The
Gordon Institute
for Music Learning

- *Continuing the Legacy of Audiation: Understanding Music Learning Theory's Core Principles*

- *Applying Skill and Learning Sequences to Popular Beginning Instrumental Method Books*

If one audiates, then one must have audeas.

The GIML Audea is a great place to share audeas.

GIML

The Gordon Institute for Music Learning (GIML) is a nonprofit organization dedicated to advancing the research in music education pioneered by Edwin E. Gordon. The broad purpose of this Institute is to ensure that Dr. Gordon's work realizes its potential to serve as the foundation for future research and to revitalize music education for generations to come. The Institute supports research into how individuals learn music through research in teaching teachers, in teaching parents and in teaching students of all ages.

Guidelines for Article Submission

1. Manuscripts for possible publication should be double-spaced, 2-10 pages in length, in Times New Roman, font size 12. Use tabs before each paragraph only and no other formatting procedure.

2. Each manuscript should be submitted electronically to the publications chair in a folder that includes the abstract (150-200 words), up to 5 keywords, the author's bio (two sentences), and a photo. The first sentence in the bio should state your job title and the name and location of your school. The second sentence should list one or two research interests. The photo should show your head and shoulders and have a dark background. The folder should also contain any illustrations to be included with the article; such as, music notation, diagrams, tables, and figures.

   Each supporting figure should be an individual file. All graphics: pictures, diagrams, musical examples, must be in *tiff* format, and with a minimum of 1200 dpi resolution; any text in the graphic should be in Arial font. Do NOT include titles or headings in the picture. All tables and graphs must be submitted as Word or Excel files.

3. Placement and titles of illustrations should be noted through the use of labels within the text of the article.

4. Quoted music and materials must be cleared in writing with copyright holders prior to submission. Copies of letters and contracts granting permission to print copyrighted material must accompany the submitted article or be sent by hard copy to the publications chair.

5. Bibliography should be written according to style recommendations found in the latest edition of the *Publication Manual of the American Psychological Association*; however, do NOT use tabs or indentations. Direct references within the text should include name of author, date of publication, and page number, and be placed as endnotes after the Bibliography.

6. Send all related materials to Diane Lange at lange@uta.edu.

7. The editor reserves the right to edit all copy submitted to the *GIML Audea*. Manuscripts requiring revision may be returned to the author for revision.

Submitting a manuscript indicates that it has not been published previously (including on the internet) and is not currently submitted for publication elsewhere, either in its entirety or in part. Authors are expected to comply with APA ethical standards and institutional and federal regulations in the treatment of human subjects (see http://www.apa.org/ethics).

Audea, the official publication of GIML, is issued to GIML members two times each year. Publication information and inquiries should be addressed to:

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From the President
Heather N. Shouldice

Dear GIML Members,

As I begin the final year of my term as GIML President, I remain excited for our organization to continue to move forward. As we carry on the work that Dr. Gordon began, I believe it is critical for GIML to focus on three key efforts: (1) promoting the continued evolution of Music Learning Theory, (2) supporting teachers' ability to understand and incorporate MLT into their teaching practice in a meaningful and sustainable way, and (3) clearly communicating what we do as an organization.

One exciting area pertaining to the evolution of MLT has been the establishment of the Edwin E. Gordon Research Fund, which began as a result of a very generous donation given to GIML by Dr. Gordon before he passed away. This year an ad hoc committee was formed to draft a mission statement for the fund and begin developing procedures for the distribution of funds to support MLT-related research. Thank you to Krista Jadro, Julie Kastner, Jill Reese, Alden Snell, and Cindy Taggart for serving on this committee and to Suzanne Burton for her efforts as committee chair. As a result of this committee's work, we were able to disseminate our very first call for proposals last spring and awarded funds over the summer!

An area of growth related to teacher support has been the establishment of the Carol Gordon Professional Development Scholarship, the purpose of which is to support university faculty in understanding MLT and incorporating it into their work with future and current music educators. In 2017 this scholarship fund was greatly increased as a result of a challenge campaign in which Dr. Gordon's daughter and son-in-law, Pam and Brent Bunte, volunteered to match all money donated from August through December. As a result of this fund-matching campaign, the amount available in the Carol Gordon Scholarship Fund was roughly doubled, and this year we were able to offer scholarships for three university faculty members to attend a summer Professional Development Levels Course! Another focus area more directly related to teacher support is our goal of creating a virtual mentoring program for GIML members. A small pilot of this program is already under way, with five mentor/mentee pairs participating during the current school year, and then we hope expand to include more participants as we move into 2019-2020.

An area of growth that relates to communicating what we do as an organization will be the clarification and documentation of GIML's policies and procedures. The board began this work in its spring board meeting by drafting a "Professional Ethics Position":

The Gordon Institute for Music Learning strongly encourages members to act in a positive and professional manner when discussing our organization and Music Learning Theory in general. Members are encouraged to recognize and remain open to varied approaches and to celebrate both our differences and our similarities.

This statement will appear in materials and be read at GIML events in order to communicate our desire to be a part of a collaborative music education learning community.

Continuing the Legacy of Audiation: Understanding Music Learning Theory's Core Principles

Keynote address for the 6th International Conference on Music Learning Theory

Cynthia Crump Taggart
Michigan State University

Abstract

In order for Music Learning Theory practitioners to continue to grow and develop together as a GIML community, we must identify and use as a guide the core principles of Music Learning Theory. Music Learning Theory serves as a theoretical framework that "offers **guidance and direction** for development of appropriate method…" (Gordon, 2012, p. 28). This keynote identifies and explores some of the key principles of that theoretical framework: (1) audiation is the core of Music Learning Theory; (2) syntax and context is fundamental to audiation; (3) all children are musical and unique; (4) children learn by doing; (5) music is learned in much the same way that a language is learned; (6) sound must precede sight; (7) children need to experience a rich musical vocabulary and a wide variety of tonalities and meters; (8) discrimination learning lays the foundation for inference learning; (9) whole/part/whole sequencing enhances and deepens learning, and (9) assessment improves instruction.

Keywords

Music Learning Theory, theoretical framework, syntax, context, audiation, inference learning, assessment, whole/part/whole sequencing

Introduction

I am going to paint for you a picture of a classroom. As I do so, I would like you to think about how you know that this is a Music Learning Theory classroom. What is it in the teaching and environment that is specific to Music Learning Theory? Try to remember as much as possible about this classroom description, as I will be drawing upon it throughout this paper.

The room is brightly lit and appears similar to many elementary general music classrooms. The walls are covered by bulletin boards, one with pictures of the instruments of the orchestra, another with pictures of important jazz musicians, and a third with music vocabulary words. There is a large circle in the middle of the room's carpet to remind the students where they should sit. Five groups of tonebar and small percussion instruments are set up around the outside of the room, providing as much space between the groups as possible. Little by little, as the class approaches the music room, the noise gets louder in the hall.

The teacher meets the students at the door. As the fourth graders walk into the room, she begins to sing "Old Joe Clark." For those of you who don't know Old Joe Clark, it is a Mixolydian song, and the word

students have learned it in the previous class period. Following the teacher's model, the students begin moving their arms and bodies with flowing movement as they walk. As soon as they begin to join in the singing, the teacher stops singing the melody and begins to harmonize by singing the chord roots of the song. The students, who are used to singing without the teacher, continue to sing in harmony with her as they form their circle. The teacher sings, on the dominant pitch of the song, "Please sit (changing to tonic) down."

Then the teacher establishes tonality in minor using syllables and sings on the tonic, "I am going to sing a pattern using tonal syllables. If that pattern is a tonic pattern, I want you to sing back a tonic pattern that is different from mine, also using tonal syllables. If I sing a dominant pattern, I want you to sing back a different dominant pattern than mine using syllables. Just as a reminder, what are the tonic function pitches in minor tonality?" Some students raise their hands and others energetically sing the tonal syllables for the tonic-function pitches. "How about Dominant function?" Again, the students answer. And, off they go; the teacher sings patterns, and either the whole group or individual students improvise their responses. Some of the individual responses are complex and performed with confidence, whereas others are less sure, not completely in the desired function, or associating the wrong solfege with pitches. The teacher keeps a record of the responses of the individual children on her iPad as the activity unfolds. Occasionally a child associates the incorrect solfege with a pattern, and the teacher sings, "Did you mean LA DO MI (singing the pattern again with the same pitches as the student but correcting the solfege) or DO MI LA (singing the solfege that the student used with the pitches that the solfege should have represented)?" The student answers, "The second one," and the teacher sings on tonic, "Great! I like that tonic pattern!"

After five or six minutes of individual and group improvisation, the teacher tells the students to find the members of their squad and sit down by one of the instrument groups on the perimeter of the room. "I want you to be seated with your group by the time that I finish singing the song." Then the teacher establishes major tonality and sings Sandy Land, a song that the students have experienced in two earlier grade levels, in first grade when they learned to sing the melody, and in third grade when they performed the melody with chord roots and made up a dance to it. The teacher establishes tonality and then cues the students to sing the song without her. Then she asks half of the class to sing the song and the other half to sing the chord roots. As they near the end of the song, the teacher gestures for the groups to switch parts, which they do as they sing the song again. After the students are done singing the song, the teacher says, "Now, each of your squads is going to create an arrangement of this song. The instructions for this project are on the handouts at each of your stations. Your arrangement must have the melody of the song at some point, as well as the chord roots. But, there are lots of choices you can make. You can add your own harmony parts, and you can make up rhythm ostinati if you want. You can have as many parts as you want. You can use some or all of the instruments or make your arrangement entirely vocal. You could use body percussion. You could add an introduction or a coda. You probably will need to repeat the song more than once. You have the rest of this class period to work, and I will give you some time in the next class period as well. At the end of next class period, your groups will perform your arrangements for the class, and we will choose one of your arrangements or combine parts of them to perform at our informance with your parents in two weeks. Also, if it helps you remember how the arrangement goes, you can make a score or map.

So, get to work. Use F Do, which you can find on your tonebar instruments, as the resting tone." The classroom immediately erupts into a cacophony of conversations and instrumental exploration as the students begin to work. The teacher walks around the classroom circulating between the groups, reinforcing the parameters and possibilities for the arrangement, providing support as the students need it, and answering student questions.

So, what in this vignette was specific to Music Learning Theory? What, in the description of this classroom, differentiates it from a classroom that is based in any of the other classroom approaches to music learning? In this keynote I hope to help us think about what is unique and central to Music Learning Theory. Identifying these core Music Learning Theory principles can keep us on track as we continue to grow and learn. Using them as a guide when we make instructional decisions will allow us to move forward in our own teaching practices while holding true to the principles that Ed Gordon, embraced, identified, and developed.

Music Learning Theory's Foundations

Over and over, Ed stressed that Music Learning Theory is not a method. It does not have a set of materials that are "the answer" to how music should be taught. Music Learning Theory is not and never was intended to be a methodology. It is not that specific or prescriptive. Rather, Music Learning Theory provides teachers with a framework to help them understand how to prepare and structure learning so that they can provide their students with learning environments that are optimal. Gordon (2012) stated, "Music learning theory offers guidance and direction for development of appropriate method…" (p. 28). Teachers have tremendous freedom within Music Learning Theory in terms of the types of instructional activities that they use and how they sequence and plan instruction, as long as they pay attention to the scaffolding that is needed for students to participate and learn successfully.

So, rather than a methodology, I think of Music Learning Theory as a theoretical framework upon which our instructional practice is hung. Ed developed this theoretical framework to explain how children learn music; in other words, he developed a music learning theory. Since that time, he and many others have continued to refine and apply this theory to music teaching in many types of classrooms and studios around the world, and many of you in this room have contributed to the applying and refining of these ideas and applications.

This application of theory to practice in the music classroom known as Gordon's Music Learning Theory is continually evolving. When Maria Runfola (2005) and I edited our book of readings, we purposefully called it *The Development and Practical Application of Music Learning Theory* to acknowledge this evolution. And, this growth, change, and development in Music Learning Theory can not stop with Ed's death.

Ed always stressed that we need to keep learning. He emphatically stated over and over again that, if Music Learning Theory looks exactly the same in 20 years as it does today, we will have failed. We need to keep learning and applying what we have learned in new ways. He exemplified this desire to continue growing and developing in everything that he did. His ideas were always changing and expanding, deeping what we know about how children learn when they learn music. And he continued to do research so that what we know is based upon more than shaggy dog stories and teaching lore. Now it is up to us to continue this work.

GIML is at a critical juncture in its history. We are trying to navigate the waters for the first time without Ed to guide us in our journey. We need to consider how to move forward so that we don't stagnate, while remaining true to the core of Music Learning Theory. Yet, if Music Learning Theory is going to continue to grow and develop, how do we grow and develop together so that we have a unified voice as an organization? How do we move forward the body of knowledge that is Music Learning Theory so that the words "Music Learning Theory" still have meaning, even as the knowledge base surrounding them changes and develops?

I contend that, as we continue to grow and develop, we need to be aware of the core principles that lie at the heart of Music Learning Theory so that we do not lose our way. What are the fundamental,

immutable principles that must remain present in all that we know and do? I am going to share some of my thoughts about this with you in hopes that we can continue this dialogue as an organization.

Core Principles

First and foremost, at the core of Music Learning Theory is audiation, and every discussion of Music Learning Theory or translation of Music Learning Theory into practice must focus on audiation and the development of audiation skills. Gordon (2012) believed that audiation[1] is fundamental to music learning and music making. He stated, "Sound itself is not music. Sound becomes music through audiation, when, as with language, we translate sounds in our mind and give them meaning" (Gordon, 2012, p. 3). Another way to think about it is that, again in Gordon's words, "Audiation is to music what thought is to language" (Gordon, 2003, p. 25). This notion of audiation places Gordon's work squarely in the realm of cognitive psychologists. Musicking is interpretive, in that learners actively are interpreting what they are experiencing and learning musically within the organized body of what they have experienced and learned musically in the past. In other words, learners are actively constructing meaning (Taetle & Cutietta, 2002). A fundamental assumption of Music Learning Theory is that audiation informs one's musical actions, whether those actions are performing, listening, composing, or any of the other many ways to engage in musicking. Therefore, sophisticated audiation will be likely to result in sophisticated musicking, barring other interferences, for example lack of technique. The primary goal in Music Learning Theory is to help students develop their audiational skills as a means of facilitating and enriching musical engagement. Think for a minute about how audiation was engaged in the vignette the beginning of this talk.

Acquisition of a sense of syntax and context is fundamental to music understanding and forms the core of audiation. In fact, this purposeful focus on syntax and musical context is another guiding principle that differentiates Music Learning Theory from most other approaches to music learning. Think again about the vignette. How did context and syntax play a role? Certainly, it played a role in the focus on harmonic function and chord roots. Also, it came to life in the teacher's establishing tonality and meter before singing.

The placing of music into a syntactical structure is what differentiates music performance that is driven by audiation from that which is driven by rote imitation. When audiating, the meaning one gives music is determined by placing and interpreting what one is audiating in a musical context. This allows the musician to give the music intrinsic meaning and even allows the musician to predict what might come next in the music.

For most music, the two most important contexts are the tonality and meter. For example, when hearing an unfamiliar tonal melody with the last pitch of the melody omitted, someone who is audiating would know that the melody is incomplete. That person would know, as a result of his or her past experiences with melodies (which have resulted in the development of melodic schemas) that the melody has not reached closure; it did not end on the tonic, and the two parts of the melody were not rhythmically balanced. Most persons would complete the melody in their audiation, based upon the melodic schemas that they have developed as a result of listening to them and/or performing melodies in the past.

Gordon's Music Learning Theory intentionally helps students develop musical schemas and eventually helps student learn to understand them so that they can use or avoid those schemas
superduper

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[1] Audiation is a term that was coined by Gordon to describe the cognitive process of constructing meaning in music.

purposefully to enrich and enhance their own music making and music creation. Those schemas also serve as the musical means of making sense of music when listening; they help to give that music instrinsic meaning.

Another fundamental understanding in Music Learning Theory is that all children are musical. Although individuals are different from one another and have different instructional needs, all children can learn music and use music as a means of expression. In the same way that mathematics or language may be learned more quickly by some children than by others, music may be learned more quickly by some than by others. But, all children have the potential to learn math and language, and all children have the potential to learn music.

Music aptitude is one's potential to learn music, and Gordon (2012) states, "Just as no person is void of at least some intelligence, no person is void of at least some music aptitude. To that extent, everyone is musical" (p. 44). Music teachers are charged with helping students realize their potentials to learn music and become independent music learners and makers. Moreover, instruction should be adapted to the needs of individuals so that everyone is challenged and supported in their music learning endeavors, depending upon their musical needs, because providing individualized instruction is another central focus of practitioners of Music Learning Theory.

The next fundamental assumption in Music Learning Theory is that children learn by doing. As a result, Music Learning Theory classrooms are filled with the "doing" of music. When they are engaging in music making, children listen to the music that they are making and compare it with what they are audiating so that their audiation and performance can be made to match as closely as possible. In this way, their audiation informs their performance, but their performance also informs their audiation. What children experience in their bodies informs their rhythmic and stylistic understanding. In addition, when they listen to the sounds that they make, as well as those made by others, they learn by making discriminations between their audiation and performance, and they become more sensitive to those differences. Because the voice (singing, chanting and speaking) and the body are the primary means through which children can engage in music at first and both help to inform and to reflect audiation, these modes of performance are the primary focus of music making in elementary general music classrooms that are based upon Music Learning Theory. Again, how did this manifest itself in the vignette? In what types of musicking did the students engage?

Also fundamental are Gordon's models of music learning that are central to Music Learning Theory. Music Learning Theory, like the approaches of Orff, Kodaly, Dalcroze, Suzuki, and others, is a rote-before-note approach to music learning. Children experience and make music before they read it or learn about it theoretically. Gordon draws from models of language learning when describing music learning, as the music and language learning processes have many similarities (Valerio et al., 1998). Because music and language are both aurally and orally based, researchers have recognized that music and language learning share similar processes and may be related to one another. Both are learned most easily when children are young through their immersion in a rich language- or music-filled environment. In both domains, reading is learned most effectively only after children have large listening and speaking vocabularies or, in music, large singing, chanting, and moving vocabularies so that they can bring meaning to the language or music notation. With language, children typically learn to read words that they already know, understand, and can speak. With music, children read music notation with comprehension only when they recognize in notation music that they can already audiate. This overall sequence of learning manifests itself in Gordon's two models: his model of preparatory audiation and his formal music learning theory. These two models overlap and are not mutually exclusive. The first focuses on the development of syntactic structures as a result of informal immersion in a developmentally-appropriate, musically-rich environment. The second focuses more on the learning of formal music concepts and what they mean for how we engage students musically in the classroom.

The focus on music learning being like language learning has several ramifications that also help differentiate Music Learning Theory from other approaches to music learning. One of these is the use of a variety of tonalities and meters from the very beginning of the learning process. According to Music Learning Theory, during informal music guidance particularly, but also throughout life, the music environment should be as rich and varied as possible to facilitate music learning. This manifested itself in the vignette by engaging the students in minor, Mixolydian, and major, all in a short period of time. Developmental psychologists know that children who have richer, more varied language environments develop better language skills (Moerk, 2000). Specifically, children whose parents speak with larger vocabularies have been found to develop larger vocabularies and to learn to read and write earlier and with greater comprehension than children from less rich language environments. Likewise, children who have had an opportunity to experience a rich, diverse musical vocabulary from the beginnings of their music development will develop richer musical skills and typically will develop those skills more quickly (Valerio, et al, 1998). As a result, Music Learning Theory teachers immerse children in an environment that is rich in different tonalities and meters.

Another way to think of this is that children learn what something is by learning what it is not. Gordon stated, "It is not possible to know what something is or what it represents without comparing it to something else" (p. 1). In fact, Gordon (2001) calls the brain a "pattern-making system" (p. 23) that is always looking for similarities and differences between what it is processing and what it has processed in the past. Even though much of the music that children hear on a daily basis is in major tonality and duple meter, they need to hear music in a wide variety of tonalities and meters other than major and duple. In this way, they can develop a deeper understanding of major and duple by learning what makes them different from other tonalities and meters (Valerio, et. al, 1998). Providing this tonally and rhythmically rich environment may be difficult musically for teachers at first, because they may have little repertoire or experience in some of the more unusual tonalities or meters. However, as teachers explore these in their teaching, they will find that their own musicianship develops in tandem with that of their students. Most important, however, they provide children with what is needed to lay a solid foundation for their becoming versatile musicians in the future.

Another fundamental principle of music learning theory is that two types of learning form the larger framework of Gordon's models: discrimination learning and inference learning, with discrimination learning laying the foundation and providing the scaffolding for successful inference learning, and inference learning helping to reinforce what was learned at the discrimination levels of learning. Gordon drew on the work of Gagné. He identified the first four types of learning as described by Gagné (signal learning, stimulus-response learning, chaining, and verbal association) as perceptual types of learning, in which students are taught the correct answer. In Gordon's words, when engaged in these types of learning, "a student 'takes in' what he is taught in a predominantly rote fashion" (Gordon, 1971, p. 58). In Gordon's model of formal learning, this becomes discrimination learning. He identifies Gagné's final four types of learning (multiple-discrimination learning, concept learning, principle learning, and problem solving) as conceptual types of learning, which becomes inference learning in his formal music learning model. With inference learning, the learner is not told the correct answer. Rather the learner, based upon previous learning experiences, figures things out on his or her own. According to Gordon, the student "'learns by learning' and creates new and unique ideas" (Gordon, 1971, p. 58).

Although discrimination learning provides readiness for inference learning, ideally teachers create opportunities for children to bridge from discrimination learning to inference learning regularly and often, as this helps develop their students' musical independence and helps them learn to function and view themselves as musical. The incorporation of increasingly more inference learning into instruction is one of the most dramatic changes that I have seen in the practical application of Music Learning Theory

Theory during my 40 years as a Music Learning Theory Practitioner. Inference learning allows children to take ownership of their musicking, which is one of the primary goals of Music Learning Theory. Music Learning Theory teachers revel in their students' abilities to make musical decisions and to express themselves musically. As a result, they orient their instruction toward inference learning whenever possible, while paying attention to what types of and how much discrimination learning is necessary to make inference learning successful. Students who learn more quickly than others often can successfully bridge from discrimination learning to inference learning more quickly than those for whom music learning is a slower process.

Children bridge back and forth between the two types of learning, depending upon their instructional needs.[2] Yet, ultimately, Music Learning Theory teachers want their students to be independent and lifelong music learners and makers, which requires that they are able to make inferences musically in the absence of a teacher. In elementary school, the balance between discrimination and inference learning may shift even more toward inference as students become older and have more discrimination learning upon which to base their inferences. The opening vignette of a fourth grade class period is an example of a class that is heavily weighted toward inference learning. Both the pattern improvisation and the creation of an arrangement of a song were firmly situated in inference learning.

Another fundamental precept of Music Learning Theory is that it is a whole-part-whole approach to music learning. The two primary components of Music Learning Theory-based instruction are learning sequence activities, that is tonal and rhythm pattern instruction, and classroom activities. In the vignette, the improvisation of patterns was the learning sequence activities and the rest of the activities were classroom activities. These combine to form a whole-part-whole approach to teaching music, with the classroom activities serving as the whole and pattern instruction serving as the part. Most of each class period is spent in holistic music making (classroom activities), and between five and seven minutes of each class period are spent in pattern instruction.

Because learning sequence activities form the component of instruction that is unique to Music Learning Theory, and because they are the component that Gordon writes about and has designed more fully in terms of classroom application, many view them as the most important part of Music Learning Theory-based instruction. However, learning sequence activities are only important because they inform classroom activities and holistic music making. In actuality, they constitute only a small portion of what happens in the music learning theory music classroom. Yet, the skills developed in learning sequence activities inform and enhance student work in every musical endeavor.

Assessment is built into pattern instruction as a part of how it is designed. Assessment also is central to classrooms based upon Music Learning Theory. Gordon stated, "Being sensitive to individual musical differences among students being taught in a heterogeneous general music class or performance ensemble is a hallmark of Music Learning Theory" (Gordon, 2005, p. x). The more one knows about a student, the better one can design instruction to meet that student's needs, and assessment is one way of learning more about students.

Students' music aptitude scores guide the teacher in interpreting the responses of students. In addition, in learning sequence activities, measurement of student achievement takes place on an on-going basis, as teachers keep track of the quality of student responses, as the teacher did in the opening word

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[2] Early in the development of Music Learning Theory, Gordon called the moving back and forth between discrimination and inference learning "spiraling," which was drawn directly from the work of Bruner. As his ideas developed more fully, he chose to use the word bridging rather than spiraling, as it allowed him to differentiate between Bruner's ideas and his own. He views bridging as more "recursive" than Bruner's concept of spiraling (Gordon, 2008).

vignette using her iPad. Also, in classroom activities, student learning and achievement is assessed regularly as well using rating scales and other teacher-designed assessments. In a Music Learning Theory classroom, children regularly respond in solo, as it is only by hearing them perform or respond alone that a teacher can meaningfully evaluate a child's skill development or knowledge. In a group, a child can imitate other children rather than having ownership of the skill or knowledge. The more accurate the assessment of student learning, the better a teacher can design instruction to meet each student's learning needs.

When its guiding principles lay at the heart of music instruction, Music Learning Theory provides a means of developing students' abilities to think musically. Through Music Learning Theory-based instruction, students can become musically independent and develop strong musical skills, a rich music vocabulary, and compelling musical ideas that they can express eloquently as they pursue their musical desires throughout life.

Conclusions

The need for a strong GIML has never been greater. GIML of the future needs to continue learning as an organization and needs to deliver what it has learned to its membership with clarity so that, as Music Learning Theory continues to grow and develop, Music Learning Theory practitioners grow and develop with it. GIML needs to be the arbiter of what Music Learning Theory means and how it translates into practice. This will not be easy, as we will need constantly to listen to one another, learn from one another, and be willing to adapt our practices to incorporate new ideas. And GIML, as an organization, needs to be facile enough to incorporate those ideas into the information that it delivers through publications and professional development workshops. I look forward to accompanying all of you on this journey of growth and development as GIML moves forward into this next era.

Note

Portions of this address are drawn from "Music Learning: A Theoretical Framework in Action" and are used with permission of the publisher. Taggart, C. C. (2016). In C. Abril and B. Gault (Eds.) *Approaches to Teaching General Music: Methods, Issues, and Viewpoints.* Oxford University Press, pp. 183-208.

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Applying Skill and Learning Sequences to Popular Beginning Instrumental Method Books

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Abstract

In many beginning instrumental method books, authors present an instructional sequence based on learning note names and note values. While such materials may expedite developing executive skill and learning to *read* music, they do not promote a sequential approach to understanding how pitches and rhythms interact to create musical contexts. Moreover, presentations of tunes in many of these books include oversimplified rhythms, unmusically slow tempos, and disregard for melodic chromaticism.

To improve sequential instruction in instrumental music education, we reviewed twelve popular beginning instrumental books and identified 730 tunes (excluding clearly pedagogical exercises). Twenty-four tunes were common to five or more books. We analyzed those tunes for harmonic and rhythmic content and suggested considerations for sequencing beginning instrumental instruction based on Gordon's Content Learning Sequences. Teachers are encouraged to consider opportunities for musical enrichment, incorporate familiar repertoire, and exercise professional judgment while providing instruction informed by Music Learning Theory.

Keywords

Sequential instruction, Instrumental Music Education, Method Books, Music Learning Theory

Unfortunately, most beginning instrumental music method books contain only Major tonality, Duple meter, and music of a similar style. Even if the instrumental teacher is prudent about establishing a context (tonality and meter), students in a traditional setting will still not be able to compare Major tonality with Minor tonality or Duple meter with Triple meter until later in their study. In addition to comparing tonalities and meters, students will be benefit by comparing musical styles. For example, much can be gained by performing a familiar folk song in a jazz or classical style. Unless comparisons are possible, comprehension will be limited at best (Grunow, 2005, p. 193).

Authors of most beginning instrumental music method books present materials to support a particular instructional sequence. A "Scope and Sequence" or "Pacing Guide" is often included that reveals a progression of skills and content for beginning instrumental music instruction.

Often, suggested sequences are based on learning note names and note values. Understanding how pitches and rhythms interact to form musical contexts (i.e., tonality, meter, and style) is not prioritized (Azzara, 2008; Gordon, 2012; Grunow, 2005; Waller, 2010). Teachers who wish to incorporate Gordon's (2012) Content Learning Sequences may find it challenging to apply these sequences to many beginning instrumental method books. To help teachers address this challenge, we reviewed twelve popular beginning instrumental method books to identify common content and suggest re-ordering based on these principles. In this article, based on our presentation at Fourth International Conference on Music Learning Theory ("Audiation for a Lifetime of Learning"), we share considerations for re-ordering method book content based on these principles.

Pedagogues and performers in a variety of musical styles agree that acquiring and internalizing a vocabulary of repertoire is critical for informing performance, generative creativity, and music understanding (Aebersold, 2010; Baker, 1995; Grunow, Gordon, & Azzara, 2001; Houlihan & Tacka, 2008; Steen, 1992; Suzuki, 1983; Wright, 2010). It would be logical for students to begin that process by learning to sing and chant repertoire and related content.

Many popular beginning instrumental method books, however, emphasize developing executive skills as soon as possible to prepare a performance in which students "read" music. For example, rhythm sequences in many method books begin with elongations (e.g., whole notes, half notes)—durations that are challenging for children to audiate and perform. Alternately, were students to begin with macrobeats and microbeats in duple and triple meters, they would experience a context for rhythm. Similarly, while it would be advantageous for students to learn duple meter and triple meter concurrently, many books delay introducing measure signatures associated with triple meter (e.g., ¾, 6/8). Similarly, students learn pitches best in a tonal context (e.g., major, minor, Dorian); however, DO signatures (i.e., key signatures) are often chosen to prioritize teaching accidentals. Learning to play and read in multiple tonalities and meters would promote greater musical understanding.

Unfortunately, notational presentation of tunes often varies from ways in which those tunes might typically be audiated. Often, rhythms are simplified, DO signatures are modified, tempos are much slower, and melodic chromaticism is ignored. Grunow (2005) notes, "In most beginning instrumental classes, unmusical tempos and uncharacteristic rhythms (imposed by early use of notation) demand little of students' senses of tonality, meter, and musical style..." (p. 187). For example, in Figure 1, "London Bridge" appears as notated in a number of books (note absence of a DO signature); in Figure 2, the same tune appears as it might commonly be audiated.

Figure 1

Figure 2.

Book Selection and Analysis

To examine common practice in beginning instrumental music in a systematic manner, we created a list of tunes common to beginning instrumental method books. We surveyed twelve popular beginning instrumental series available in our university libraries: *Accent on Achievement* (O'Reilly & Williams, 1997), *Band Expressions* (R. Smith, S. Smith, Story, Markham, Crain, Gammon, & Campbell, 2003), *Belwin 21st Century* (Bullock & Maiello, 1996), *Do It!* (Froseth, 1997), *Essential Elements 2000* (Lautzenheiser et. al., 1999), *Jump Right In: The Instrumental Series* (Grunow, Gordon, & Azzara, 2001), *Measures of Success* (Sheldon, Balmages, Loest, & Sheldon, 2010), *Premier Performance* (Sueta, 1999), *Sound Innovations* (Sheldon, Boonshaft, Black, & Phillips, 2010), *Standard of Excellence* (Pearson, 1993), *Tradition of Excellence* (Pearson & Nowlin, 2010), and *Yamaha Advantage* (Feldstein & Clark, 2001)[i].

In each book, we noted presentations of tunes, excluding clearly pedagogical exercises (e.g., "Five New Notes," "Going Higher and Higher," "Tonguing and Blowing"). This process yielded 730 selections. After merging appearances of the same tune with different titles (e.g., "Ode to Joy" and "Theme from *Symphony #9*"), we identified 24 tunes found in five or more method books (see Table 1 on the next page).

Table 1.
Twenty-Four Tunes Appearing in Five or More Method Books
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Tune	Number of Books
Hot Cross Buns	10
Jolly Old St. Nicholas	10
Jingle Bells	9
Ode to Joy	9
When The Saints Go Marching In	9
Au Claire De La Lune/Pierrot	8
Frere Jacques/Are You Sleeping	8
Sakura	8
Alouette	7
Aura Lee	7
Down By The Station	7
Largo from New World Symphony	7
Lightly Row	7
Minuet in G	7
Camptown Races	6
Carnvial of Venice	6
Kum Bah Yah	6
Mary Ann	6
Skip To My Lou	6
Surprise Symphony	6
Volga Boatmen	6
Good King Wenceslas	6
Amazing Grace	5
London Bridge	5

We subsequently analyzed each tune for tonal and rhythm functions (see Figure 3 for an example). This analysis presented several practical challenges. First, presentations of tunes varied in the extent to which they simplified rhythms (see Figures 1 and 2 above). Second, it was sometimes challenging to reconcile contexts implied by notation with those we audiated when analyzing tunes. For example, one method book presented "Rain, Rain, Go Away" as displayed in Figure 4 (note absence of a DO signature for harmonic context); presentations of this tune with which we were familiar suggested notation in Figure 5 (with DO as "home").

Figure 3.

Figure 4.

Figure 5.

Ultimately, we made subjective decisions to place tunes in objective categories. Recognizing that such common repertoire is audiated and notated in a variety of ways, we discussed each tune and agreed on a rendition we both felt was most consistent with the way in which students were likely to know the tune (e.g., "Mary Had a Little Lamb" with divisions and elongations; "Rain, Rain, Go Away" in Major tonality).

Results

After identifying and analyzing these 24 tunes, we organized them by rhythm and tonal content. In Table 2, we present tunes organized by rhythm content; we present tunes organized by tonal content in Table 3. Next, we compared these sequences of tunes. Gordon (2012) indicates that tonal and rhythm content learning sequences begin with "the most elementary level (classification) of learning" (p. 170, 214) at the top of each sequence. Therefore, we looked for tunes common to the most elementary level of each sequence (i.e., Major tonality, tonic/dominant functions and Duple meter, macro/microbeat functions) as a point of departure. Three tunes fit these criteria: "Down by the Station," "Lightly Row," and "Pierrot." It would be logical, therefore, to teach these three tunes at the outset of beginning instrumental instruction, regardless of their placement in a given method book.

See Table 2 on the next page.

Table 2.
Twenty-Four Tunes Sequenced Based on Rhythm Learning Sequence

Tune	Meter	Functions
Aura Lee	Duple	Mm
Down by the Station	Duple	Mm
Good King Wenceslas	Duple	Mm
Jolly Old St. Nicholas	Duple	Mm
Lightly Row	Duple	Mm
Pierrot	Duple	Mm
Sakura	Duple	Mm
Surprise Symphony	Duple	Mm
Volga Boatmen	Duple	Mm
Minuet	Triple	Mm
Frere Jacques	Duple	Mmd
Hot Cross Buns	Duple	Mmd
Mary Ann	Duple	Mmd
Skip to my Lou	Duple	Mmd
Alouette	Duple	Mmde
Camptown Races	Duple	Mmde
Jingle Bells	Duple	Mmde
London Bridge	Duple	Mmde
Ode to Joy	Duple	Mmde
Largo from *New World Symphony*	Duple	Mme
Oh When the Saints	Duple	Mme
Kum Ba Yah	Duple	Mmdeu
Carnival of Venice	Triple	Mmru
Amazing Grace	Triple	Mmdtu

Note. M=macrobeats, m=microbeats, d=divisions, e=elongations, u=upbeats, r=rests, t=ties.

Recommendations

Following those selections, a unilateral next step based on content learning sequences is unclear. Teachers may choose to prioritize either the rhythm or tonal content learning sequence; however, while learning sequence activities engage with meter and tonality separately, repertoire inherently combines tonality and meter. Resolving this ambiguity ultimately requires a teacher to exercise professional judgment. At this point, teachers must consider their unique instructional context when determining what to teach next. For example, to defer teaching the high 2 fingering due to concerns about executive skill, a string teacher may delay playing tunes with TI below DO in the melody until later in the sequence. Other teachers might sequence tunes informed by repertoire with which students have become familiar through general music classes or other musical experiences, or students' music aptitude. When considering your next step, remember that students should be exposed to multiple tonalities and meters throughout the skill learning sequence. For example, Norman (2005) advocates using informal guidance to bathe students with tunes in a variety of tonalities before they learn to perform them, outlining a sequential taxonomy based on harmonic function

Method books often include opportunities for students to extend their learning (e.g., composing an end to a phrase, choosing expressive markings, learning about advanced theoretical concepts). Another logical activity is using common tunes such as those in this article as materials for musical enrichment. Tunes represented in our analysis comprise an overabundance of majority tonality and

duple meter. Most are also in Bb Major with a 4/4 measure signature. Simply audiating and performing each of these 24 tunes in an additional tonality and an additional meter would, in effect, triple a student's repertoire. Performing in another keyality, and/or reading and notating each tune in another measure signature, would provide further enrichment. These objectives are consistent with ideas and techniques from a variety of musical traditions (e.g., Aebersold, 2010; Baker, 1995; Grunow, Gordon, & Azzara, 2001; Levin, 2009).

Beyond these 24 tunes, what if your students do not know tunes on this list? What if they do not know tunes in the lesson book you are using? While part of developing good musicianship is ability to read unfamiliar music with understanding, an additional challenge for 21st century music educators is incorporating repertoire familiar to students. This repertoire likely represents a variety of music styles from a variety of cultural contexts. Similarly, many students now identify "When Johnny Comes Marching Home" as "The Ants Go Marching," or associate Copland's "Hoe Down" with the Wendy's commercial "Where's the Beef?" While melodic and rhythmic elements are relatively unchanged in these examples, many other tunes are either no longer part of our shared experience (e.g., "Hot Cross Buns," "Sweet Betsy from Pike"), or are known by only some of our students (e.g., hymn tunes).

Another strategy to consider is asking students to bring familiar repertoire to instruction. Students listen to a variety of approachable songs they can learn to play by ear (e.g., popular music, video game and movie themes, commercial jingles). Asking students to perform familiar repertoire allows them to learn more about music that motivates them. This strategy also helps teachers further develop their musicianship by increasing their own repertoire. These familiar tunes can then be infused into existing curricular content sequences.

Recognizing that many school districts require certain method books, or that many teachers are comfortable teaching with a particular book, we recommend considering these strategies for thoughtfully sequencing beginning instrumental repertoire, regardless of method book, based on Music Learning Theory.

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[i] Readers familiar with recent developments in beginning instrumental music instruction may also be aware of *The Habits of Musicianship: A Radical Approach to Beginning Band* (Duke & Byo, 2011), a method book available for free download. While we note this book offers much that is commendable in "overthrowing the hegemony of published method books" (Duke, 2010, p. 218), material in the book is original music composed by the authors, and was therefore not suitable for this analysis.