



## 'Pitch, a Fit'

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Demonstration ensemble-Ann Arbor Huron High School Symphony Orchestra, Timothy Krohn, Director

### Starting Assumptions and Goals

- 1) This session deals **only** with pitch, as all other factors: balance, dynamics, etc. are 'very good'.
- 2) Strings are tuned to 'beatless' P5ths, winds tuned to A 440 and or Bb.
- 3) Perfect 5ths **spread** beyond octaves so that only neighbor strings are beatless; open G or C is not beatless with open A or E.
- 4) No melodic tuning (adding beats) is considered, except in an unaccompanied passage.
- 5) All tuning is VERTICAL and harmonic as soon as you have 2 parts.
- 6) There are **different** sized half and whole steps: sustaining (bowed) tones **must** 'solve' this.
- 7) When an open string is not included in a certain passage, the best solution may still be for a tuning note to be **in tune with** an open string.
- 8) We are drilling scales over the tonic, in rounds of thirds, and in triads.
- 9) These concepts will work for strings at **all levels** from beginners on and for high school winds.
- 10) There are circumstances in which the entire orchestra listens to the winds for pitch.
- 11) The target ensemble is a 9-12 high school full orchestra that meets **after** school to add winds 1x per week and 30% of the strings and 30% of the winds take private lessons.
- 12) The Yamaha Harmony Director keyboard is a great tool, but, high school orchestras must, also, tune to open strings in rehearsals and in concert, as much as possible, to promote the most resonance and to maintain a specific concept for tuning.

### Methods and Applications

**Goal:** train the players to identify to which note(s) and section(s) they are tuning.

- 1) The tonic, open string, or other logical pedal guides us in class and at home.
- 2) Open strings determine most high school full orch and most all string instrument pitch foundations.
- 3) **The Tuning Note:** this 'pedal' or controlling note can be any note, an open string is the 1st choice.

4) **1st Finger Rule:** proving that strings tuned in 'beatless' 5ths spread beyond 'tempered' tuning requiring more than one location of fingers. The Rule is; if the open string in context is ABOVE the 1st finger then the 1st finger must be high enough to be 'beatless' with the open string and visa versa if the open string is BELOW.

5) **The Tuning Drill:** proves that there are **different** sized half and whole steps in 'beatless' string tuning and shows us how to apply this.

6) **The Leading Tone:** scales over the tonic, but switching to the dominant for the leading tone

7) **Context:** tuning notes may change every bar or may 'control' the pitch center for many bars.

8) **Follow the Leader:** isolate identical notes/phrases that are doubled within the winds and/or strings.

9) **Practice for the future:** create double stops wherever possible to further apply these rules.

10) **Finger signals** (up, down) to show i.e. a 2nd tpt or viola section that they are either sharp or flat to the controlling tuning note in rehearsal and possibly in the performance

**Goal: Replace these comments:** 'that's wrong', 'you are out of tune', 'tune this up', 'you are sharp/flat', 'your finger is too High/Low', 'to close/far', 'your finger is 'off' the tape', 'touch the other finger', 'fix it'

**With;** 'listen to this instrument with the current 'tonic', 'adjust to the cello open string in Bar 12', or, 'base your pitch in the low brass on the violin 'pedal', listen to the sustained note'.

## 'Pitch, a Fit' Drills and Repertoire

Ex 1	<b>Final Check:</b> Winds test their major triads over the strings as they check their open strings.		
Ex 2	<b>1st Finger Rule:</b> Only neighbor strings are beatless. If the open string in context is ABOVE the 1st finger, then the 1st finger must be high enough to be 'beatless' with the open string and visa versa if the open string is BELOW.		
Ex 3	<b>The Leading Tone;</b> can have its own tuning note, the dominant, for every 7th degree up and down the scale.		
Ex 4	<b>The Tuning Drill:</b> proving that there are different sized half and whole steps in 'beatless' string tuning		
Ex 5	<b>The lower choice</b>		
Ex 6	<b>Both</b> locations in one chord		
Ex 7	Coventry Carol	Traditional arr. W. Ryden	Gr 2 Kalmus
Ex 8	Still, Still, Still	Traditional arr. M. Hellem	Gr 2 Kjos
Ex 9	Concerto Grosso in d Op.3 # 3 mvt 1	Vivaldi	Gr 4 Lucks
Ex 10	Scheherazade mvt 2	Rimsky-Korsakov	Gr 6 Dover
Ex 11	Pizzicato Blues	Mitchell	Gr 4 Grand Mesa
Ex 12	Symphony No 1 mvt 4	Brahms arr. V.Leidig	Gr 3 Alfred
Ex 13	Concerto No. 3 mvt 1	Bach	Gr 3 Kalmus
Ex 14	Symphony No 4 mvt 1	Tschaikovsky	Gr 6 Lucks
Ex 15	Romeo and Juliet Ov	Tschaikovsky arr.J. Brubaker	Gr 5 Belwin
Ex 16	Grand March	Wagner arr. V Leidig	Gr 3 Alfred