

Chromaticism as the Basis of Developing Fretless String Intonation

- ❑ Theory
 - ❑ Traditional theory: students that play out of tune do so because they don't "hear" the correct tones
 - ❑ This theory supposes that students will fix tonal flaws if they hear them
 - ❑ Do they? 🙄
 - ❑ Fix with singing
 - ❑ Music as a "language", examined
 - ❑ Sapir-Whorf hypothesis: "structure of a language affects its speakers' world view or cognition"
 - ❑ The half step is the foundational interval of western music
 - ❑ Theory: chromaticism must be taught almost immediately, otherwise they will not develop a clear concept of notes beginning with the same letter, esp. notes played with the same finger
 - ❑ Notes are letters, measures are words, phrases are sentences
 - ❑ Learn the complete alphabet from the beginning
 - ❑ Behavioral/Athletic theory: all tonal flaws must be manifested physically
 - ❑ Whether or not they heard the mistake, they played the mistake
 - ❑ Theory: Students do hear tones accurately
 - ❑ All students can match pitch; failure to do so is a result of speed
 - ❑ Therefore we must teach instrumental strength/dexterity/speed
 - ❑ Imagine playing "Mary Had a Little Lamb"
 - ❑ Did you imagine it in first position?
 - ❑ Beginners consistently tested with high accuracy on a tonal discrimination app
 - ❑ Little correlation between the most accurate students and their instrumental tonal accuracy
 - ❑ Fix the instrumental physics
 - ❑ Map the fingerboard
 - ❑ Calibrate daily to growing bodies
 - ❑ Theory: in personal practice, most students ignore fine tuning and focus on phrase cohesion
 - ❑ "Diligent practice" is achieved by performing the complete phrase without crashing
 - ❑ Most students stop practicing once they can do this
 - ❑ Any flaw in an orchestra's skillset is a product of insufficiently small or incomplete scaffolding
- ❑ Features/Goals
 - ❑ Scalable for all levels
 - ❑ Beneficial to every row of the orchestra
 - ❑ Students learn the music faster/more accurately

- ❑ Tempo
 - ❑ Slow
- ❑ Pizzicato: practice pizzicato sections arco and tune
 - ❑ Check form when returning to pizzicato
- ❑ Piano Dynamics: “left hand must always be 100% strong”
 - ❑ Separate left side from right side, then combine
 - ❑ Practice your warmups at difference dynamic levels
 - ❑ Apply the Sapir-Whorf hypothesis to dynamics
 - ❑ pp-p-mp-mf-f-ff
 - ❑ MIDI recognizes 127 levels of dynamics
- ❑ C String/low strings
 - ❑ Check setup/positioning daily
 - ❑ Callibrate C string as part of daily warmups