

Solfege:
The Key to Successful Musicianship
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Music Literacy Tenets

The use of tonic solfa (do-based major, la-based minor) is an effective way to improve music literacy skills without extensive theoretical understanding.

The music literacy method used in this workshop is based on native language acquisition and reflects common approaches to music education in the United States, including the Kodály approach, Music Learning Theory (Edwin Gordon), and Conversational Solfege (John Feierabend). It also based on the teaching principle of **sound before sight** promoted by Pestalozzi and Lowell Mason.

Students who are **musically literate** are able to **hear, perform, improvise, read** music notation, and **write** (take dictation, compose) music with understanding (e.g., awareness of harmonic function, melodic content, rhythm, meter, form, expression/style, texture, context and technical skill). It is assumed that being musically literate also includes familiarity with musical styles and literature. **Solfege can easily be integrated into teaching folk and classical music.** As music teachers, we want to help students become as musically literate and independent as possible.

Audiation (the ability to hear music that is not physically present) is the foundational skill of music literacy skill development and therefore should be nurtured at all times.

What is the typical process for how we learned our native language?

1. We heard, understood and spoke lots of words and sentences before we learned the alphabet or how to read.
2. We continually developed our vocabulary and common language usage before we learned to read and were instructed in grammar.
3. We learned to read after we learned to speak and converse.
4. We learned how to write words and original stories before we were instructed in grammar.

Implications for Music Literacy Instruction

1. Approach each tonality and meter as language that includes syntax and common usage. Teach students to hear/use the language before teaching, writing or rules. Delay teaching music theory until it is needed
2. Teach music in 3-5 note patterns (like words or sentences) rather than teaching individual note names and values.

Solfege and Tonality

Each mode/tonality has a different resting tone/tonic.

d	r	m	f	s	l	t	d	(Ionian/major)
	r	m	f	s	l	t	d	(Dorian)
		m	f	s	l	t	d	(Phrygian)
			f	s	l	t	d	(Lydian)
				s	l	t	d	(Mixolydian)
					l	t	d	(Aeolian/minor)
						t	d	(Locrian)

Minor Tonalties and Solfege

Natural Minor Scale: l t d r m f s l¹ s f m r d t l

Harmonic Minor Scale: l t d r m f si l¹ si f m r d t l

Melodic Minor Scale: l t d r m fi si l¹ s f m r d t l

Comparative Modes

The **Mixolydian Scale** (s l t d r m f s¹ f m r d t l s) can also use a comparative major scale (d r m f s l t e d¹ t e l s f m r d - major scale with a lowered 7th). Do or so can be used as the tonic for Mixolydian.

The **Dorian Scale** (r m f s l t d r¹ d t l s f m r) can also use a comparative minor scale (l t d r m fi s l – minor scale with a lowered 6th). La or Re can be used as the tonic for Mixolydian.

Major Patterns for Memorization

1. d r m f s l t d¹ t l s f m r d (scale)
2. dm rf ms fl st ld¹ tr¹ d¹ ts lf sm fr md rt₁ d (thirds)
3. d d **r** d d r **m** r d d r m **f** m r d d r m f s f m r d d r m f s l s f m r d d r m f s l t l s f m r d d r m f s l s f m r d d r m f s f m r d d r m **f** m r d d r **m** r d d **r** d d (climbing scale)
4. d r d d m d d f d d s d d l d d t d d d¹ d (ascending diatonic intervals)
5. d¹ t d¹ d¹ l d¹ d¹ s d¹ d¹ f d¹ d¹ m d¹ d¹ r d¹ d¹ d d¹ (descending diatonic intervals)
6. dr m rm f m fs l slt ltd¹ td¹ r d¹ t l s lsf sm fmr mrd rdt₁ d (stepwise sequence)
7. dmsm rflf msts fld¹ str¹ t ldm¹ d trf¹ r¹ d¹ (ascending triad arpeggios)
8. d¹ lfl tsms lfrf smdm frt₁ r mdl₁ d rt₁ s₁ t₁ d (descending triad arpeggios)
9. d m s m f l d¹ l s t r¹ t d (primary triad arpeggios)
10. d m s m s d¹ s d¹ m¹ m¹ d¹ s d₁ s m s m d m d s₁ d (tonic arpeggios)

Major Patterns for Drilling

11. d m s s t r^l d^l s m s r t_l d s m t^l s r d s_l m d (I - V patterns)

12. dms sfrt_l rsf msd dsm rst_l ds_ld dmds_l t_lrfs dsmd^l (I V⁷ patterns)

13. dms sfr t_lrs msd dfl lfd sdm rt_lsf dsd (I IV V⁷ patterns)

14. d f s d d f_l s_l d d s d d s_l d d m_l f_l s_l d (bass progressions)

15. d s_l f_l s_l d d l_l f_l s_l d d f_l l_l s_l d d t_l s_l t_l d d t_l f_l s_l d (more bass progressions)

16. d m s d s t r^l f^l m^l d^l s m s f r t_l d m s d^l d (I - V⁷ arpeggios)

Primary Triad Progression

S	d ^l	t	d ^l	s	l	t	d ^l
A	m	r	s	m	f	f	m
T	s	f	m	d ^l	d ^l	r ^l	s
B	d	s _l	d	d	f	s	d
	I	V⁷	I	I	IV	V⁷	I

Altered Tones

1. d di r ri m f fi s si l li t d^l t te l le s se f m me r ra d (chromatic scale)
2. d di r ri m me r ra d (partial chromatic scale)
3. d r m f fi s; d m fi s d fi s (fi)
4. d^l fi s (fi - modulating to the dominant)
5. d m s d^l t te d te (te)
6. d m s te l f (te- modulating to the subdominant)
7. d m s d m si d m l d m te (major, augmented, minor, I⁷)

Major Songs and Themes for Decoding, Memorizing, and Harmonizing

drm - Hot Cross Buns, Closet Key, (Shortnin' Bread)

sml - Nanny Nanny Boo Boo; A Tisket A Tasket; Star Light, Star Bright; Lucy Locket

drmf - Oh How Lovely is the Evening; Bacarole

drmfsl - Twinkle, Twinkle

Mostly Stepwise

Mary Had a Little Lamb, My Country 'Tis of Thee, Joyful, Joyful, Goin' Home, Lean on Me (m - t₁),
Go Tell Aunt Rhody, Frere Jacques, Joy to the World (d-s; d-d¹)

French Canon: d d r m d r t₁ d m m f s m f r m s s s s l s f s f m m m m m f m r s d

I-IV-V Melody: drmd t₁dr t₁ drmd l₁df fdl₁f mrds₁ rdt₁ d

Triadic Movement/Arpeggios

Happy Birthday, Star Spangled Banner, Taps; Rocky Mountain; You re a Grand Old Flag

fi; V/V Secondary Dominant

The Simpsons, Haydn: Theme from Surprise Symphony, Now is the Month of Maying,
Star Spangled Banner

do Pentatonic (with d¹) – Shortnin' Bread

Scale - Joy to the World; Can Can

si - Modulation to vi: Take me Out to the Ballgame

le - Jeopardy Theme

ri - You Are My Sunshine; Down by the Riverside

Minor

Minor Patterns for Memorization (memorize, sing in canon)

1. l t d r m f s l¹ s f m r d t l (natural minor)
2. l t d r m f si l¹ si f m r d t l (harmonic minor)
3. l t d r m fi si l¹ s f m r d t l (melodic minor)
4. l d t r d m r f m si f l¹ si t¹ l¹ f si m f r m d r t d l t si₁ l (harmonic thirds)
5. l t d t d r d r m r m f m f si f si l si l t¹ l si f si f m f m r m r d r d t d t l t l si₁ l (stepwise seq.-hm)

Progressions

S	l	si	l	l	l	si	l
A	m	r	d	m	f	r	d
T	d	t ₁	d	d	r	t ₁	d
B	l	m ₁	l	l	r ₁	m ₁	l
	i	V⁷	i	i	iv	V⁷	I

Melodies for Decoding, Memorizing, and Harmonizing

Hashivenu: l t d r d t l t d r d t l t d r d r m d l m m f m l¹ f m l¹ t¹ l¹ t¹ d¹ d¹ l¹ d¹ t¹ l¹ l¹ d¹ t¹ l¹ m l¹

Joshua Fit the Battle

Hey, Ho Nobody Home

Ghost of Tom

Shalom, My Friends

Ah, Poor Bird

Planning Music Literacy Instruction

1. Consider big picture goals (learning, experiences, literature) and context (students, frequency, purpose).
2. Develop a music literacy instructional plan and sequence for teaching tonal and rhythm content by creating your own sequence or follow what is in a book (see examples). This includes melodies, tonalities, meters, key signatures and time signatures.
3. Consider performance literature. For any music that we expect students to read, perform a tonal and rhythmic analysis of music to identify
 - a. What tonal and rhythmic content has been taught (familiar),
 - b. Challenging patterns that need to be taught be rote, and
 - c. What else can be taught through the music.
4. Develop materials (recordings, song list, pattern cards) as needed for teaching tonal and rhythmic patterns
5. Use the music literacy instructional process for each unfamiliar (new) rhythm and tonal pattern.
6. Introduce note names, key signatures, and theory after students are able to hear, read and write with the pattern.

Music Literacy Instructional Process

I. Hear, Sing, and Improvise (ears)

1. Rote - Provide opportunities for students to hear, echo, and memorize specific content, using syllable names (**bond sound with syllables**)
2. Decode - See if students can recognize the content in familiar and unfamiliar contexts (**hear in solfege**)
3. Create - improvise with content (**re-arrange, invent**)

II. Read (eyes)

4. Rote - bond sound with symbol (**see and practice familiar patterns using staff notation**)
5. Decode - perform patterns and melodies (**hear and perform content in a different contexts**)

III. Write (hand)

6. Rote - copy notation (**rote-reading**)
7. Decode - have students **take dictation** using content
8. Create - **compose** music using content

Directions for Application

1. Students who cannot sing in tune or with a sense of beat/meter should focus on these skills as they are prerequisite skills for literacy instruction.
2. Do not skip steps. If most students cannot aurally decode with accuracy, do not move on but go back to more rote teaching (bonding sound with syllable).
3. Differentiate instruction at each level as needed.
4. Promote audiation at every level.
5. Promote vocal technique and expression at all times.
6. Use hand signs and stick notation (d r m) as needed for developing the ear (pre-notational).
7. Students need the opportunity to hear themselves sing and play alone. Help students develop confidence to sing alone.
8. After competency is developed in one key, develop competency in other key signatures.
9. Sing pattern in comfortable keys rather than what is dictated by the key signature.
10. Modify the solfege to match the resting tone rather than what is specified by the key signature.
11. Students need the opportunity to hear themselves sing and play alone. Help students develop confidence to sing alone.

Teaching Techniques

Aural Rote (echo, imitate)

- Stick notation for patterns (middle school)
- Handsigns

Aural Decode (individual assessment) - Familiar and Unfamiliar

- Relay games
- Name that tune (in solfege); Mystery Melodies written in stick notation
- Have students decode the syllables for familiar songs and rhymes for extra credit

Aural Create (original patterns)

- Call and response (different pattern that ends on tonic)
- Jam session (class performs ostinato or chord progression (cadences, blues); individuals take solos (chose from posted patterns or create their own)
- Jeopardy (create and perform a pattern that begins and ends on...)
- Human piano (have students play the piano to build chords)
- Teach type of embellishment (keep rhythm the same, change the melody; add passing tones to get to chord tones; change dynamics or articulation; add rests)

Reading Rote (bonding sound with symbol)

- Display and point to pitches/rhythms as you sing them (switch keys regularly); students echo

Reading Decode (reading; sight reading) Familiar and Unfamiliar

- Mystery melodies from traditional notation (pitch and rhythm separate and then together)
- Sing melodies from tone set on the board (teacher points)
- Rhythm Bingo (cover performed pattern)
- Sight Reading Hall of Fame
- Belts (Levels)
- Pattern cards cover a wall, each identified with a letter and number (ID performed pattern)
- Applications to song literature

Writing Rote (copying)

- Copy the measures as it is performed

Writing Decode (dictation) Familiar and Unfamiliar

- Write down performed pattern (stick or staff)
- Prepared worksheet (finish the phrase)
- Individual whiteboards
- Teach short hand and process for taking dictation

Writing Create (Composition)

- Finish the phrase
- Compose using specified tonal and or rhythm patterns

Additional Audiation Techniques

- Echo game but sing only the pattern of the day
- T sings everything but last note; S sing the ending note

- Leave out rhythms or notes of the scale (inside and outside)
- Sing all warm-ups on solfege first
- Echo in canon (listening while singing or chanting)
- Establish tonality before singing
- Keep an external beat when performing (reinforce hearing the microbeat)
- Play only tonic when children are singing (no accompaniment)
- Practice finding and listening for the tonic of any activity
- Pitch memory (find A or Do)
- Everyone learn melody first of songs with multiple parts
- Learn to hear root melodies and common harmony parts
- Show pattern and remove it before they perform it
- Reinforce the skill of being able to decode and memorize (or write down) a melody/phrase they recognized in solfege or rhythm syllables
- “Show me the hand-sign for do every time you hear it.”
- “Show me the hand-sign for the chord that your hear.”
- “What would this pattern be if we were counting on numbers?”
- “What are the letter names for the notes in this tonal pattern?”

Examples of Tonal and Rhythm Sequences

Conversational Solfege Tonal and Rhythmic Sequence – Feierabend

Unit 1: Duple: paired eights with quarter (patterns)

Unit 2: Triple: triplet with dotted quarter

Unit 3: Triple: quarter with eighth

Unit 4: Major: d r m (F)

Unit 5: Major: d r m s (F, G) **melodies**

Unit 6: Duple: quarter and rest (F, G)

Unit 7: Duple: half note

Unit 8: Triple: dotted quarter, dotted rest

Unit 9: Triple: dotted half

Unit 10: Major: d r m s l (F, G) **in duple and triple**

Unit 11: d r m f s (F, G)

Unit 12: d r m f s l (D)

Unit 13: Triple: eighth with quarter

Unit 14: Major: s₁ d r m f s l (F, G)

Unit 15: Duple and triple: pick up notes and eighth rests in major (F, G, D)

Unit 16: Duple and triple: eighth rests in major (F, G, D)

Tonal Content Considerations

1. Additive tone sets that eventually make up a scale
2. Scales and cadences*
3. Stepwise movement* (drm rmf;
4. Stepwise intervals* (d drd, drmr) ascending and descending
5. Above and below a note (drdt, d rmrdr)
6. Intervals (d r d m d f; d¹ t d¹ l; l t l d)
7. Skips - Thirds* (d m r f)
8. Triads (d m s m r f l f)*
9. Primary triad with inversions**
10. Below do steps
11. Below do skips

12. Root melody cadences (d s₁ d; f₁ s₁ d; d l₁ f₁ s₁ d)
13. Modulations (d f₁ s; d r d₁ r; d t₁ l f; d t₁ d r m m l)
14. Accidentals (m r₁ m)
15. Chromatic movement and scales (d d₁ r r₁ m m e r r a do)

Advanced Aural Skills

1. Singing patterns and/or intervals from a given pitch.
2. Singing triads/cadences from a given pitch.
3. Whole Tone Scale d r m f₁ s₁ t₁ d₁
4. Hearing, reading, and creating with chords beyond basic triads in major, minor, and other modes.

Teaching Handsigns

1. When teaching handsigns, always encourage audiation.
2. Do not let the handsigns get in the way of performing memorized patterns.
 - a. Simplify when necessary (e.g., only sign the first pitch of a pattern).
 - b. Encourage students to sign the syllables that come easily. Students should not stop to think of the handsign.
 - c. Identify the difficult changes and drill at a slow tempo). Practice the more difficult movements (e.g., s l, l f, l f r) at a slower tempo and with lots of repetition.
3. Handsigns should reflect musical expression (articulation) and may reinforce vocal concepts.
4. Watch and provide feedback so that handsigns are not learned incorrectly.
5. Provide incentives for learning and using handsigns.

Handsign Teaching Strategies

Do looks like a fist (teach high and low)
 Re slides down to do.
 Ti points up to do
 So looks like a wall.
 Mi is flat like the ground.
 La looks like a cave.
 Fa is stinky (boo, thumbs down).

Part-Singing Skill Sequence

1. UNISON
2. ECHO SONGS
3. CALL AND RESPONSE
4. OSTINATI
5. PARTNER SONGS
6. ROUNDS, CANONS
7. ROOT MELODIES
8. VOCAL CHORDING
9. PARALLEL HARMONIES (3RDS)
10. DIATONIC DISSONANCES
11. BASS CLEF; SHARED STAFF

OTHER CONSIDERATIONS

- Part singing vs. unison singing
- Connection to real literature, text, diction
- Reading with expression

Promoting Good Intonation

1. Vocal

- Audiation (hearing in harmonic context)
 - Uniform vowel formation
 - Constant self-monitoring and adjusting
 - Ability to hear ones self
2. In addition, intonation for choral singing requires
 - a) Hearing and tuning in relationship to another part (root/bass)

Strategies to Promote Creativity

1. After students have learned patterns, melodies and can hear chord changes in a tonality develop a variety of activities that allow individual choice. Provide examples of possible choices.
2. Have students change the dynamics, tempo, rhythm patterns, meter, or tonality.
3. Give small groups a set of tonal or rhythm patterns to arrange, audiate/sign, and then perform for the class.
4. Question/answer and call/response activities with parameters (e.g., your answer must end on la or your response can be anything except when you hear s t r, your response has to include d m s). This can be an aural or visual activity.
5. Give students paper or cardboard keyboards. Allow students to practice decoding and playing stepwise patterns beginning on a designated note. Show the scale on the staff to help show the relationship of the staff to moving resting tones.
6. Have students harmonize (sing, play, write an arrangement) or re-harmonize a given melody.
7. Have students compose a brief (8-bar) melody that begins and end on the resting tone (tonic). You may provide parameters such requiring certain chords, rhythms, or a V I cadence at the end. Provide pre-made tonal or rhythm dictation sheets with bar lines as needed.

Student Practice Strategies

1. Sign, conduct, or sway to the meter when singing patterns or melodies.
2. Practice in small groups. Take turns leading and decoding. Take turns performing a phrase with a mistake and letting your partner identify the mistake.
3. Memorize patterns, phrases, unison and two-part music by ear and from notation.
4. Memorize an entire exercise and notate it without referring to the notation. Look for patterns and form.
5. With two-part exercises: sing one part while clapping or signing the other part.

Secondary Teaching Strategies

1. Make CDs for class and individual use to assist with helping students learn tonal and rhythm patterns.
2. When extracting challenging tonal and rhythm patterns from music (to review aurally), try to not make the pattern longer 2 – 4 beats/notes. Patterns can be longer if you reviewing familiar patterns and you want students to see/hear the pattern in the context of the music. When identifying/creating a list of patterns to rehearse, identify the measure number and the voice part for reference purposes.
3. Circle the challenging tonal and rhythm patterns in your score. Write in the syllables if needed to help you. You may ask your students to do the same in beginning stages but do not let your students become
4. When notating extracted patterns on the board, determine if it is better to first use solfege abbreviations (d r m) and stick notation or go directly to the staff, using the actual key of piece.
5. Solfege is an aural tool not a theoretical tool. If a passage does lend itself to hearing a tonic or chord root, determine how the solfege can serve as a tool for hearing in a harmonic context (different key) or serve as a way to hear the intervals (ex. Series of ascending major thirds could be a series of d m). Don't forget that the piano and chords (anything the students can hear) should be considered in determining how to use the solfege. The singer may hear the music in a different key/way than the actual harmony of the piece.
6. Being able to use the solfege scale to figure out the pitches is a different skill from being fluent or hearing in solfege. Do not confuse the two. Remember to reinforce hearing solfege in context of audiating (tonic or chord root).

7. After sufficient time assess (have students decode) a few low, average and high achieving students to determine if students can audiate and perform the pattern. If they are not successful, return to the rote level of the process.
8. Have patterns posted on a wall/board so that you can better monitor student engagement.
9. When teaching a tonic pattern and the rote-reading level, introduce the concept of line-line-line and space-space-space (visual anchors). This is also a logical point to introduce ledger lines.
10. Integrate selected rhythm patterns and expressive elements when singing scales.
11. Constantly promote analysis and critical thinking.
12. Have students circle every “do” in an exercise.
13. Use a tonic sign on the staff to identify the tonic. Eventually teach students how to determine the tonic from the key signature, cadences, and from accidentals.
14. Teach students to relate and tune to the resting tone and chord root. Periodically have students stop and sing the resting tone. Avoid playing accompaniments, except to occasionally play the resting tone or root melody when needed. The ideal way to learn a skip (ex: d f₁) is by rote and decoding. Finding the note by moving to the note stepwise from the tonic is a more of a quick fix than a long-term solution.
15. When presenting any musical in a notational form (rhythm patterns, solfege abbreviations, staff) have students think it (audiate it as you point to it) and then sing it.
16. If needed, allow students to chant rhythms one time before focusing on the melodic content. Emphasize expression even when reading rhythm.
17. Integrate rhythm patterns into memorized melodies and scale patterns. Have students use handsigns as an indication that they are audiating pitches.
18. Have students tap the beat (external silent tapping), chant rhythms, or conduct as an indication that they are audiating a steady beat and sense of meter.
19. Promote reading with understanding (comprehension) by having students be aware of tonality, chords, meter, and phrasing. Remember, music is not just pitch and rhythm.
20. Develop strategies to promote fluency.
 - a. Encourage students look ahead and memorize when reading music.
 - b. Show a pattern on a flashcard and remove it before the students have finished performing the pattern.
 - c. When reading choral music, have them turn on beat one of the last measure on a page. Gradually increase the length of the memorization.
21. Gradually increase the reading tempo. Do not always perform music at the same tempo.
22. Provide a meaningful incentive for sight reading (e.g., Wall of Fame, Challenge System).

Introducing Letter Names, Theoretical Concepts

1. Choose simple songs (e.g., Hot Cross Buns, Twinkle) that are easily performed in solfege. Sing song with letter names while showing handsigns. Gradually introduce songs with larger tone sets and new keys.
2. Have students sing d r m and then G A B.
3. Students sing patterns while teacher plays it on an instrument.
4. Teach students patterns on instruments (stepwise, thirds, skips). Let them figure out some of the notes by ear.
5. When developmentally appropriate, help students understand intervals through solfege:
Do up to re is major second, Do up to ra is a minor second.

Hand Signs

Flats

b



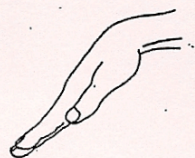
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Music Literacy Development Resources

- Vocal Connections; Whitlock, Ruth; Southern Music
 CD for students to imitate and decode (Gordon tonal sequence w/piano acc.)
 Good vocal model
- Sound Thinking: Music For Sight-Singing and Ear Training Volumes I and II;
 Tacka, Philip and Houlahan, Micheál; Boosey & Hawkes; 1991
 Includes folk songs and classical music themes
(Volume II includes a great section of classical themes)
- The Key to Sight Reading Success Book I (unison)
 Hemmenway, John; Leach, Mary Belle; Wehrung, Mary Nan
 AMC Publications
- The Key to Sight Reading Success Book II (SATB)
- Keys to Sight Reading Success Book III: 125 Moderate Two-Part Exercises – Treble Clef
 Carlisle, Marsha; AMC Publications
- Sight Singing Made Accessible, Readable, and Teachable Volume I
 Eaton, Denise (Texas High School Choral Director)
<http://www.alliancemusic.com/product.cfm?iProductID=816>
 Treble and bass
- Patterns of Sound
 Eilers, Joyce and Crocker, Emily; Jenson
 Good for beginning middle school
- Essential Sight-Singing, Volume I Mixed Voices (Male, Treble also available)
 Crocker, Emily and Leavitt, John; Hal Leonard, 2005 (has CD)
- The Folk Song Sight Singing Series, Books I - IX
 Crowe, Edgar; Lawton, Annie; Whittaker, W. Giles
 Oxford University Press, 1933
 Keys not sequenced; great for European folk tunes
- Songs for Sight Reading, Volumes I and II (SATB literature)
 Henry, Mary and Jones, Marilyn; Southern Music
- Music Literacy for Singers
 Patti Dewitt
- Developing Musicianship Through Improvisation
 Azzara, Christopher and Grunow, Richard
<http://www.giamusic.com/products/P-6819.cfm>