IMPROVING THE INTONATION OF YOUR STRING STUDENTS THROUGH SIGHT, SOUND, AND TOUCH

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OVERVIEW

• Philosophy

• Causes of intonation problems & strategies to correct
  • Aural
  • Technical
  • Physical

• Technology to assist
PHILOSOPHY

- Importance of intonation on performance
- Misconceptions of intonation problems
- Teaching aural skills from day one
- The teacher determines the expectation for intonation
- What research has shown us
SOUND

• Audiation (Gordon, 1993)

• “Say” note names

• Listen for what is correct & incorrect intonation

• Pitch matching & echoes from day one

REFERENCE PITCHES & DRONES

• Sustained pitches
  • Beat elimination – explain/demonstrate to students

• Tetrachords & Scales

• Tunes & Performance repertoire

• Improvisation

• Word of caution about loud reference pitches

SOUND

• Detune the instrument’s open strings for scales/simple tunes

• Accompaniments

  • Puts a melody in harmonic context

  • EEi, accompaniments with different harmonic analysis

• Instrument harmony

  • Double stops - checking with open strings

  • Partners “double stops”

• Listen for sympathetic vibrations/ringing of instrument
TUNING IN ORCHESTRA

• Tuning Sequence
• Build chords
  • Root, Third, Fifth (& Seventh)
  • Change chords
• Chorales
  • 371 Bach Chorales, published by DeHaske, distributed by Hal Leonard
  • Bach & Before, published by Kjos
  • Bach Chorales for Strings, Southern Music
OPEN STRING TUNING

• 1. Listen
• 2. Internalize
• 3. Tune
TUNING CHORDS

Fifth

Third

Root

Tonic

Dominant
AURAL THEORY TRAINING

- Intervals
  - Higher/lower game
  - Half/whole step identification
  - Advanced interval identification
TECHNICAL ISSUES

• Instrument position
• Left Hand
• Right Hand
INSTRUMENT POSITION

• Violin/Viola
  • “The Frankenstein” – too far forward
  • “The sagger” – instrument not parallel to ground
• Cello/Bass
  • Endpin/instrument too low
  • Neck too far away from head

VIOLIN/VIOLA LEFT HAND

• Straight wrist

• Left hand shape sequence
  • 1. turn head, 2. bend first finger, 3. twist

• Left arm position
  • Swing, maintain hand shape
CELLO LEFT HAND

- First finger placement/touch
  - reach back to nut with first finger
- Left elbow
  - Bridge taps
  - Flying pizzicato
  - “Grab a Coke”
DOUBLE BASS LEFT HAND

• Left hand shape
  • “Inhale and hold”
    • Fingers over face, thumb in ear
• Left elbow height
  • Bridge taps
• “Grab a Coke”
TO TAPE OR NOT TO TAPE?

How many? For how long?
What is the purpose of finger tapes?
THE RIGHT HAND

- The bow effects intonation too!
- Balancing point of contact, speed, weight, etc.
- Bowing “PAWS”
Point of Contact
(placement of the bow on the string)

The 5 “lanes” for bow travel
Area of the Bow
(the part of the bow used)

whole bow
0-100
lower half
0-50
upper half
50-100
near the frog
0-30
middle
30-60
near the tip
60-100

0 (at the frog)
33 (balance point of the bow)
50 (middle of bow)
100 (at the tip)
Weight

* the amount of pressure you put on the bow
* use first finger to push the stick into the bow hair - “bite” the string
* measured with “pounds”

100 lbs.

fff
ff
f
mf
mp
p
pp
PPP

50 lbs.

0 lbs.
Speed

* the speed of the bow
* measured in “miles per hour”

* the longer the note, the slower the bow stroke
* the shorter the note, the smaller the bow stroke

- 25 MPH
  “Super Duper Slow Bow”

- 33 MPH
  “Super Slow Bow”

- 50 MPH
  “Slow Bow”

- 75 MPH
  “Bow”

- 100 MPH
  “Run”

- 125 MPH
  “Sprint”
MECHANICAL PROBLEMS

• Fine Tuners – lubricate or replace
• Pegs - lubricate
• False Strings – compare with kid’s sneakers
• Environmental factors

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PITCH ADJUSTMENT

• Students must understand how and when to physically adjust a pitch on the fingerboard

• Pitch adjustment exercises
  • “Hands together,”
  • Pitch bending - use a sustained tone on a keyboard and pitch bend wheel
  • “Follow me”
  • One finger tetrachords/scales

• Strategies to enhance listening: 1. Eyes Closed, 2. Play softer
BLOCK FINGERING

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.

15. WALKING SONG

INDEPENDENT FINGERING

• At the latest, start when you approach the teaching of “low 2”

• Opens up the door for vibrato

• Students will then begin to understand when to use block fingering and when to use independent fingering
FINGER PATTERNS

UNDERSTANDING THE FINGERBOARD
Violin & Viola Finger Patterns

____ pattern

low<---strings ----> high

____ pattern

low<----strings ------> high

____ pattern

low<-----strings -------> high

Violin & Viola Finger Patterns

1-2 pattern

2-3 pattern

3-4 pattern

open hand
COMMERCIAL DRONE RECORDINGS

• *Cello Drones* by Navarro River Music, also available on iTunes
COMMERCIAL DRONE RECORDINGS

- *The Tuning CD* by Richard Schwartz – available on Amazon and iTunes
TARTINI IN TUNE

• iOS App for iPad
• $2.99

INTONIA DEMONSTRATION

• Mac/PC (Java app)
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• Save recordings
• www.intonia.com
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