest

1 2

= 2 Silent Beats

= 3 Silent Beats

RHYTHM RAP

Clap the rhythm while counting and tapping.

THE HALF COUNTS

Check your embouchure and hand position.

Breath Mark

Take a deep breath through your mouth after you play a full-length note.

GO TELL AUNT RHODIE

American Folk Song

ESSENTIAL ELEMENTS QUIZ

Using the note names and rhythms below, draw your notes on the staff before playing.

Violin

SHAPING THE LEFT HAND

D STRING NOTES

Step 1: Shape your left hand as shown. Be certain your palm faces you.

0 = Open string
1 = 1st finger
2 = 2nd finger
3 = 3rd finger
4 = 4th finger

Step 2: Bring your hand to the fingerboard. Place your fingers on the D string, keeping your hand shaped as shown below. Be sure your first finger forms a square with the fingerboard, and your wrist is relaxed and straight.

G is played with 3 fingers on the D string.
F# is played with 2 fingers on the D string.
E is played with 1 finger on the D string.

Listening Skills

Play what your teacher plays. Listen carefully.

LET’S READ “G”

Start memorizing the note names.

Sharp

A sharp raises the sound of notes and remains in effect for the entire measure. Notes without sharps are called natural notes.

F# (F-sharp)

LIFT OFF

Play all F#s. Sharps apply to the entire measure.

Is your left hand shaped as shown in the diagrams above?
Flute

Whole Note = 4 Beats
Whole Rest = A Whole Measure of Silent Beats
Whole Rest = Rests from a staff line.
Half Rest = Rests on a staff line.

20. RHYTHM RAP

Gap the rhythm while counting and rapping.

21. THE WHOLE THING

Duet
A composition with two different parts, played together.

22. SPLIT DECISION – Duet

A

B

23. MARCH STEPS

<table>
<thead>
<tr>
<th>Percussion</th>
<th>Woodwind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play 8ths and 16ths</td>
<td></td>
</tr>
</tbody>
</table>

24. LISTEN TO OUR SECTIONS

Percussion, Woodwind, Bass, Percussion, Woodwind, Bass, Percussion, Woodwind, Bass, All

25. LIGHTLY ROW

26. ESSENTIAL ELEMENTS QUIZ

Draw in the bar lines before you play.

Violin

Austrian composer Wolfgang Amadeus Mozart (1756–1791) was a child prodigy who first performed in concert at age 6. He lived during the time of the American Revolution (1775–1783). Mozart’s music is melodic and imaginative. He wrote hundreds of compositions, including a piano piece based on this familiar song.

43. A MOZART MELODY

Adapted by W. A. Mozart

Key Signature
D MAJOR

The Key Signature tells us which notes to play with sharps and flats throughout the music. Your Key Signature indicates the key of the piece: all B♭s as B♭s and all C♯s as C♯s (or F♯s) when you see this key signature, which is called “G Major.”

44. MATTHEW’S MARCH

Play F♯ and C♯ when you see this key signature.

45. CHRISTOPHER’S TUNE

Play the notes below. Then compose your own music for the last two measures using the notes you have formed with this rhythm.

46. ESSENTIAL CREATIVITY

Play the notes below. Then compose your own music for the last two measures using the notes you have formed with this rhythm.
**Bow Builder Six**

Let’s Bow!

**Early Bow Hold**

**Regular Bow Hold**

**Thumb Placement**

- **Step 1**: Hold the instrument with your left hand on the upper bout as illustrated.

- **Step 2**: Hold the bow at the balance point (Early Bow Hold). Your right elbow should be slightly lower than your hand.

**Listening Skills**: Play what your teacher plays. Listen carefully. Your tone should be smooth and even.

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**Putting It All Together**

Congratulations! You are now ready to practice like an advanced player by combining left and right hand skills while reading music. When learning a new line of music, follow these steps for success:

1. **Step 1**: Tap your toe and say or sing the letter names.
2. **Step 2**: Play pitch and say or sing the letter names.
3. **Step 3**: Shunt bow and say or sing the letter names.
4. **Step 4**: Bow and play as written.

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**54. Bowing “G”**

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**55. Back and Forth**

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**56. Down and Up**

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**57. Tribal Lament**

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**58. Bowing “D”**

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**59. Little Steps**

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**60. Elevator Down**

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Violin (Rhythm)

66. RHYTHM RAP
Shadow bow and count before playing.

67. PEPPERONI PIZZA

68. RHYTHM RAP
Shadow bow and count before playing.

69. D MAJOR SCALE UP

Tempo Markings

Violin (Whole Note)

150. RHYTHM RAP
Shadow bow and count before playing.

151. SLOW BOWS
Slow Bow

152. LONG, LONG AGO
Moderato

153. C MAJOR SCALE AND ARPEGGIO

Arpeggio

An arpeggio is a chord whose pitches are played one at a time. Your first arpeggio uses the 1st, 3rd, 5th, and 8th steps from the C major scale.

154. LISTEN TO OUR SECTIONS

155. MONDAY'S MELODY
Moderato

Traditional Folk Song
Left Hand Concepts

- Violin & Viola - Bornoff finger spacing
- Carl Flesch and Ivan Galamian scale patterns
- Cello - Each finger represents a 1/2 step
  - Extended position
  - Thumb position
- Double Bass - Shifting from day 1 – Span of the hand is a whole step
  - Sitting vs. Standing
  - Simandl vs. Rabboth
Right Hand Concepts – The Bow

- Violin, Viola, & Cello - French Bow
- Double Bass - French & German Bow
- The violin frog has a square end.
- All others have rounded ends.
- Stick = Pernambuco or carbon fiber
- Hair = Horsehair
Chapter One: Understanding the "Sound Machine"

Principles of Sound Production

An awareness of the physical properties of the vibrating string is key to understanding sound production. It is also a common language by which teachers, players, conductors, and composers can communicate. Basically speaking, in order to produce sound efficiently, the act of bowing must coincide with the physical properties of the vibrating string. In other words, the string is the master of the bow, not vice versa. To explore this further, it is necessary to think like a scientist or physicist. The following is based on observable physical and mechanical principles.

How it Works:
The three most common bowing factors determining good tone quality are: a) bow speed (or velocity—the amount of bow drawn per unit of time), b) bow pressure (between the bow hair and the string), and c) distance from the bridge (placement, contact point, or sounding point). What may not be as clearly understood is the relationship between these factors in changing conditions. Tone production is a three-way balancing act where a change in one factor influences the others, similar to a mobile. One additional factor is the direction of the friction applied to the string via the bow hair. This friction must be applied perpendicularly at all times, because any given point on the string moves essentially in that direction. However, the angle of the bow to the string can vary as long as the perpendicular friction is maintained (see Oblique Bow Angle, p. 16).

When all bowing forces are in harmony with the vibrating string, good sound will result (limited only by the quality and adjustment of the instrument).

Figure 2 is a simplified representation of the vibrating string and the resulting interrelationships of bow speed, pressure, and distance from the bridge. The length of the string represents a given pitch and the width (amplitude) represents volume level. When viewed from either end, it moves essentially in a circular path, not straight back and forth as implied in this two-dimensional drawing. The maximum width of the vibration pattern (point A) is directly proportional to the volume level produced; that is, the greater the amplitude the greater the volume. Notice that, at points on the string which are closer to either end, the amplitude decreases proportionately within the context of a constant volume level and pitch. The changing amplitude of the string vibration relative to the distance from the bridge shows how bow speed and placement are actually independent of volume level.

Notes:
1. The term "tone quality" refers to that which is recognized as good or bad, whereas the term "timbre" refers to variations of sound quality within acceptable tone quality.
2. The entire string vibrates in a complex pattern called the "Helmholtz motion"; nevertheless, any given point on the string moves more or less perpendicularly to its length.
3. "Pressure" is the proper term for what happens where the string and bow hair meet, but, "weight" is the preferred term for how that pressure is achieved.
The Physics of Bowing

To illustrate, compare a point on the string relatively close to the bridge ("B") with one closer to the end of the fingerboard ("F"). Even though both points are traveling back and forth the same number of times per second (frequency), the string at "F" must travel a much greater distance in its vibration cycle than at "B". Therefore, the speed of the string through the air at "F" is much greater than at "B". To produce a good sound at "F", then, the speed of the bow must be significantly greater than at "B"; that is, it must match the speed of the string at any given point along its length.

Correspondingly, when bow speed changes because of the requirements of the music, the distance from the bridge must be adjusted proportionately. For example, when the bow speed must slow down due to a suddenly longer note value (or slur), the placement must move closer to the bridge where the air speed is slower.

Simultaneously, the third ingredient—bow pressure—must be adjusted as well. Another property of the vibrating string is its changing resistance to perpendicular movement (stiffness) relative to the distance from either end. The greater the resistance, the smaller the amplitude, and vice versa; that is, resistance changes relatively to distance from either end of the string. In bowing conditions, the point of greatest resistance is at the bridge. This explains why the bow must apply more pressure to the string when playing closer to the bridge and vice versa, that is, bow pressure must match the resistance in the string at any given point along its length. Again, this is for a string vibrating at one volume level and pitch. So, along with bow speed and placement, pressure is similarly independent of pitch and volume level.

An understanding of the essential independence of these bowing factors from volume level, rhythm, and pitch is key to bowing mastery.

A by-product of changing the balance of bowing forces within a constant volume and pitch is a change in the timbre. Bowing closer to the bridge (B) produces a "brighter", "more intense", "more complex" timbre; whereas bowing closer to the fingerboard produces a "darker", "warmer", "smoother" timbre. This principle can be further expressed as follows: a) when bow speed, pressure, and placement are constant, the timbre is also constant; b) when they are changed, the timbre changes accordingly.

Changing volume level and pitch can be expressed through variations of this same vibration model. For example, to visualize the bowing factors at a lower volume level, imagine a smaller amplitude but with the same string length. The bowing factors are proportionately less—slower bow speed, etc. (see Figure 3).

To summarize:

• The physical properties of the vibrating string determine all bowing factors.

• The most efficient direction of friction for producing string vibration is perpendicular to the string.

• Bow speed, pressure, and placement are independent of pitch and volume level.

• The string's air speed varies according to the distance from the bridge.

• Bow speed must match the string's air speed at all times.

• String resistance varies according to the distance from the bridge.

• Bow pressure must match the string's resistance at all times.
The Physics of Bowing Applied

- Contact point = Travel Lanes
- Bow Speed = mph
- Arm Weight = ounces & pounds
Bowing Terms

*On the string*
- Détaché
- Accented Détaché
- Hooked/Linked Bowing (space)
- Portato or Louré (pulse)
- Martelé
- Staccato (hair stays on the string)

*Off the string*
- Spiccato (hair leaves the string)

*Special Effect Bowings*
- Ricochet
- Bariolage
- Tremolo
- Col Legno
- Ponticello
- Sul Tasto

(sur la touché, sulla tastiera or flautando)
Bowing Principles

• Bow direction is the foundation for musical and rhythmical accent.
  • Down bow on strong beats
  • Up bow on weak beats

• The note written on the first beat of the measure is usually down bow.
• The last note of a measure is usually up bow.
• An anacrusis slurred over the bar line is usually played down bow
• The even/odd rule states that an odd number of bow changes before a bar line are started up bow and an even number of bow changes start down.
• Chords are usually played down bow.
Standard Bowing Markings

Tips on marking parts and score

- Soft lead (#1 or 2) pencil is recommended for visibility and erasability.

- Ideally, bowings are marked in the parts and score in advance of the first rehearsal.

- Wind and string markings are placed above the staff precisely over the affected notes. Alternate and divisi bowings can be placed below.

- Added slur marks connect the note heads when possible, otherwise the stems. Divisi slurs are above and below the notes.

- Bow direction marks and slurs should coincide. Avoid marking a bow direction in the middle of a slur.

- Unless otherwise indicated, it is assumed that the bow changes direction with each unslurred note, so avoid marking the obvious. Continuing patterns can be marked “sim.,” or “etc.”

- Style markings (dots, accents, dashes, etc.) should be as close to the note head as possible.

- Use brackets to indicate the division of chords.

- Use abbreviations such as: UH, LH, M, Fr., WB, Tp. to designate bow distribution (Figure 1).

- Write the name of the stroke or “on”, “off”, etc., when either way is possible.

- Measure numbers and rehearsal letters should coordinate between parts and score.

- Measures should be numbered at least at the beginning of each line, preferably more frequently, to save rehearsal time.

- Be consistent in the way linked and hooked patterns are indicated. Avoid the use of dots under the slur when the style is not staccato. Direction symbols are clearer.

Figure 1: Common Bow Division Abbreviations
## Typical Rehearsal Sequence

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<tr>
<th>Band - All</th>
<th>Educational - Orchestra</th>
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<tbody>
<tr>
<td>Scales</td>
<td>Tune</td>
</tr>
<tr>
<td>Etude/Warm-up</td>
<td>Scales</td>
</tr>
<tr>
<td>Chorale</td>
<td>Etude/Warm-up</td>
</tr>
<tr>
<td>Tune</td>
<td>Music rehearsal</td>
</tr>
<tr>
<td>Music rehearsal</td>
<td></td>
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### Collegiate and Pro Orchestra

- Music Rehearsal
Orchestra Warm-up Routine

Daily Warm-Ups
for String Orchestra
By MICHAEL ALLEN

The purpose of this organized warm-up method is to ensure that all players have the fundamentals of good string playing addressed on a daily basis. The warm-up is sequential in presentation, allowing the teacher to use it at a number of different developmental levels. For instance, exercises #1 through #19 can be successfully played by most seventh grade students when the quarter-note beat equals 60. Most eighth and ninth grade students can learn exercises #1 through #30 when the quarter note equals 120. The entire warm-up can be played by the average high school orchestra when the quarter note equals 132.

The recommended procedure for using this warm-up is to use an amplified metronome and play the exercises without pause. The metronome ensures a steady beat, while playing the exercises without pause allows the teacher to address administrative duties, individual student needs, or unexpected interruptions. If an amplified metronome is not available, have students say the rests between exercises.

I. TUNING Measures 1-5 provide an initial tuning opportunity for the string section. An additional tuning is recommended at the end of the warm-up.

II. WARM-UP RHYTHMS Exercies #1 through #6 employ a variety of standard rhythms and provide the student an opportunity to play on all four strings.

III. FINGER PATTERNS Exercises #7 through #10 cover the four basic finger patterns, using a simple rhythmic pattern on the D string. Finger patterns in this warm-up are identified by the location of the half-step rather than the numeric designations which vary from teacher to teacher. Exercise #7 presents the “forward” or “upper” extension in the cellos. Care should be taken that the thumb remains behind the second finger at all times. Exercise #10 presents the “backward” or “lower” extension in the cellos.

IV. STYLISTIC BOWINGS Exercises #11 through #18 cover the major concepts in stylistic bowing. Exercise #11 (upbow) presents a problem when performed at a slower tempo. If this occurs, substitute triplet eighth notes until the students are able to handle a faster tempo overall. Exercise #12 (downbow) should use the entire bow, with each quarter note having a crisp and precise attack. Exercise #13 (et al) emphasizes the ability to retrieve the bow from the tip and perform a series of notes at the frog. Exercise #14 (grand martele) should be performed using the entire length of the bow. Exercise #15 should be performed with rhythmic accuracy. Avoid the triplet syndrome. Exercise #16 (fourth) should be performed using a gentle, pulsing motion of the bow. Do not stop the bow between notes. Exercise #17 (tremolo) should be performed in the upper half of the bow, using a very short and rapid back-and-forth motion. Exercise #18 is a coordination novelty which the students really enjoy!

V. DOUBLE STEPS Exercise #19 provides the opportunity for students to play double stops on a daily basis. Some explanation is needed in the fourth bar of this exercise for the double basses. They must shift to the second position in order to play a unison double stop.

VI. LONG TONES Exercise #20 is a long-tone exercise, which develops bow control and distribution. Care should be taken to distribute the bow equally over the course of twelve beats. Insist that students maintain a fff dynamic level throughout.

VII. STRING CROSSING Exercises #21 through #23 develop string crossing skills within the context of various bowings. Cellos must use either second or third position fingerings, while the double basses must use the third position.

VIII. SHIFTING Exercises #24 through #29 explore the three standard classes of shifts in both ascending and descending patterns, while exercises #30 and #31 provide the opportunity to shift to and from harmonics.

IX. CHROMATIC ALTERATIONS Exercises #32 and #33 develop strength and dexterity of the left hand for the upper string player. This type of movement is the foundation of good intonation. Care should be taken that all unused fingers remain stationary on the indicated notes. Exercise #32 develops the backward or “lower” extension of the cellos. Again, care should be taken that the second, third, and fourth fingers remain stationary on the indicated notes. On the second, third, and fourth “sections” of exercise #33, the forward or “upper” extension for the cello is presented. During these passages, it is important for the cellist to develop the proper use of the left-hand thumb. In the backward extension the thumb remains stationary, and during the forward extension the thumb follows the second finger.

X. SCALES Exercise #34 presents a chromatic scale, an often-overlooked technique for the string player. Exercise #35 develops speed, while exercise #36 presents the basic two-octave D major scale. Exercise #37 extends the range for advanced players, especially for the cellos and double basses.
Daily Warm-Ups

DAILY WARM-UPS
For String Orchestra

VIOLIN

MARTIN ALLEN

1. TUNING SEQUENCE
2. WARM-UP RHYTHMS
3. FINGER PATTERNS

IV. STYLISTIC BOWING

VIOLIN
Daily Warm-Ups
Intermediate & Advanced Skills that Help Create a Mature String Sound

• Step-up instrument and bow/better strings/rosin
• Vibrato
• Shifting (timbre options)
• Improved tuning through better rhythmic alignment
• Consistent bow placement
• Blend – The Power of the Herd
• Did I say vibrato?
Strings

CHOOSE YOUR SET!

Questions About which set is for you?
We can HELP! Call 866.742.7123 Apprentice Hotline

DIRECT

Direct/Subtle
A direct string has a brilliant, distinct tone designed for music to cut through piano or orchestral mixes. A subtle set directs even more. They blend well and often have a dark undertone.

SMOOTH

Projection
- Aggressive
- Forceful
- Moderate
- Mild

Smooth/Textured
Textured sets are complex sounding with many colors and rich, resonating overtones. Smooth sets are very clear and focused. The tone is clean and smooth.

TEXTURED

SUBTLE

Each string is waxed, treated, and selected by a team of discerning professionals. Strings were judged in key award categories: Projection, Texture, and Tone Color.
References


