

The ABCs of MLT (Music Learning Theory)

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What is MLT?

- NOT a method!
- Theory about how we learn music, developed by Edwin E. Gordon
- Can be applied to any level or setting
- The primary goal of MLT is to enhance musical understanding and skill (for ALL individuals) through the development of audiation.
- Core Ideas of MLT:
 - 1) Music Aptitude
 - 2) Audiation
 - 3) Sequential Learning

Music Aptitude

- vs. Achievement
- Normally distributed
- Multiple dimensions
- Innate AND influenced by environment
- Helps us individualize instruction so ALL students can be successful!

MLT is a way of explaining how we learn music and develop audiation—"the sense of music that tells [us] when to sing what" (in Bluestine, p.11).

Audiation...

- means the hearing and comprehension of music in the mind.
- involves a sense of tonal/rhythm syntax.
- is the ability to think *in* music.
- involves prediction.

A Few Practical Ways to Help Develop Audiation:

- Resting tone: model, sing, play, find!
- Basic harmony:
 - resting tone drone/ostinato
 - chord roots ("bum" then solfege), later chord tones in 3 parts
- Macrobeat/microbeat: move/chant, separately then simultaneously

Importance of Sequential Learning

Language/Music Learning = Parallel Processes!

Five Language (& Music) Vocabularies:

1. Listening
2. Speaking (Singing/Chanting/Moving/Playing by ear)
3. Thinking/Conversing (Audiating/Improvising)
4. Reading
5. Writing

Helping Students Develop Musical Listening Vocabulary

- Model & move: Sing and chant *for* your students, not *with* your students!
- Songs and chants without words
- Variety of tonalities and meters
 - We learn what something *is* by learning what it is *not*!
- Do LOTS of flow movement. This helps students feel the space between the beats.
- Help students develop a sense of “home” by singing 5-1 at the end of songs, leaving out the last note periodically, and singing directions on the resting tone.

- *Amy* (ES&C #45)- slow flow vs. bouncy beat with body parts, buzz on resting tone

Amy

Edwin E. Gordon



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- *Harvest* (ES&C #29)- pretend to stir soup with flow

Harvest

Edwin E. Gordon



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- *Jumping* (MP p.68)- pretend to paint with flow then dots, jump on 5-1, “audiate”

Jumping

Edwin E. Gordon



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Helping Students Develop Musical “Speaking” Vocabulary

- Sense of context! (resting tone, macro/microbeat)
- Whole-Part-Whole
 - 1) Experiencing the “whole” (songs/chants/recordings)
 - 2) Studying the “parts” (tonal patterns, rhythm patterns, resting tone, macro/microbeat, labeling tonality/meter/function)
 - 3) Returning to the “whole” with greater understanding
- Patterns = words (We don’t audiate isolated pitches or durations but tonal patterns and rhythm patterns.)
 - Tonal and rhythm separately
- Individual response = audiation
- Neutral syllable first, then solfege.

- *Hippopotamus* (Beth Bolton)- cooperband to macro/micro, echo patterns (neut. syll.)

Hippopotamus

Beth Bolton



I'm a hip-po - pot - a - mus liv - ing hap - pi - ly on a great big lake.

I'm a hip - po - pot - a - mus on the bot - tom - us of a lake.

All the oth - ers in the jun - gle can - not beat sum - mre - hear. D.C. al Fine

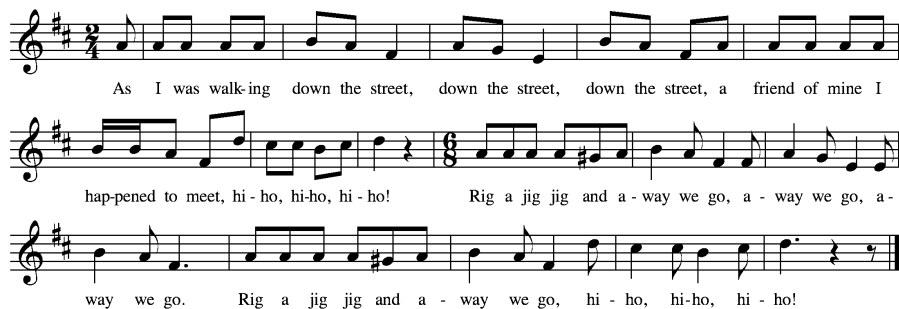
I'm so glad I'm in the wat - er, ver - y cool, in my pool.

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- *Rig a Jig Jig* - echo tonal patt.(solf.), sing r.t. (solf.), label tonality, label patt. function; - macro/micro+syll., echo rhy. patterns (syll.), label meter

Rig a Jig Jig

Traditional



As I was walk-ing down the street, down the street, down the street, a friend of mine I

hap-pened to meet, hi - ho, hi-ho, hi - ho! Rig a jig jig and a - way we go, a - way we go, a -

way we go. Rig a jig jig and a - way we go, hi - ho, hi-ho, hi - ho!

Helping Students Develop Musical “Thinking/Conversing” Vocabulary

- Improvise!
- Simple (patterns) → Complex (melodies)
 - Rhythmic Improv.
 - Tonal Improv.
 - Melodic Improv.
 - Question & Answer phrases
 - “Singing conversation”

The Big Grey Shark David Lurie

Medium Swing

The big grey shark loves to swim and sing. —

When he's hun - gry he'll sing an - y - thing! —

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- Over harmonic progression
 - *Biddy, Biddy*- 7-step process for improvisation:
 1. Sing the melody.
 2. Sing the chord roots (or chord tones).
 3. Improvise rhythms on chord roots/chord tones.
 4. Improvise chord tones on macrobeats.
 5. Improvise chord tones on microbeats.
 6. Improvise chord tones on macro/micro.
 7. Add passing/neighbor tones, other rhythms, etc.

Helping Students Develop Musical Reading/Writing Vocabulary

- Readiness:
 - Audiation of resting tone, macro/microbeat
 - Vocabulary of tonal patterns & rhythm patterns
 - Fluency with tonal solfege/rhythm syllables
 - Experience with improvisation
- Start with reading/writing familiar patterns
 - Teach initially based on sound/function, NOT music theory!

Skill Learning Sequence

Content (noun) vs. Skill (verb)

Discrimination vs. Inference Learning (stepwise/bridging)

Discrimination Learning	Inference Learning
Aural/Oral	Generalization
Verbal Association	Aural/Oral-Verbal-Symbolic
Partial Synthesis	Reading-Writing
Symbolic Association	Creativity/Improvisation
Reading-Writing	Aural/Oral-Verbal-Symbolic
Composite Synthesis	Reading-Writing
Reading-Writing	Theoretical Understanding

Discrimination Learning- familiar; tell the answer first!

I. Aural/Oral

- listen/"speak"
- neutral syllables ("bum"/"bah")
- resting tone, tonal patterns, chord roots, macro/microbeat, rhythm patterns

II. Verbal Association

- solfege/syllables as a tool to enhance audiation
- resting tone, tonal patterns, chord roots, macro/microbeat, rhythm patterns
- labeling names of tonalities/meters and pattern functions

III. Partial Synthesis

- patterns grouped together (synthesized) to help develop sense of context

IV. Symbolic Association

- read & write tonal patterns and rhythm patterns
- find & read tonal patterns and rhythm patterns in song or chant notation

V. Composite Synthesis

- patterns grouped together *in notation* to help develop sense of context

Inference Learning- unfamiliar; don't tell the answer!

***Success here depends on quality of discrimination learning.*

VI. Generalization -not telling the answer!

- identify same/different patterns, associate solfege to patterns, read/write unfamiliar patterns, identify tonality/meter of an unfamiliar song, etc.

VII. Creativity/Improvisation

VIII. Theoretical Understanding

- traditional music theory
- talking *about* and explaining "why"

Skill Learning Sequence

AURAL/ORAL	DISCRIMINATION LEARNING	GENERALIZATION	INFERENCE LEARNING
<p>Students develop aural and oral musical “vocabulary” through listening and imitating.</p> <ul style="list-style-type: none"> • Sing resting tone on neutral syllable (“bum”). • Move to/chant macrobeats and microbeats on neutral syllables (“bah” or “ch”, etc.). • Echo tonal patterns and/or rhythm patterns on neutral syllables (“bum”/“bah”). • Recognize familiar patterns (“bum”/“bah”) within a song/chant. • Sing first/last pitches of songs/patterns on neutral syllable (“bum”). • Sing chord roots on neutral syllable (“bum”). 	<p>Students independently apply skills learned at the Aural/Oral, Verbal Association, or Symbolic Association level to unfamiliar patterns or unfamiliar songs/chants.</p> <ul style="list-style-type: none"> • Identify two patterns (neutral syllable) as same or different. • Identify and sing the resting tone (neutral syllable or solfege) of an unfamiliar song. If solfege is used, identify/label tonality. • Identify and move to/chant macrobeats and microbeats (neutral syllable or rhythm syllables) of an unfamiliar song/chant. If syllables are used, identify/label meter. • Apply solfege/syllables to patterns performed by the teacher using a neutral syllable. • Label/identify the function of patterns performed by teacher using a neutral syllable. • Read unfamiliar patterns. • Write unfamiliar patterns. • Transpose familiar patterns to a new key signature or a new time signature. 	<p>Students teach themselves new information by independently applying skills learned at the Aural/Oral, Verbal Association, or Symbolic Association level to unfamiliar patterns or unfamiliar songs/chants.</p> <ul style="list-style-type: none"> • Identify two patterns (neutral syllable) as same or different. • Identify and sing the resting tone (neutral syllable or solfege) of an unfamiliar song. If solfege is used, identify/label tonality. • Identify and move to/chant macrobeats and microbeats (neutral syllable or rhythm syllables) of an unfamiliar song/chant. If syllables are used, identify/label meter. • Apply solfege/syllables to patterns performed by the teacher using a neutral syllable. • Label/identify the function of patterns performed by teacher using a neutral syllable. • Read unfamiliar patterns. • Write unfamiliar patterns. • Transpose familiar patterns to a new key signature or a new time signature. 	<p>Students independently apply skills learned at the Aural/Oral, Verbal Association, or Symbolic Association level to create and perform new musical material with (improvisation) or without (creativity) external restrictions.</p> <ul style="list-style-type: none"> • Create tonal patterns or rhythm patterns (neutral syllable or solfege/rhythm syllables) that are new and/or different from those performed by the teacher. If solfege/syllables are used, teacher could specify function to be improvised. • Create new melodic material, with or without harmonic progression/restrictions. If solfege/syllables/labels are used, teacher could specify a tonality/meter and/or an explicit harmonic progression. • Arrange or compose new musical material through audiation. If solfege/syllables/labels are used, teacher could specify a tonality/meter and/or an explicit harmonic progression. • Improvise based on what is read in notation. • Arrange or compose new musical material through audiation and use notation to preserve creation.
<p>Students learn to sing tonal syllables and chant rhythm syllables and use them as a tool for labeling and understanding content previously audiated and performed at the Aural/Oral level.</p> <ul style="list-style-type: none"> • Sing resting tone with solfege AND recognize/label tonality. • Move to/chant macrobeats and microbeats with rhythm syllables AND recognize/label meter. • Echo tonal patterns with solfege and/or rhythm patterns with rhythm syllables. • Recognize/label pattern function of patterns given by teacher using solfege/rhythm syllables. • Recognize familiar patterns (with solfege/rhythm syllables) within a song/chant. 	<p>Students learn to compare and recognize tonal contexts or rhythmic contexts of familiar content.</p> <ul style="list-style-type: none"> • Recognize/label the tonality or meter of a series of familiar tonal patterns or rhythm patterns. • Recognize/label the tonality or meter of a familiar song or chant. 	<p>Students learn to sing tonal syllables and chant rhythm syllables and use them as a tool for labeling and understanding content previously audiated and performed at the Aural/Oral level.</p> <ul style="list-style-type: none"> • Sing resting tone with solfege AND recognize/label tonality. • Move to/chant macrobeats and microbeats with rhythm syllables AND recognize/label meter. • Echo tonal patterns with solfege and/or rhythm patterns with rhythm syllables. • Recognize/label pattern function of patterns given by teacher using solfege/rhythm syllables. • Recognize familiar patterns (with solfege/rhythm syllables) within a song/chant. 	<p>Students learn to compare and recognize tonal contexts or rhythmic contexts of familiar content.</p> <ul style="list-style-type: none"> • Recognize/label the tonality or meter of a series of familiar tonal patterns or rhythm patterns. • Recognize/label the tonality or meter of a familiar song or chant.
<p>Students learn to read and write notation for content previously audiated and performed at the Aural/Oral and Verbal Association levels.</p> <ul style="list-style-type: none"> • Recognize and sing/chant familiar tonal patterns or rhythm patterns seen in notation. • Notate familiar tonal patterns or rhythm patterns. • Recognize familiar tonal patterns or rhythm patterns within the notation of familiar songs/chants. 	<p>Students learn to sense tonal and rhythmic context of notated sounds.</p> <ul style="list-style-type: none"> • Read/write a series of familiar tonal patterns or rhythm patterns and recognize/label its tonality or meter. 	<p>Students learn to read and write notation for content previously audiated and performed at the Aural/Oral and Verbal Association levels.</p> <ul style="list-style-type: none"> • Recognize and sing/chant familiar tonal patterns or rhythm patterns seen in notation. • Notate familiar tonal patterns or rhythm patterns. • Recognize familiar tonal patterns or rhythm patterns within the notation of familiar songs/chants. 	<p>Students learn theoretical information explaining how musical sounds are constructed and/or audiated (i.e. traditional music theory).</p> <ul style="list-style-type: none"> • Understand and identify time-value names of notes and rests. • Understand the patterns of half-steps and whole-steps within scales and construct scales on a given pitch. • Understand and name pitch intervals. • Understand and name qualities of chords.
<p>Students learn to sense tonal and rhythmic context of notated sounds.</p> <ul style="list-style-type: none"> • Read/write a series of familiar tonal patterns or rhythm patterns and recognize/label its tonality or meter. 	<p>Students learn to sense tonal and rhythmic context of notated sounds.</p> <ul style="list-style-type: none"> • Read/write a series of familiar tonal patterns or rhythm patterns and recognize/label its tonality or meter. 	<p>Students learn to read and write notation for content previously audiated and performed at the Aural/Oral and Verbal Association levels.</p> <ul style="list-style-type: none"> • Recognize and sing/chant familiar tonal patterns or rhythm patterns seen in notation. • Notate familiar tonal patterns or rhythm patterns. • Recognize familiar tonal patterns or rhythm patterns within the notation of familiar songs/chants. 	<p>Students learn theoretical information explaining how musical sounds are constructed and/or audiated (i.e. traditional music theory).</p> <ul style="list-style-type: none"> • Understand and identify time-value names of notes and rests. • Understand the patterns of half-steps and whole-steps within scales and construct scales on a given pitch. • Understand and name pitch intervals. • Understand and name qualities of chords.

RESOURCES

For an introduction to MLT:

- Bluestine, E. (2000). *The ways children learn music*. Chicago: GIA Publications.
- Shouldice, H. N. (2020). *Everyday musicality: Unlocking the inner musician through MLT* [Audio podcast]. Retrieved from <https://everydaymusicality.com/podcast/>

For an in-depth explanation of MLT:

- Gordon, E. E. (2012). *Learning sequences in music: A contemporary music learning theory*. Chicago: GIA Publications.

For MLT in Elementary General Music:

- Taggart, C. C., Bolton, B. M., Reynolds, A. M., Valerio, W. H., & Gordon, E. E. (2000). *Jump right in: The music curriculum*. Chicago: GIA Publications. (*Grades K-4 available)
- Reese, J. (2019). *Navigating music learning theory: A guide for general music teachers*. GIA Publications, Inc.

For MLT in Beginning Instrumental Music:

- Grunow, R. F., Gordon, E. E., & Azzara, C. D. (1999). *Jump right in: The instrumental series*. Chicago: GIA Publications.
- Schleuter, S. L. (1997). *A sound approach to teaching instrumentalists*. New York: Schirmer Books.

For MLT in Choral Music:

- Jordan, J. (2017). *Inside the choral rehearsal: Harmonic rehearsal teaching and learning based on the Music Learning Theory of Edwin E. Gordon*. Chicago: GIA Publications.

For MLT in Early Childhood Music:

- Valerio, W. H., Reynolds, A. M., Bolton, B. M., Taggart, C. C., & Gordon, E. E. (1998). *Music play: The early childhood music curriculum*. Chicago: GIA Publications.

Other MLT-related resources:

- Azzara, C. D. & Grunow, R. F. (2006). *Developing musicianship through improvisation*. Chicago: GIA Publications.
- Lange, D. M. (2005). *Together in harmony: Combining Orff Schulwerk and Music Learning Theory*. Chicago: GIA Publications.
- Runfola, M. & Taggart, C. C., Eds. (2005). *The development and practical application of Music Learning Theory*. Chicago: GIA Publications.

Other sources for songs and chants in a variety of tonalities and meters:

- Bailey, J. (2002). *Sing-to-kids songbook*. Self-published on TeachersPayTeachers.com.
- Bolton, B. M. (2009). *Musicianship*. Bestbael Music. *Katangaroo and Fives, Sevens, and Crazy Eights* also available. (To purchase, contact bethboltonmusic@gmail.com.)
- Gordon, E. E., Bolton, B. M., Hicks, W. K., Taggart, C. C. (1993). *The early childhood music curriculum: Experimental songs and chants without words*. Chicago: GIA Publications.
- Jordan, J., & Shenenberger, M. (2004). *Ear training immersion exercises for choirs*. Chicago: GIA Publications.

MLT-Related Websites:

- National GIML: www.giml.org
- GIA Publications: www.giamusic.com
- Alliance for Active Music Making: <http://www.allianceamm.org>

Overview of Tonalities

Major

tonic (I) subdominant (IV) dominant (V7) tonic (I)

So-La-So-Fa-Mi-Re-Ti-Do Do - Mi - So Do - Fa - La Ti - Fa - So Mi - Do

Mixolydian

tonic (I) subdominant (IV) subtonic (VII) tonic (I)

Re-Mi-Re-Do-Ti-La-Fa-So So - Ti - Re So - Do - Mi Fa - La - Do Ti - So

Lydian

tonic (I) supertonic (II) dominant (V) tonic (I)

Do-Re-Do-Ti-La-So-Mi-Fa Fa - La - Do So - Ti - Re Mi - So - Do La - Fa

Minor

tonic (i) subdominant (iv) dominant (V7) tonic (i)

Mi-Fa-Mi-Re-Do-Ti-Si-La La - Do - Mi La - Re - Fa Si - Re - Mi Do - La

Dorian

tonic (i) subdominant (IV) subtonic (VII) tonic (i)

La - Ti - La - So - Fa - Mi - Do - Re Re - Fa - La Re - So - Ti Do - Mi - So - Fa - Re

Phrygian

tonic (i) supertonic (II) subtonic (vii) tonic (i)

Ti-Do-Ti-La-So-Fa-Re-Mi Mi - So - Ti Fa - La - Do Re - Fa - La So - Mi

Aeolian

tonic (i) subdominant (iv) subtonic (VII) tonic (i)

Mi-Fa-Mi-Re-Do-Ti-So-La La - Do - Mi La - Re - Fa So - Ti - Re Do - La

Locrian

tonic (i°) mediant (iii) subtonic (vii) tonic (i°)

Fa Mi Re Do La Ti Ti Re Fa Re - Fa - La La - Do - Mi Re - Ti

Beat Function Rhythm Syllables

*This system aids in the development of audiation because it is based on how we audiate rhythm: by beat function. (Time-value, note-value, mnemonic, and notation-based systems do not facilitate audiation because they are notationally or phonologically based.)

*The function-based syllable system can also be used as a tool for identifying meter because macrobeats are always DU and each meter has its own microbeat syllables.

Usual Duple

Du Du Du De Du De Du Ta De Ta Du Ta De Du Ta Du Du - De Du

Usual Triple

Du Du Da Di Du Da Di Du Ta Da Ta Di Ta Du - Ta Di Du Ta Ta Du Da Di

Usual Combined

Du De Du Da Di Du Ta De Ta Du Da Di Du Da Di Du De Du Du Di Du

Unusual Paired/Unpaired

Du Du Ba Bi Du Be Du Ta Ba Ta Bi Ta Du Be Du Ba Bi Du Be Du Be Du Ba Bi Du Ta Be Ta Du

Pronunciation Guide:

DU= "doo" DE= "day" DA= "dah" DI= "dee"
 TA= "tah" BE= "bay" BA= "bah" BI= "bee"

Usual Meter= Even Macrobeats
 Unusual Meter= Uneven Macrobeats

25 Ways to Apply Music Learning Theory to Traditional Instrumental Instruction

By Richard F. Grunow/ Michael E. Martin/ Christopher D. Azzara

1. For the teacher: Learn to sing the melodies and bass lines for 30-40 tunes found in beginning instrumental method books. Sing them at a musical tempo, and with characteristic rhythms. Teach students to sing and then play these melodies and bass lines by ear.
2. Establish tonality and/or meter before students sing or play.
3. Have students sing everything before they play.
4. Have students move in a variety of ways to the music they are learning.
5. Teach students to audiate the harmonic context of the music (resting tone, bass line, and harmonic functions).
6. Teach students to audiate the rhythmic structure of the music (macrobeats and microbeats).
7. Remind students to audiate what they are going to perform before they perform it. If you are not sure they are audiating, have them sing it and have them move to the large and small beats in the music!
8. Teach students to take the preparatory breath in the tempo of the music.
9. Develop musical independence right from the start. It is each student's responsibility to play in tune and stay in tempo.
10. As much as possible, avoid placing tapes or dots on the fingerboards of the string instruments. They may assist hand posture. They do not assist audiation.
11. Sing and play for students, not with them.
12. Hear each student sing something alone and play something alone in each lesson.
13. Teach major and minor concurrently. Add Dorian and Mixolydian songs as well.
14. Teach duple meter and triple meter concurrently. Add songs in unusual and combined meters as well.
15. Help each student develop a vocabulary of tonal and rhythm patterns that he/she can recognize and perform.
16. Teach students the proper names of tonalities (major, minor, Dorian, etc.) and meters (duple, triple, unusual, combined) and how to recognize them by ear.
17. Develop proper posture and instrument position.
18. Spend the first three to six months playing by ear, before introducing music notation.
19. After introducing notation, spend the first half of every lesson or rehearsal playing by ear.
20. Play the same song in many different keys. Play the same song in different tonalities (major, minor, Dorian, Mixolydian, etc.)
21. Improvise.
22. Do the first concert without notation.
23. Use tonal and rhythm syllables based on function, not note names or note values.
24. Sing while placing your fingers for the correct pitches.
25. Play recordings that demonstrate characteristic tone quality and style.

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