Audiation-Based Recorder Instruction in the General Music Classroom

by Kathy Liperote

The United States is one of many countries in which recorder instruction is an integral and popular part of the general music curricula (Reynolds & Gottschalk, 2009; Wortman, 1968). Although instructional approach may differ (e.g., rote or note), recorder provides opportunities to teach many musical skills, including composition, improvisation, music elements, and aural skills (Grunow 2005; Kersten, 2000; Marshall & VanHaaren, 2006; Wortman, 1968). Teachers claim that playing with recorded accompaniments will increase students' listening skills, and thereby,

improve intonation and dynamic balance (Reynolds & Gottschalk, 2009). Recorder ensembles provide a venue for students to sing, accompany, and develop an awareness of harmony, while also being exposed to an array of ensemble literature (Burakoff, 1966; Kersten, 2000). Of the myriad reasons for recorder instruction in the general music classroom, perhaps the most common and/or important, is to teach students to read notation (Burakoff, 1966; Marshall & VanHaaren, 2006; Kersten, 2000; Wortman, 1968).

Common Practice Recorder Instruction

The typical process for teaching recorder is to introduce students immediately to notation while simultaneously teaching executive skills (e.g., embouchure, posture, hand position, finger placement, and articulation). Common practice method books (e.g., *Best in Class Comprehensive Recorder Method, Essential Elements Recorder Classroom Method, Recorder Express, Recorder Fun,* and *Yamaha Recorder Student*) begin with pages that define music symbols, such as the treble clef, note names on the staff, measure lines, time signatures, fingerings, and charts with note and rest value equivalents. The first notes taught are, almost without exception, B, A, and G. Instruction begins with students associating fingerings with note names and tapping their feet to "count" rhythms. Sometimes the note name is written inside the note head, and numbers are written below each note or rhythm to indicate beats. Gradually students learn songs, but they are notated with uncharacteristic rhythms at unmusical tempos, making them virtually un-

recognizable. Instructional emphasis is on the visual (notation). But unless students have the prerequisite ability to sing in tune and move their bodies in an organized manner, the early introduction of notation, without musical context or regard for aural skills, will likely result in lack of comprehension; students will be limited to decoding and imitating notation (Gordon, 2012; Grunow, 2005).

Audiation

Audiation, a word coined by Edwin Gordon, is the process by which we assimilate and comprehend in our minds music that was just heard or heard in the past. Audiation is to music what thought is to language (Gordon, 2012). Instrumentally speaking, audiating while playing an instrument is like thinking while speaking language. It is through audiation that children acquire a sense of tonality, meter, and style—necessary skills for reading music and playing an instrument with comprehension.

Ideally, audiation-based activities begin informally at home when parents sing to and with their children and engage them in movement and play. Children's audiation continues to develop with similar activities in general music class prior to their recorder instruction, which typically begins in third or fourth grade. When audiation skills are in place, executive skills required to play an instrument develop much more quickly and easily. The fundamental question then arises, how can teachers help students develop audiation, and instrumental and music reading skills? Perhaps the answer to this question is best approached by briefly reviewing the music learning process.

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Learning Music and Learning Language

Although music is not a language, music and language share a similar learning process. Four vocabularies describe both: listen, speak, read, and write; they are hierarchical and interactive (Gordon 2012; Grunow, 2017; Liperote, 2006). For example, children learn language by first listening to the many sounds heard in their environment. They begin to recognize perceptual units of speech (e.g., phrases, words, phonemes, vowels), attach meaning to them, and imitate those sounds in their own "speech" (babble) or vocal approximations. Soon, children's vocal imitations become intelligible words they learn to associate with familiar people, objects, and feelings. By age three, syntax and meaning develop when children

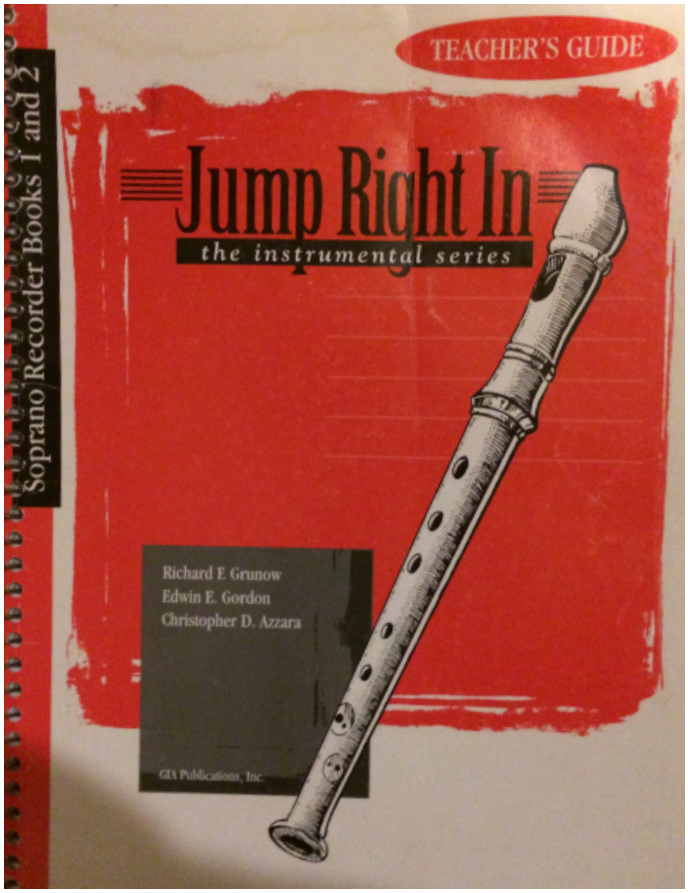
put words together to form sentences and phrases, and eventually, to carry on conversations. Over a four- to five-year period, children acquire large listening and speaking vocabularies, forming the foundation for learning to read and write. The four vocabularies form a chain, with proficiency at earlier levels giving the child logical, sequential entry to the next level. Later, children learn the theory of language (e.g., parts of speech, grammar, and sentence structure).

A similar process occurs when learning music, meaning the same path to music literacy can be achieved (Gordon, 2012; Grunow, 2017; Liperote, 2020). Ideally, parents expose children to a large and varied listening vocabulary (songs) sung and performed on instruments. Being innately musical, children freely engage in vocal play and improvised songs and chants that reflect experiences and events that are meaningful to them. They also sing and move with their parents, siblings, and caregivers, which prepares them for the babble stage in music, similar to the babble stage in language. Children emerge from music babble when they learn to distinguish between major and minor tonalities, and duple and triple meters. The longer children engage in "listening" and "speaking" activities, the better prepared they will be to learn to play an instrument, improvise, and eventually, to read and write notation—with comprehension.

Patterns in music function as words do in language

Whole-Part-Whole

Music learning and language learning share another important similarity: both occur in a "whole-part-whole" process. In language, children first listen to conversations ("whole") in the environment. Their first attempts at speech are imitations of those sounds (babble), which soon become intelligible words ("parts"). Through continual listening and speaking, children learn to put words together to form phrases and sentences as they communicate their needs and feelings, tell stories, and converse ("whole"). The "whole-part-whole" process continues throughout life. In music, the same process occurs when children listen to and sing many songs ("whole") in a variety of tonalities, meters, and styles. This musical interaction prepares them to then learn function-based tonal patterns and rhythm patterns ("parts") derived from those songs. (Tonal patterns are groups of two to five notes performed in succession without objective rhythm. Rhythm patterns are two to four measures of rhythms performed without reference to pitch) (Grunow, Gordon, & Azzara, 2001). Patterns in music function as words do in language: both communicate meaning; they are the syntactical units that enable comprehension. And as words in language combine to form sentences and conversations, patterns in music combine to form phrases and songs ("whole"). Again, the "whole-part-whole" process continues throughout life.



Jump Right In: The Instrumental Series

There is a plethora of recorder books from which general music teachers can choose; few are based on audiation (Weaver, 1989). There are exceptions. Perhaps most notable is *Jump Right In: The Instrumental Series* (JRI) (Grunow, Gordon, & Azzara, 2001), which is based on research in Music Learning Theory and the belief that "a music instrument is an extension of the human mind and body" (p. 12).

JRI includes 12 sequential lesson plans and over 30 teaching procedures for teaching beginning instrumental music and for developing students' audiation. Accompanying the series are audio files that contain numerous recordings of melodies, bass lines, and harmony parts; tonal and rhythm patterns; melodic patterns; and accompaniments for study in school and at home. The series prioritizes the audiation instrument, thereby providing context for students to learn to play recorder. Through logically-sequenced instruction, the recorder functions as an extension of students' audiation, not as a mechanical tool. Students demonstrate higher levels of achievement and become intrinsically motivated to improve their skills, remain in the music program, and continue a lifetime of music making (Alexander, 2016; Grunow, 2017; Weaver, 1989).

It is not within the scope of this article to describe all of the Teaching Procedures in JRI Therefore, in the pages that follow, I will summarize a few that uniquely engage students in audiation-based recorder instruction. For details, please consult *Jump Right In: The Teacher's Guide.*

Teaching a Melody and Bass Line

The most important of the four vocabularies is *listen,* because it establishes the foundation on which the others are built. In music learning, as in most learning, we learn by making comparisons (Gordon, 2012; Grunow, 2005). Therefore, teachers should provide many contrasting musical examples that students can listen to, sing, and compare within a close instructional time frame, including contrasts in tonality, meter, style, genre, timbre, and so on.

Following is a condensed Teaching Procedure from JRI for teaching a melody and bass line. For the teacher:

- Choose a song based on the musical content you are teaching (e.g., major or minor tonality; duple or triple meter; tonic and dominant tonal functions; macrobeat and microbeat rhythm functions).

- Begin by establishing a context (tonality) with your voice or instrument. In major, for example, sing *do mi so | so fa re ti | do*, or play I-V7-I on a harmonic instrument. Ask students to hum or sing the last *do* ("resting tone") before you do.

- Without accompaniment, sing the melody expressively one or more times on a neutral syllable such as *doo* (connected) or *too* (separated), depending on the style of the song. Ask students to hum or sing the resting tone associated with that song (*do* in major tonality; *la* in minor tonality) at various times during the performance (e.g., mid-phrase or on the last note).

- Depending on the musicianship level of the students, sing the song in its entirety or in phrases for students to echo immediately after your performance. Avoid singing *with* the students. Instead, listen and assess their performances together and individually. When students are ready, put the phrases together to form the whole song (i.e., "whole-part-whole").

- Ask students to sing the melody silently (audiate) or aloud while you sing the bass line (roots of the harmonic progression) one or more times on a neutral syllable. Then sing the bass line in its entirety or in phrases for students to echo. The bass line solidifies the melody, adds musical interest, and encourages students to anticipate (audiate) what comes next. Use the same procedure for teaching harmony parts.

- Assign the melody, bass line, and/or harmony parts to students according to section, gender, or some other criteria. Draw on students' creativity by asking bass-line and harmony-part singers to improvise rhythms using prescribed rhythm functions, for example, macrobeats and microbeats. During these activities, be sure students perform individually so they can learn from each other's demonstrations while you assess.

Pattern Instruction

Just as children comprehend language through familiar words and phrases, children can understand the structure of songs by becoming familiar with tonal and rhythm patterns, and series of patterns.

Tonal Pattern Instruction

Following is a condensed Teaching Procedure from JRI for teaching tonal patterns. For the teacher:

- Choose tonal patterns based on songs students are learning.
- Establish a context (tonality) with the voice or a harmonic instrument (e.g., I-V7-I harmonic progression).
- Sing each pattern with a neutral syllable (e.g., "*bum*"), separating notes within each pattern. Students should experience the flow of each tonal pattern to understand its content (e.g., tonic or dominant) rather than focus on individual notes.
- While singing the pattern, move your hands and arms out in front of your body to prepare to cue. By the time you complete the last note of the pattern, your hands should be outstretched with elbows slightly bent–similar to where you place them on the steering wheel of a car. Then, "tap" the air lightly as a gesture for students to breathe and echo. Immediately repeat the process to prepare students to hear and echo your next pattern.
- Call on individuals as well as the entire group. For individual performances, gesture to the selected student at the last moment. This keeps everyone interested, audiating, and ready to echo the pattern.

Begin with tonic and dominant functions in major and minor tonalities because they are most recognizable, and therefore, most accessible. As students' skills increase, progress to more complex patterns. This will further their understanding of harmonic progression as well.

- When most students are able to sing patterns with a neutral syllable, teach the same patterns with tonal syllables based on tonal function. Use movable *do* and *la*-based minor so students can associate different labels with different sounds; that is, they hear the resting tone change to correspond with different tonalities. Syllables allow students to store and retain more patterns in their audiation, thus building a vocabulary that they can later immediately associate with notation.
- Teach a sequence of patterns in an order that becomes familiar to students, just as in language, children learn a familiar order of words to describe objects or people. Once the majority of students are able to perform tonal patterns in a familiar order, sing them in an unfamiliar order, which will help them to recognize patterns in unfamiliar contexts, such as a new song.

Rhythm Pattern Instruction

Following is a condensed Teaching Procedure from JRI for teaching rhythm patterns. For the teacher:

- Choose rhythm patterns based on songs students are learning.
- Establish a rhythmic context (meter and tempo) by asking students to join you in tapping their heels on the floor to feel the large beat (macrobeat) and tapping their hands on their thighs to feel the small beat (microbeat). Some teachers may prefer having students tap two fingers of one hand in the palm of the other to represent the microbeat.
- Chant each pattern with a neutral syllable (e.g., "*bah*") while maintaining a consistent tempo using expressive vocal inflection. (Vocal inflection helps students differentiate and retain patterns, and to perform musically).
- In duple meter, continue tapping macrobeats with your heels throughout the pattern. On the third macrobeat, stop tapping microbeats on your thighs and move your hands out in front to prepare for a breathing gesture. (Students should continue tapping the microbeats). On the fourth macrobeat, "tap" the air to cue the students to breathe and echo the pattern on the next downbeat.
- Call on individuals as well as the entire group to echo the pattern. For individual performances, gesture to the selected student just before the downbeat so all students stay on task and are ready to echo while you assess.
- Begin with rhythm patterns that contain macrobeats and microbeats in duple and triple meters because they are most common and familiar to students. Chant patterns in familiar and unfamiliar orders as suggested in "Tonal Pattern Instruction."
- When most students are able to chant patterns with a neutral syllable, teach the same patterns with rhythm syllables based on beat function; that is, syllables that are consistent with the way rhythms feel, regardless of how they appear in notation (Grunow, 1992).

Teaching Recorder

Knowing a large and varied repertoire of songs and their corresponding tonal and rhythm patterns prepares students to learn to play recorder. When teaching executive skills, the physical aspects of playing recorder, the teacher first models correct posture, hand position, and individual finger movements on an actual recorder while the students follow along on their "imaginary" recorders. When ready, students practice the same skills on their recorders. Next, students learn

connected style of articulation using the syllable "doo," and separated style of articulation using the syllable "too." They practice both styles first with the voice by saying "doo" and "too" in duple and triple meters. After learning proper embouchure, they perform the syllables with an airstream only, and then on the recorder mouthpiece with "no fingers down." Soon, students are ready to learn their first fingering. The teacher establishes tonality for G major, then sings and demonstrates G-*do*. The students do the same, and then perform G-*do* in different contexts (e.g., duple and triple meters, with connected and separated styles of articulation). Soon, they learn *ti, re,* and *mi* in the same way. Because of their familiarity with solfège, students are quickly able to play three-note songs that they previously sang, like "Major Duple," "Hot Cross Buns," "Mary Had a Little Lamb," and "Pierrot." In time, they perform the same songs in different keys (e.g., F-*do*, Bb-*do*) and in minor tonality (e.g., e-la, g-la), learning new fingerings and songs along the way. Learning to play the leading tone *ti* early on (e.g., F# in G-*do*) and *si* (e.g., D# in e-la) is important because it reinforces students' understanding of the dominant function, and opens their ears to hearing and performing tonic-dominant-tonic progressions so prevalent in the repertoire. When students are not encumbered by prematurely-imposed notation, their technique often develops quickly; they do not have to wait for notation to "catch up" to what they can already play by ear.

Students are also taught to play melodic patterns, which are combinations of tonal and rhythm patterns, two to four measures in length. They may be a fragment of a melody, or notes within melodies that alternate. The teacher establishes tonality, performs a melodic pattern, and the students echo on the next beat. Particularly beneficial is that, during this activity, teachers hide their fingers as they perform each pattern by standing behind the students or behind a music stand, turning their backs to them, or asking them to close their eyes. By doing so, students must rely on their audiation to echo melodic patterns rather than their eyes.

Students also play tonal patterns on recorder that they previously sang with tonal syllables. After establishing tonality, the teacher demonstrates each fingering of a tonal pattern-one note at a time-while also singing its solfège name (e.g., *do mi do*). The students sing and finger

along with the teacher. Next, the teacher performs the pattern with no space between notes so the students experience the pattern as a grouping; again, the students do the same. In time, students play minor tonal patterns that they previously sang, and they play patterns in different major and minor keys. Playing tonal patterns and melodic patterns not only helps develop students' executive skills, but also helps them to play many songs-by ear.

Introducing Improvisation

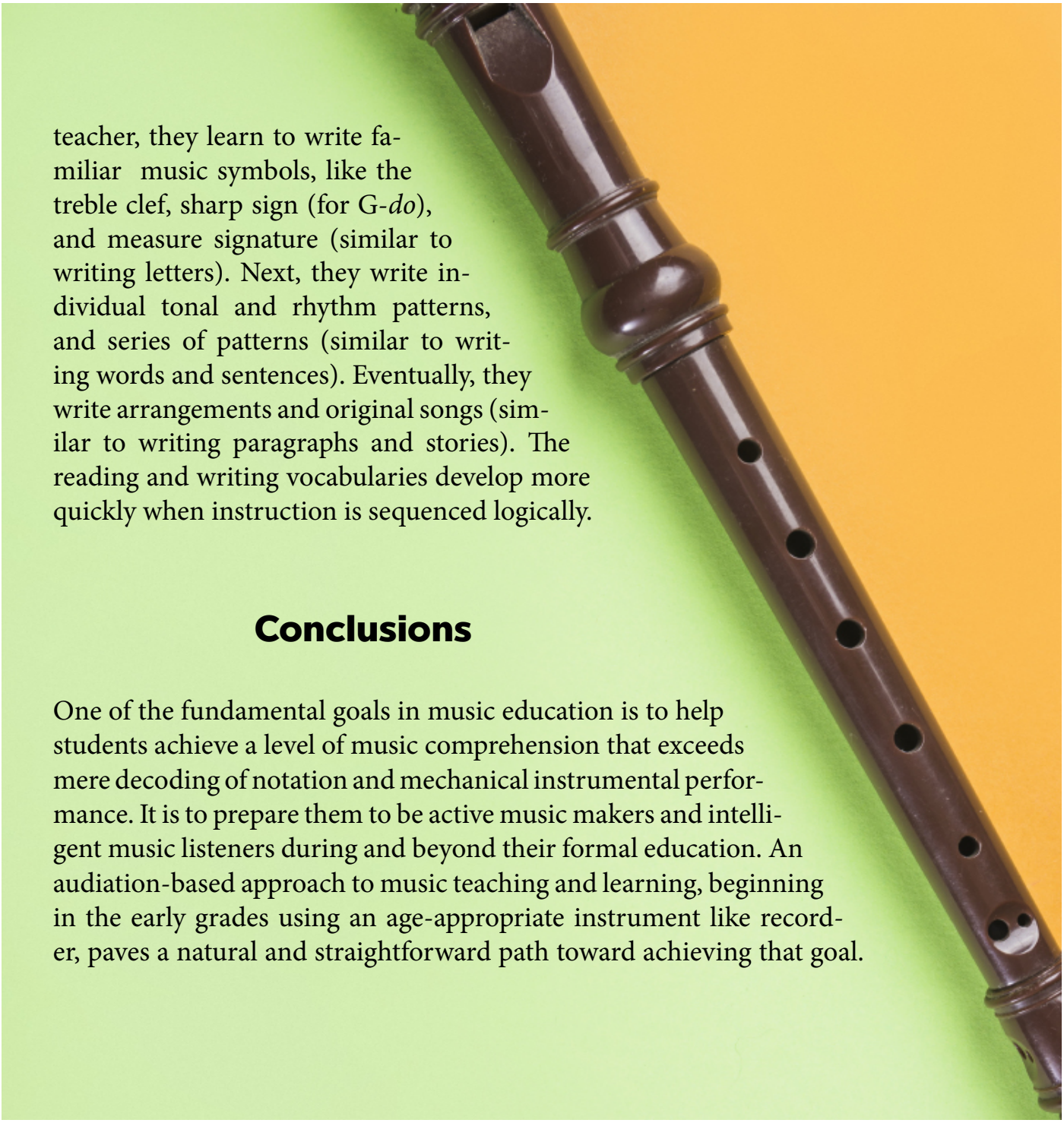
When students are comfortable with patterns and syllables, they are ready to learn the function names of patterns, which will also prepare them for improvisation. For example, the teacher explains that any combination of (singing) *do mi so* is a "major tonic pattern," and that any combination of (singing) *so fa re ti* is a "major dominant pattern." The teacher sings a pattern with tonal syllables, and students respond by singing the name (function) of the pattern (e.g., tonic or dominant). When students are ready, the teacher can introduce improvisation by singing a tonic pattern in major tonality (e.g., *do mi so*) and asking students to sing a different tonic pattern (e.g., *do mi do*). Next, the teacher sings a dominant pattern (e.g., *so fa re*) and asks students to sing a different dominant pattern (e.g., *re ti re*). Over time, this process expands to include subdominant patterns in major (i.e., combinations of *fa la do*), and tonic, dominant, and subdominant functions in minor tonality.

A similar process occurs when teaching students to improvise rhythm patterns. For example, the teacher chants macrobeat and microbeat patterns and asks students to respond with their own rhythmic successions using the same functions. As with tonal patterns, rhythm patterns increase in difficulty (e.g., divisions, elongations, rests) as students' skills improve. Eventually, students improvise longer patterns, combine tonal and rhythm patterns in "question/answer" exchanges, and improvise entire solos. Students draw on their audiation to repeat these improvisation activities with recorder.

Reading and Writing Music

With properly-sequenced instruction, learning to read notation is a matter of associating a new visual experience with a familiar aural experience. Using syllables, students first read familiar patterns and associate them with notation. Just as in language, students first read familiar words and associate them with the print of language. Soon, they are able to read series of patterns, and then tonal and rhythm patterns combined-songs. Students' reading skills transfer easily to the instrument because of their familiarity with many songs, patterns, and tonal and rhythm syllables.

Not surprising, children learn to write music similar to the way they learn to write language. With help from the



teacher, they learn to write familiar music symbols, like the treble clef, sharp sign (for G-*do*), and measure signature (similar to writing letters). Next, they write individual tonal and rhythm patterns, and series of patterns (similar to writing words and sentences). Eventually, they write arrangements and original songs (similar to writing paragraphs and stories). The reading and writing vocabularies develop more quickly when instruction is sequenced logically.

Conclusions

One of the fundamental goals in music education is to help students achieve a level of music comprehension that exceeds mere decoding of notation and mechanical instrumental performance. It is to prepare them to be active music makers and intelligent music listeners during and beyond their formal education. An audiation-based approach to music teaching and learning, beginning in the early grades using an age-appropriate instrument like recorder, paves a natural and straightforward path toward achieving that goal.

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