Nutrient-Rich Teaching: Reaping What You Sow

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4 COMPONENTS OF REHEARSAL

1. PREPARATIONS
Cultural Expectations for All Musicians

Wind Instrumentalists
instrument assembly/maintenance
individual warming-up
preparations for this rehearsal

Percussion Instrumentalists
instrument assembly/maintenance
preparations for this rehearsal
individual warming-up on mallet equipment

2. FOUNDATIONS
Foundations of Musicianship – Individual and Collective
Initial Foundation: Ensemble Sound – sustained/tone-filled moments
Non-verbal exploration of Section/Ensemble Tone Quality, Balance, Blend,
Intonation, Shape, Color, Dynamic Contrast, ...
Subsequent Foundations – determined by long/short term goals
Rhythm, Articulation, Style, Tone Quality, Intonation, Technique, Terminology,
Theory, History, Listening, Repertoire-Related Information, Balance, Blend, Expressive
Shape, Color, Dynamic Contrast ...

3. REPERTOIRE
Foundations Skills Applied to Artistic Context
The application of foundation skills to musical composition (repertoire reinforces and
allows for application of foundation skills)

4. CLOSURE
Cultural Expectations for All Musicians

Wind Instrumentalists
instrument disassembly/maintenance
post-rehearsal/logistical details

Percussion Instrumentalists
instrument disassembly/maintenance (assigned tasks)
post-rehearsal/logistical details
REHEARSAL COMPONENT PROPORTION

An All-Too-Frequent Rehearsal

Another Approach to Rehearsal
REHEARSAL PREPARATIONS: Establishing Routines and Avoiding Ruts

BEFORE REHEARSAL BEGINS - INDIVIDUAL BEHAVIORS

GOAL: No matter when a student arrives in relation to the start of rehearsal, s/he is aware of expectations for specific behaviors (social and musical).

BIAS: Mature musicians enter a rehearsal space and prepare for rehearsal in predictable, specific, and consistent ways. Student musicians can be nurtured to behave in identical ways ... even the 135 musicians a first-period Ninth Grade Band.

Wind Musicians
1. Be seated with your instrument and folder.
2. Put music/materials in order for rehearsal (see rehearsal plan on whiteboard).
3. Begin your individual warm-up, and continue until full rehearsal begins.

Percussion Musicians
1. Get your folder from the folder cabinet.
2. Assist in getting all covers removed and properly stored from all mallet instruments and timpani, and mallet bags from percussion cabinet.
3. Assist in setting up snare/field drums, tom-toms, and accessory percussion equipment needed for the entire rehearsal (refer to rehearsal order on whiteboard).
4. Put music/materials in order for rehearsal (see rehearsal plan on whiteboard).
5. Begin your individual warm-up on mallet instruments only using softer keyboard mallets, and continue until full rehearsal begins.

Educator Musicians
1. Be present in the rehearsal room and overtly visible/engaged with the overall environment (and the students who inhabit it).
2. Reinforce appropriate behaviors with praise (especially students who you are slowly "reeling into the boat").
3. Redirect inappropriate behaviors as necessary.
4. Be engaged with the quality of the sounds in the rehearsal room.

   The "cacophony" resulting from 70 musicians engaged in mature individualized warm-up, and that of 70 musicians engaged in immature individualized warm-up has very different timbres, colors, and densities.

Individual Warm up Sheets
These warm-up sheets - customized for each instrument in the ensemble - contain specific, appropriate, and musically rich activities for the first moments of playing (both at school and at home). Include material that would take no more than 5-7 minutes to complete, but also include the "essentials" of outstanding musicianship.
THE PRIMARY FOUNDATION: Establishing Routines and Avoiding Ruts

GOAL: Bringing individual musicians into intentional, thoughtful, and meaningful musical and social relationship with others in the ensemble.

BIAS: The most important musical characteristic of an outstanding ensemble is the purity, depth, and beauty of ensemble tone quality.

"F DESCENDING SCALE"

- Find the right notes
- Fermata on each note
- No breath between two different notes
- Quality of rolls on mallet instruments
- Balance of mallet sounds
- Mallet percussion changing quickly, without accents, between "white" and "black" keys
- Legato tongue vs. slur
- "Are we changing together?"
- Balance within sections
- Balance within ensemble ("sculpting the tutti sonority")
- Sensitizing the ensemble to crescendo/diminuendo gesture (i.e. which sections lead crescendo/diminuendo?)
- Use of upper octaves, particularly after ensemble sound centers/stabilizes on lower octaves
- Release - "Sing your next note on DAH" "Match what you sang on your instrument"
- "Hear the next note in your head before you change to it."
- Students leads with gesture (as would a chamber musician)

"F STRETCH"

- Designed to foster unified enunciations and releases
- Woodwinds/Mallets play, brass buzz on mouthpieces
- Sing phrase, play the same phrase (and vice versa)
- "Sing your next note"
- Varied tempi
- Varied shape

"F CHROMATIC SCALE"
- designed with flats descending and sharps ascending
- numbered for teaching enharmonic equivalents
SUBSEQUENT FOUNDATIONS: The Miracle-Gro® Model

Nurturing ‘Intonationally-Independent’ Students

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PITCH SYSTEMS EMPLOYED IN THE CONCERT BAND
- wind players ultimately observing just intonation (“beatless” tonalities)
- percussion instruments (bells, xylophone, marimba) tuned using equal temperament
- piano tuned using equal temperament

ACQUIRED SKILLS OF AN “INTONATIONALLY-INDEPENDENT” WIND INSTRUMENTALIST: PERCEPTION AND PERFORMANCE

PERCEPTION SKILLS
1. Advanced skill in inner hearing (e.g. the mind as a musical instrument).
2. A well-developed sense of tonality (residing in the head of the musician, not in the musical instrument) including skill in tonal memory.
3. A high sensitivity to beatless or pure tonalities.
4. Advanced skill in placing a pitch in the inner ear prior to producing it on a musical instrument.
5. Highly refined comparison skills between “the instrument in the head” and “the instrument in the hand.”

PERFORMANCE SKILLS
1. Produce a consistent and characteristic tone quality (through all ranges and dynamic levels) from enunciation to silence.
2. Intentional and controlled manipulation of any/every note via embouchure or fingering so as to produce beatless or pure tonalities (e.g. unisons, octaves, fifths/fourths, thirds/sixths, and seconds/sevenths).
ABOUT SINGING ...

• There is something very powerful and meaningful about using the singing voice – an instrument that is actually part of us as human beings – in making music.
• With the increased availability of personal audio devices (iPods, portable CD players, etc) fewer and fewer school-age students are experiencing singing as a way to enjoy / create music.
• The use of singing to address intonation issues in the rehearsal setting is a long honored tradition in the wind band medium: “What can we do to improve the intonation of our individual players? ... He must be made to sing, sing, sing. Tartini said, ‘Per be suonare, bisogna ben cantare! (To play well, you must sing well!).’” --William Revelli, 1938.
• There is a connection between the sensation of creating musical sound with the voice and creating a musical sound in the mind. Both are highly individual actions.
• The student comfort level with singing is directly proportional to the comfort level of the teacher with his/her singing voice.
• Singing can serve as an indicator of the collective concentration level of an ensemble.

STRATEGIES TO DEVELOP SKILLS LEADING TO INTONATION INDEPENDENCE

PERCEPTION SKILLS

1. INNER HEARING
   a. “The Good Voice in Your Head” – Ask the students to sing a familiar song (e.g. Happy Birthday) aloud, and then a second time but this time without actually singing aloud.
   b. “Inner Hearing in Color” – Ask the students to hear a familiar melody played on different instruments using their inner hearing (e.g. a short melody on flute; then the same melody on trombone; then on saxophone).
   c. “Écoutez é Réditez” – Using a familiar song, present one phrase to the students aloud, and have them sing the second phrase in their inner ear. For instance, teacher sings the first phrase of Frere Jacques, and the students internally hear the second phrase. The teacher then sings the third phrase, and the students internally hear the fourth phrase.

2. TONALITY
   a. “Find the Clunker” – Perform a familiar melody either by voice or instrument, intentionally altering a single note sharp or flat. Ask the students to identify the improperly altered note. The goal is not to provide an incorrect pitch, but incorrect alteration of the correct pitch.
   b. “Cutting In and Out” – Have the students sing only certain words in a familiar melody. For instance, sing aloud only the word “you” when it appears in Happy Birthday.
   c. “Tennis Anyone?” – Divide the ensemble in half and sing a familiar song, alternating pitches between the halves. For instance, America, would be performed: (R) My (L) coun (R) try (L)’tis (R) of (L) thee, (R) sweet (L) land etc.
   d. “Four Square Anyone?” – (Variant of “Tennis Anyone?” above) Divide the ensemble into four groups and sing a familiar song, alternating pitches between each of the groups.
   e. “Play, then Sing” – Have the ensemble play the first three notes of a major scale, and then collectively have them sing the scale fragment back aloud.
f. “Sing, then Play” – (variant of “Play, then Sing” above) Have the ensemble sing the first three notes of a major scale, and then collectively have them play the scale fragment.
g. “I sing, you play” – The teacher sings a brief scale passage, to which the students respond on their instruments. The difficulty level of the passage can be adjusted to meet the skill level of the ensemble.

3. BEATLESS OR PURE TONALITIES
a. “Electronic Tuner Duel” – Use two sound-producing electronic tuners, and calibrate one tuner slightly higher or lower than the other. Present the same musical pitch on both tuners, drawing the attention of the students to the resulting beats or waves. Then, recalibrate the tuners so that they are identical so that students can hear the resulting beatless or pure sonority.
b. “Trombone Duel” – (“Live” variant of “Electronic Tuner Duel” above) Using two trombonists, have them perform the same musical pitch and have one intentionally perform the pitch slightly higher or lower than the other, drawing the attention of the students to the resulting beats or waves. Then, have the “errant” trombonist adjust gradually so that students can hear the resulting beatless or pure sonority evolve.

4. PLACING A PITCH INTERNALLY
a. “Find the Note in Your Mind” – Have the ensemble play the first note of a major scale. Next, instruct the students to sing up to the third note of the scale using their inner voice. Then, ask the class to sing that internalized note aloud.
b. “Internal Melodic Intervals” – Using a numbering system in which 1 represents the first scale degree and 2 represents the second scale degree, etc., ask the students to internally hear the melodic interval “1, 4.” Then, have the class sing the melodic interval aloud.
c. “It IS Polite to Point” – Using a familiar melody, have the students internally sing the song, singing aloud only when the teacher points to the class.

5. REFINED PITCH DISCRIMINATION SKILLS
a. “Higher or Lower?” – The teacher presents two “versions” of the same musical pitch (singing, instrumentally, or recorded), intentionally altering the second note slightly higher or lower in musical pitch. Ask the students to identify whether the second pitch is higher or lower in musical pitch.
b. “Student Version of Higher or Lower” – (variant of “Higher or Lower” above) Have two students perform the same musical pitch one after another. Ask the students whether the second instrumentalist is higher or lower in musical pitch.

PERFORMANCE SKILLS

1. NURTURE MATURE AND CHARACTERISTIC TONE QUALITY
a. Infuse every moment of every rehearsal with reminders of the importance of tone quality. As with all aspects of refined instrumental musicianship, tone quality has to be taught and nurtured continually.
b. Insist that every individual musician warms-up prior to the start of rehearsal. Students must be provided with toneful materials that are appropriate for use in this important part of their musical day (e.g. mouthpiece buzzing for brass instrumentalists, head joint tones for flautists, etc). Not only will then every student be charged with a task the moment that he/she enters the rehearsal room every day, the resulting tone quality of the ensemble will improve greatly. The key to success is for the teacher to be on hand to monitor this part of the rehearsal.
c. Incorporate breathing exercises into the beginning of your rehearsals. The most common solution to improving tone quality is taking in a larger quantity and quality of air. For ideas on breathing exercises, seek out a VHS or DVD copy of The Breathing Gym by Sam Pilafian and Patrick Sheridan.
d. Begin all rehearsals with sustained pitches in octaves, dictated by the conductor. Insist upon good posture, breathing, and blended tone qualities.
e. Explore timbre matching within sections of the ensemble. There is good reason why every member of the Minnesota Orchestra horn section all perform on Lawson horns: the more that every member of a particular section sounds the same, the more clear and beautiful the resulting sonorities become. Isolate a section and have each member play the same musical pitch with his/her best tone quality. Ask the other members of the ensemble to explain how the sounds are different.
f. Insist on characteristic tone qualities from percussionists. Many times a slightly different implement will produce a very different tone. The bass drum is capable of a myriad of colors and timbres. Drawing the entire ensemble’s attention to that fact could be “ensemble changing” for many reasons.
g. Program and perform repertoire on every concert that explores lyrical, toneful playing. In order to keep percussionists engaged in the learning process, transcribe wind parts for mallet instruments (being sensitive to ranges – bells vs. xylophone vs. marimba). Lyrical and expressive music is one of the most direct ways to the souls of student musicians.

2. PITCH MANIPULATION
a. A picture IS worth a thousand words! Copy and distribute the Chords of Just Intonation handout to demonstrate the importance of this skill with all of your wind instrumentalists.
b. “Tuner Triads” – If you have access to three (or more) tuners that produce sounds, calibrate each to the same pitch standard, and set one on the root, another on the fifth, and the last on the third of the chord. Allow the students to hear the resulting beats or waves. Next, recalibrate the tuner dedicated to the fifth of the chord slightly higher (following the first chord on the Chords of Just Intonation handout). Allow the students to hear the beatless or pure interval that results. Next, recalibrate the tuner dedicated to the third of the chord, allowing the students to hear the resulting beatless and pure sonority.
c. “Pitch Bending Assignment” – THIS IS HUGE! I cannot conceive of another way to ensure the ability to perform with accurate intonation according to the principles of just intonation without having every wind instrumentalist develop this skill. The time spent by the teacher hearing each individual student is a worthwhile investment of time and energy in the long run.

HARMONIC/TRIADIC INTONATION
d. “Tuning Trainer Assignment” – This is the realistic and musical application of the pitch bending skill. Again, the time invested will pay large dividends.
e. Harmonic Tuning (Instrumental application) – Acquire an ensemble technique or method book that provides traditional four-part chorales and/or sonorities. Isolate two, then three, then four part sonorities on a regular basis so that the ensemble can apply the Pitch Bending and Tuning Trainer skills to ensemble settings. An outstanding resource for this aspect of teaching is David Newell’s Bach and Before for Band.
f. Harmonic Tuning (vocal application) – Acquire resources that provides two, three and four part sonorities appropriate for singing in rehearsal. Experience has taught me time and time again that once an ensemble begins to sing in parts, the willingness of the students to embrace the strategy skyrocket.
3. THE WHOLE ENCHILADA: THE DAILY TUNING PROCESS

Devoting time in every rehearsal for tuning according to the process outlined in the handout provided incredible help to my students. The process outlined is the one used in my dissertation study. I encourage you to explore its use in your own rehearsals.

CONCLUSIONS: THINGS TEACHING HAS TAUGHT ME …

• Advanced skills in intonation are teachable and learnable. As with most concepts, some students will embrace these skills more quickly than others…
• As with all important aspects of musicianship, the successful teaching of refined intonation skills requires continual attention - and repetition - throughout the learning experiences of students.
• Intonation training that solely teaches skills in “adjusting” (e.g. eliminate beats or waves) is - in one way - subconsciously encouraging error in the intonation aspect of instrumental music making.
• The ultimate goal of teaching intonation skill is to foster skills that enable the accurate placement of every note, so as to never be out-of-tune. The internal instrument is the only way to properly place a note prior to its performance.
• Intonation is ultimately the responsibility of the student musicians. The teaching of the skills to enable the musicians to be responsible for intonation is ultimately the responsibility of the educator.
• Western musical art traditions and practices require us to adhere to principles of just intonation in instrumental performance. In other words, performing with accurate intonation is not “optional.”
• Tone quality plays a critical role in intonation/tuning and, therefore, needs to be an aspect of music making that is continually reinforced.
• 95% (+) of intonation skill is concentration. There is a correlation between an ensemble’s ability to concentrate and its consistency / success with intonation concepts.
• The sense of tonality (and therefore intonation skill) is in the musician – not in the instrument.

RESOURCES


Nurturing Rhythmic Competency and Independence in Students

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I believe that lack of independence in this area - in particular, the ability for a student to know when he/she has performed rhythmic material correctly - is the leading cause for students to quit band/orchestra.

The feeling that we experience when we know that we have done something correctly - without anyone else having to help us or tell us that we were right - is intensely and deeply satisfying, motivating, and sustaining.

FOUR ESSENTIAL PEDAGOGICAL AREAS

1. Pattern Recognition/Memory
Akin to learning a language
Echo sequences - “teaching the sound before the symbol”
Pattern recognition - digital flashcards

2. Kinesthetic Response
Demonstrating a pulse - “tap your feet”
Coordinate fingers/arms, counting system, and pulse - “count-finger-tap”

3. Vocabulary
Know values by name - “what’s what?” and “who’s who?” (rests, too!)

4. Decoding/Translating
Student self-evaluation - “How did you do?” “Was that correct?” “It’s okay if you’re not sure.”
Top Ten List for Teaching Rhythmic Competency and Independence

10. Both rhythmic competency and independence must be a priority in teaching. As such, time must be devoted to this aspect of music making on a regular and sustained basis, and both must be assessed and evaluated to ensure individual student understanding.

9. “Teach the sound before the symbol.” This requires that you are aware of what skills your students have now, and what rhythmic skills they need in the future, and in what order they need to be taught.

8. The ability for a student to create a wide variety of rhythmic sounds in relation to a steady pulse is essential to rhythmic independence.

7. Insist on foot tapping always from your student. It is the only way that a teacher knows whether a student is creating sounds in relation to a steady pulse.

6. The ability for a student to accurately perform rhythmic sounds on the “up” count of a foot tap is critical to rhythmic competence and independence.

5. Count rhythms aloud regularly so as to keep the tool of counting sharp in students. Ensure that the way a student counts a rhythm and the way s/he plays it sound the same in the air. A “middle step” of using a neutral syllable between counting aloud and playing can sometimes be helpful.

4. In counting cut-time measures, consider teaching that cut-time is primarily a different way of tapping the foot (e.g. counts 1 and 3 are “down foot taps” and counts 2 and 4 are “up foot taps”).

3. When having the ensemble perform a new or unfamiliar rhythmic figure, the first time the ensemble performs it is the most revealing and true indicator of understanding. After the first performance, the phenomenon of “following” is in play dramatically.

2. Avoid rote teaching (e.g. singing it to the ensemble) in the context of repertoire rehearsal. Turn the question “How does it go?” back on the inquiring student.

1. A teacher must know his/her students. How do the students look/act/perform when they are fully engaged? partly engaged? tired? bored? hyper?

RESOURCES


PHILOSOPHICAL QUESTIONS TO CONSIDER

What kind of rehearsal environment do you want to create/nurture?

How important that your students become musically independent?
How often do you allow them to demonstrate this to you?

What drives your repertoire selection process?

What percentage of all the components of a composition should be successfully navigable when your ensemble sight-reads the work to indicate a ‘good fit’?

What are the signals that indicate your students are engaged? bored?

When rehearsing repertoire, for what reasons do you typically stop the musicians?
• Is there a relationship between your most sensitive ‘ear’ and the reasons you typically stop?
• Are the issues for which you stop solely your responsibility?
• How might you shift the responsibility for those issues to the musicians?
• In relation to these issues, have you nurtured the musicians to be proactive or reactive?

Is your ‘primary’ approach to rehearsal of repertoire like using Miracle-Gro® or Roundup®?

When you ask your students to mark parts, what are you typically asking them to mark?

What are the aspects of the music that your students are responsible for?
How do you hold them to that?

How often do you find yourself asking the students to “watch” rather than “listen?”
Trumpet Warm-Up Routine

1. Neck and Shoulder Rolls
Take 15 seconds to release tension in your neck and shoulders by rolling them gently in both directions. Remember to allow your mouth to open when your rolling your neck back.

2 Breathing Exercises
a. Full capacity - Take 3 full capacity inhalations/exhalations.
b. Breathing Gym Exercise - At approximately 60 bpm, perform the Breathing Gym exercise, "In 4, Out 4" with hand. If time allows, proceed to "In 3, Out 4," "In 2, Out 4," and "In 1, Out 4."

3. Mouthpiece Buzzing (60 bpm)

4. Long Tones on Instrument (60 bpm)

5. Lip Slurs (60 bpm)
Trumpet Warm-Up Routine

If time permits, continue lip slurs (ascending and descending) on open partials and through the valve series.

6. Articulation Studies

If time permits, continue different articulation patterns and different major and minor scales.
Warmup Exercises

C Instruments - Treble Clef

"F concert scale descending"

"F concert chromatic scale"

"F concert stretch"

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
C Instruments - Bass Clef  Warmup Exercises

"F concert scale descending"

"F concert chromatic scale"

"F stretch"
"F concert scale descending"

"F concert chromatic scale"

"F concert stretch"
E-flat Instruments

Warmup Exercises

"F concert scale descending"

"F concert chromatic scale"

"F concert stretch"
F Instruments

Warmup Exercises

"F concert scale descending"

"F concert chromatic scale"

"F concert stretch"

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BACH and BEFORE for BAND
by David Newell

STUDENT BOOKS

Each of the 19 individual chorales included in Bach and Before for Band is presented in the student books on two facing pages. On the left-hand page is printed a Soprano, Alto, Tenor, and Bass part. All four parts fall within the playable range of each particular instrument. The top right-hand page contains the solo part (soprano part from the left-hand page) along with the complete four-part piano score. This gives students the opportunity to follow the score as the individual parts are played during the band rehearsal. The bottom right-hand page includes a specially arranged duet part to be used when performing the chorale as a duet. This duet part is a combination of the alto, tenor, and bass parts and does not change the harmonization of the chorale.

CHORALE NO. 2

Solo with Piano Score

Duet Part
Combine this part with the soprano part when performing the chorale as a duet.
Symphonic Band
Pitch Bending Assignment

The ability to intentionally manipulate any sounded musical tone is foundational to refined musical ensemble playing in the Western Art Music tradition. The tenets of Just Intonation require the manipulation of individual musical tones in order to achieve the “pure” or “beatless” sonorities that are the hallmarks of this particular tuning system. On the ensuing page is a chart that details twenty commonly encountered chords and how far sharp or flat (in “cents”) individual members of must be altered to achieve these “pure” sonorities. As you will no doubt glean from study of the chart, without the ability to lower or raise any given musical tone, a musician lacks the ability to accurately play chords of any type “in tune” according to the tenets of Just Intonation.

Not only do mature musicians continually manipulate the notes they play in an ensemble setting, they actually anticipate the placement of the notes prior to their sounding. Therefore, the ability to play consistently “in tune” actually requires two separate and related skills – one of production (pitch production and manipulation) and another of perception (a refined sense of musical tonality and “inner hearing”).

This particular exercise is focused on production skill. To aid in the development in this important skill, the following exercise will be mastered by all winds within the Symphonic Band.

1. Using a tuner, tune your instrument as you normally do, making any necessary adjustments to your tuning slide, barrel, head joint, etc. This is the only physical tuning adjustment you are to make to your instrument during the exercise.
2. On a note of your choosing, play the note “in tune” (e.g. “0” on the tuner). Without stopping the sound, gradually manipulate the tone to “25 cents” flat. Hold the pitch there momentarily, and then manipulate it back to “0”. The entire trial (0 to -25 to 0) is to happen in one breath.
3. Repeat the process, except this time manipulating the same tone to “15 cents” sharp, holding it momentarily, and then returning to “0”. Again, the entire trial (0 to +15 to 0) is to happen in one breath.

Note: While some adjustments for pitch can be made with alternate fingerings/positions, pitch manipulation for this exercise is to be made with the embouchure. Trombonists are to execute this exercise without altering the slide position.

The goals of the exercise are several-fold:
- **TONAL FLEXIBILITY** - As the attached chart indicates, it is essential to have the ability to manipulate a musical tone at least as far as 25 cents flat and 15 cents sharp.
- **CONTROL** - Rather than thinking of the numbers (-25 and +15) as being most important in each trial, the control of the movement of the pitch is actually just as important. Strive for steady and intentional control of the tuner needle as you manipulate the note.
- **TONAL CONSISTENCY** - As individual tones are manipulated flat and sharp, the quality of the musical tone must remain rich and mature. Focus your energies on performing an entire trial with no change in the quality of musical tone on your instrument. While somewhat counterintuitive, manipulating pitch in the flat direction most often requires an increase in airflow.

If you are having difficulty with this assignment, contact your section leader who will be more than pleased to assist you in refining this essential skill.
Chords of Just Intonation

All chords are based on the root "C" which is "0" pitch