

# Unit 02: Technique and Intonation in the String Ensemble

Content Area: **Music**  
Course(s):  
Time Period:  
Length: **Ongoing**  
Status: **Published**

## Brief Summary of Unit - Revised June 2021

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The Technique and Intonation Unit will focus on the use of left-hand string instrument skills and their application toward musical expression. Students will interpret musical passages in order to infer and construct appropriate left-hand technique. Other concepts include key signatures, major and minor interval patterns, identifying and executing finger patterns, ensemble intonation, aural skills, pitch identification, and harmony. When appropriate, students will begin developing extended left hand techniques, including extensions, shifting, and vibrato. The development of left-hand skills will enhance the student's ability to analyze musical passages, identify musical patterns and differences, and respond to the ensemble performance with greater awareness of the music's aesthetic qualities.

## Standards

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ELD standards: <https://docs.google.com/document/d/1wdmsiGOdCHlrjU-WPvAtENnEgi0EStZXo0uiFYv1Nu4/edit>

The identified standards reflect a developmental progression across grades/ levels and make interdisciplinary connections across content areas including social sciences, technology, career readiness, cultural awareness and global citizenship. The standards that follow are relevant to this course in addition to the associated content-based standards listed below.

MU.9-12.1.3C.12prof.Pr5a	Develop strategies to address expressive challenges in a varied repertoire of music, and evaluate their success using feedback from ensemble peers and other sources to refine performances.
MU.9-12.1.3C.12prof.Pr6a	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres.
MU.9-12.1.3C.12prof.Pr6b	Demonstrate an understanding of expressive intent by connecting with an audience through prepared and improvised performances.
MU.9-12.1.3E.12acc.Pr6a	Using digital tools and resources, demonstrate technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres.
MU.K-12.1.3C.12int.Pr4a	Select varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.
MU.K-12.1.3C.12int.Pr4b	Demonstrate, using music reading skills (where appropriate), how the setting and formal characteristics of musical works contribute to understanding the context of the music in prepared or improvised performances.
MU.K-12.1.3C.12int.Pr4c	Demonstrate understanding and application of expressive qualities in a varied repertoire

	of music through prepared and improvised performances.
MU.K-12.1.3C.12int.Re7b	Describe how understanding context and the way the elements of music are manipulated inform the response to music.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP11	Use technology to enhance productivity.
SEL.PK-12.1	Self-Awareness
SEL.PK-12.2	Self-Management
SEL.PK-12.3	Social Awareness
SEL.PK-12.4	Responsible Decision-Making
SEL.PK-12.5	Relationship Skills
TECH.8.1.8	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

## Transfer

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- • Analyze the key signature of a musical example to determine the appropriate finger patterns across the range of their instrument
- • Aurally identify half steps and whole steps in simple patterns performed by the teacher and echo those patterns on their own instrument
- • Begin developing extended left hand techniques (extensions, positions, and vibrato )
- • Identify accidentals, hear the correct pitch, and apply the appropriate fingering to improve the ensemble performance
- • Identify half steps and whole steps and transfer this information to the fingerboard to improve individual intonation
- • Infer finger patterns found in an unfamiliar key
- Use a tuner or other tool to tune their instrument

## Essential Questions

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- How do musicians improve the quality of their performance?
- • How do I consider fingerboard options to execute a particular note?
- • How do I interpret an accidental, identify the pitch, and apply the correct fingering?
- • How does changing left-hand position change the fingerings?
- • How does my posture and left hand technique affect my intonation?
- • How does pitch fit into the overall ensemble?
- • How does this key signature affect the finger patterns that I will use on each string?
- • How does vibrato alter a sustained pitch?

- • How is the fingerboard divided up into half steps and whole steps?
- • What criteria do I consider when choosing which option is best to execute a particular note?
- How do aural skills assist with matching pitch and improving intonation?
- How do individuals choose music to experience? How does understanding the structure and context of music inform a response?
- How do performers select repertoire?
- When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?

## Essential Understandings

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- • Accidentals affect finger patterns; lowered notes move towards the scroll, and raised notes move towards the bridge.
- • Developing vibrato must begin with slow practice and increase in speed over time.
- • Intonation of the ensemble can be affected by just one individual.
- • Keys and key signatures correspond with finger patterns that are comprised of half steps and whole steps.
- • Major and minor scales are made up of a series of whole/half-step patterns. These correspond with whole/half step left-hand finger patterns.
- • Major and minor scales are made up of a series of whole/half-step patterns. These correspond with whole/half step left-hand finger patterns.
- • Posture, instrument position, and left hand position affect an individual's intonation.
- • Shifting to a new position will alter fingerings and patterns, even when remaining in the same key.
- • Vibrato is a means of rapidly altering a pitch to create a musical effect.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes. Response to music is informed by analyzing context (i.e., social, cultural, historical) and how creator(s) or performer(s) manipulate the elements of music.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.

## Students Will Know

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- Finger patterns used in keys including up to 3-4 sharps and 2-3 flats appropriate to skill level
- How a pitch may be flattened or sharpened using the left hand
- How to adjust tuning on their instrument
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- How to begin developing vibrato (when appropriate to skill level)
- How to correlate half and whole step patterns in first position and transpose them to other positions.

Students will realize the pitch collection in 1st position and infer an appropriate fingering in the new position.

- How to identify and demonstrate proper posture, instrument position, and left hand position on their instrument
- How to identify the accidentals corresponding with key signatures and how these affect the understanding of pitch
- How to interpret accidentals in notation and execute appropriately on their instrument
- Level 1 (approximately the 6th grade year):
  - How to identify and demonstrate proper posture, instrument position, and left hand position on their instrument
  - Key signatures including up to 4 sharps and up to 3 flats
  - Finger patterns in keys including 2-3 sharps and 1-2 flats (appropriate to skill level)
  - How to “read” the fingerboard map
  - How to interpret accidentals in notation and execute appropriately on their instrument
- Level 2 (approximately the 7th grade year):
  - Finger patterns used in keys including up to 3-4 sharps and 2-3 flats (appropriate to skill level)
  - How to identify the accidentals corresponding with key signatures and how these affect the understanding of pitch
  - The left hand can move to new positions by sliding the hand in a relaxed manner towards the bridge or away from it on any string.
  - How to identify new positions that correspond with existing finger tapes
- Level 3 (approximately the 8th grade year):
  - How to expand the octave range of familiar scales
  - How to correlate half and whole step patterns in first position and transpose them to other positions. Students will realize the pitch collection in 1st position and infer an appropriate fingering in the new position.
  - How to execute proper vibrato motion at a slow speed, increasing speed incrementally when ready
  - Vibrato has two variables: speed and width.

## **Students Will Be Skilled At**

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- Echoing simple pitch patterns performed by the teacher while developing intonation accuracy
- Finding and identifying accidentals in musical examples
- Interpreting a flat or sharp in notation and applying the correct fingering
- Interpreting and assessing a notated pitch in order to apply an appropriate fingering
- Interpreting and assessing when to perform an open string vs. applying a 4th finger to execute a passage accurately and musically (including slurs).
- Level 1 (approximately the 6th grade year):
  - Performing with correct instrument position, left hand shape, and proper posture
  - Relating common key signatures to the scale and finger patterns (C Major, G Major, D Major, and F Major)
  - Performing finger patterns found in Level 1 key signatures in daily warm-ups, exercises, and concert music while developing accuracy
  - Echoing simple pitch patterns performed by the teacher while developing intonation accuracy
  - Finding and identifying accidentals in musical examples
  - Interpreting and assessing when to perform an open string vs. applying a 4th finger to execute a passage accurately and musically (including slurs). (Violin/viola only).
- Level 2 (approximately the 7th grade year):
  - Relating key signatures to the scale and finger patterns found in Level 1 keys plus A Major and B-flat Major
  - Performing finger patterns in Level 2 key signatures in daily warm-ups, exercises, and concert music while developing accuracy
  - Interpreting a flat or sharp in notation and applying the correct fingering
- Level 3 (approximately the 8th grade year):
  - Relating key signatures to the scale and finger patterns found in Level 2 keys plus E Major and E-flat Major
  - Performing finger patterns in Level 3 key signatures in daily warm-ups, exercises, and concert music while developing accuracy
  - Performing Level 1 scales in two octaves as appropriate according to instrument
  - Interpreting and assessing a notated pitch in order to apply an appropriate fingering and/or shift
  - Executing a slow and controlled vibrato motion
  - Sliding the left hand to new positions and identifying the notes in that position
- Locating unfamiliar pitches on a fingerboard map and transferring that information to their instrument

- Performing finger patterns in common key signatures found in daily warm-ups, exercises, and concert music while developing accuracy
- Performing with correct instrument position, left hand shape, and proper posture
- Relating common key signatures to the scale and finger patterns

## Evidence/Performance Tasks

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- • “Road Maps” of new performance repertoire
- • Class discussions initiated by the teacher
- • Daily participation in warm-ups, exercises, and performance-based activities
- • Echoing patterns given by the teacher
- • Ensemble performances
- • Individual playing tests
- • Locating and notating notes on a “fingerboard map” to visualize new keys and positions
- • Rote vibrato exercises (when appropriate for skill level)
- • Shifting exercises in method books (when appropriate for skill level)

## Learning Plan

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- • Analyze and perform method book exercises that introduce and reinforce left hand skills.
- • Analyze and perform method book exercises that introduce and reinforce shifting to new positions.
- • Apply alternate fingerings for a musical phrase (e.g. using 4th finger, changes of position, etc.).
- • Apply finger patterns to a new scale.
- • Create visual representations of finger patterns for new scales on a “fingerboard map.”
- • Echo “vibrato wiggles” from the teacher in various rhythms. Incrementally increase the tempo.
- • Echo changes in tonality of a pitch pattern. Can be teacher-led or student-led.
- • Echo patterns from the teacher to reinforce left hand skills and intonation.
- • Echo slides from first position to a new position.
- • Echo slides from first position to the harmonic on each string.
- • Intonation drills performed against a drone note to improve pitch sensitivity and articulation
- • Listen and critique recordings focusing on intonation and left hand technique.
- • Perform and critique the effects of changing finger placement (going in and out of tune).
- • Perform and critique the effects of vibrato.
- • Perform exercises to reinforce proper left hand position and technique.
- • Perform scales in harmony to improve intonation.
- • Perform scales in one to two octaves as appropriate covering key signatures up to 4 sharps and up to 3 flats.
- • Play in new positions using an open string drone.
- • Students “pair and share” to discuss approaches to left hand fingering and technique in a musical

excerpt.

- • Tonality exercise: Alter a pitch pattern from major to minor (and vice versa).
- • Tuning exercises with a tuner, with open strings, and with use of a drone.
- • Utilize kinesthetic exercises to build foundational left hand technique with the instrument and away from the instrument (e.g. unfamiliar finger patterns, extended finger patterns, finger independence, shifting, vibrato).

## **Materials**

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The materials used in this course allow for integration of a variety of instructional, supplemental, and intervention materials that support student learners at all levels in the school and home environments. Associated web content and media sources are infused into the unit as applicable and available

- Method books and concert music repertoire
- Instrument supplies (tuners, metronome, rosin, cello straps, shoulder rests, strings, music stands)
- Technology resources (computer, recording devices)

## **Suggested Strategies for Modifications**

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This link includes content specific accommodations and modifications for all populations:

### [Performing Arts Accommodations & Modifications](#)

- • Musical parts can be modified as appropriate.
- • Students will be encouraged to move ahead in levels as their skills increase.
- • Students will be paired with partners for support and interaction.
- • Students will be provided notes describing the elements of Technique and Intonation.
- • Students will receive preferential seating.
- • Tempi can be slowed or accelerated as appropriate.
- • Visual aids will be used.