



**Title:** Audiation, Improvisation, and Music Learning Theory

**Author(s):** Christopher Azzara

**Source:** Azzara, C. (1991, Spring & Summer). Audiation, improvisation, and music learning theory. *The Quarterly*, 2(1-2), pp. 106-109. (Reprinted with permission in *Visions of Research in Music Education*, 16(2), Autumn, 2010). Retrieved from <http://www-usr.rider.edu/~vrme>

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# Audiation, Improvisation, and Music Learning Theory

By Christopher Azzara

*Eastman School of Music of the University of Rochester*

**E**dwin Gordon's music learning theory is an excellent model for understanding learning. While similar in some respects to other theories of music learning, it is not an application of other theories. Rather, it is an attempt to answer the question, "How do individuals learn music?" The answers to this question should provide the foundation for music education. The concept of audiation is at the heart of Gordon's music learning theory.

*Audiation is to music what thought is to language.*<sup>1</sup> In order to master a language, one must be able to think in that language. Likewise, in order to understand music, one must audiate music. Audiation takes place when one comprehends music for which the sound is not physically present. It is important to distinguish between audiation and imitation. To audiate is to think for oneself; imitation is quickly forgotten. Musicianship is fundamentally based on audiation. When we audiate, we give meaning to music that we read, write, create, and improvise. We audiate music we have heard, as well as music we are predicting. Audiation is not dichotomous; it is a matter of degree, not kind. The better one audiates, the more one is able to understand.

*You are what you hear.* One of the essential elements of music learning theory is the audiation of tonal and rhythm patterns. We learn music similarly to how we learn language. Language has syntax. In language, we comprehend by organizing words. Music has syntax. We comprehend music when we audiate tonal and rhythm patterns and are able to combine and sequence them in a larger context. For example, one may internalize a sense of tonality and meter. To audiate is to understand, and the greater one's understanding, the greater is the

potential to appreciate music.

*We learn to audiate so that we can audiate to learn.* With musical understanding, individuals can:

- 1) listen intelligently to music;
- 2) develop aesthetic sensitivity and appreciation through listening, improvisation, and performance;
- 3) develop the ability to communicate ideas, feelings, and emotions through improvisation,

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composition, and performance; and  
4) listen to and participate in musical performances on varying levels of understanding commensurate with individual aptitude, achievement, and interest.

## What is Basic to Music Education?

When specifying what is basic to music education, it is necessary to distinguish between musical behaviors and music-related behaviors. A musical behavior involves understanding based on audiation. Music-related behaviors can be described by

activities such as identifying clefs or key signatures and knowing the time values of notes. Music educators should research, design, and incorporate curricula, methods, and teaching techniques relevant to both behaviors, but emphasis should be placed on teaching the content and audiation skills relevant to musical behaviors. Consider the high school graduate who can recognize a treble clef sign, tell you the names of the lines and spaces on the staff, and the time values of each of the notes. He reads on the title page that the piece was written by J. S. Bach, and he knows that Bach was a prolific Baroque composer. When asked to sing or audiate the music, however, he cannot. This individual cannot give meaning to the notation. Although not unimportant, music-related behaviors are not necessary to engage in a musical behavior; they are only necessary to talk about music.

### **Individual Differences and the Learning Process**

Gordon's music learning theory is a paradigm that is the result of creative research and critical thinking, and it provides direction and definition to educators and researchers. Music learning theory is not one method of teaching music. Rather, it is the outline of logical, fundamental principles for understanding music learning. Because of the open-ended nature of the paradigm, it lays the groundwork for a myriad of teaching and learning settings.

Music instructors at all levels should have an understanding of the music learning process. Individuals bring their unique perspective to any situation; one's world view is influenced by one's specific life history. Understanding teachers and students in these terms is critical when considering any educational or research endeavor. Good teaching is not synonymous with exposure. Sadly, much of what is called teaching is simply exposure, and students are left to learn on their own. The teacher's role becomes that of a disciplinarian. Yet, with an understanding of method, teachers know what to teach, when to teach it, and why it is taught. Techniques demonstrate how to teach. When teachers apply techniques based on method, they can improve instruc-

tion and are able to teach to the differences of individual students.

Gordon's music learning theory is a model for method, and method based on this theory suggests techniques for learning sequence activities and classroom activities. Music learning theory supplies a hierarchy of sequential objectives so that students can acquire a music vocabulary for understanding music. Skill learning sequence and content learning sequence are the fundamental dimensions of music learning theory.

The skill learning sequence includes levels of discrimination and inference learning and their respective parts. In music learning theory, both rote and conceptual learning are emphasized. Discrimination learning is rote learning, and the student develops a vocabulary of familiar tonal and rhythmic patterns. During discrimination learning, the teacher gives the answers and teaches students to make comparisons. Perception is not learning; discrimination is learning. We learn what things are by what they are not. When we teach minor, students learn more about the nature of major. When we teach triple, students know more about the nature of duple. If everything is the same, there can be no inferences. Inference learning is conceptual learning, and students give meaning to unfamiliar tonal and rhythm patterns based on the familiar patterns which they learned by rote in discrimination learning. During inference learning, students teach themselves; teachers provide guidance.

Just as skill learning moves sequentially, Gordon's content learning sequence provides an orderly outline for tonal and rhythm content. Music skill and content are not mutually exclusive. Gordon (1989) states: "Skills cannot be learned unless they are taught in conjunction with tonal content or rhythm content, and tonal content and rhythm content cannot be learned unless they are taught in conjunction with a skill" (pp. 33-34).

### **Measurement and Evaluation**

Identifying musical behaviors defined by audiation and teaching to individual differences with the aid of objective measurement tools are two critical components for exemplary teaching. The primary purpose for

measurement and evaluation is to improve instruction and to teach to individual differences (Grunow & Gordon, 1989). Yet measurement and evaluation have been the subjects of much concern and criticism. Controversy exists over the application of and need for measurement and evaluation in music education. A lack of understanding by music educators has been the cause of much confusion and debate when designing curriculum and evaluating teaching effectiveness. Test interpretation should not be used to categorize students or as proof of good or bad teaching. Test scores should, however, be recognized as samples of behavior under certain conditions at certain times. As such, they provide objective scores upon which one can evaluate and help improve instruction and learning.

An understanding of musical aptitude and music achievement and their implications is essential to any discussion of teaching to individual differences. Confusion exists concerning the difference between aptitude and achievement. Many vague terms, including "talent" and "ability," also have been used in attempts to describe musicianship, resulting in more confusion. Aptitude is defined as the measure of one's potential to learn, while achievement is what has actually been learned. An individual who demonstrates high achievement must display at least equally high aptitude, while an individual who possesses high aptitude will not necessarily demonstrate high achievement (Gordon, 1989). The value of testing is to improve teaching and learning experiences. Music aptitude is one's potential to audiate: Everyone has music aptitude, and some students have the potential to achieve in music more than in other subjects (Grunow & Gordon, 1989).

Just as techniques should be understood in terms of method, music achievement should be understood in terms of music aptitude. *Measuring music achievement is the assessment of what a student has accomplished. It includes performance ability, aural skills, aural-visual skills, general musical knowledge, knowledge of music notation, composition skills, and improvisation skills.*

## Creativity and Improvisation

Since the mid-fifteenth century when the printing of music began, an ever-increasing emphasis has been placed on notation. Yet it is important to remember that notation is visual documentation for an aural art. Just as it is possible to read and understand the phrases on this page, it is possible to read and audiate notation. When performance includes audiation, meaningful expression takes place: Students give meaning to notation. Knowing how to create and improvise music is not a necessary readiness for reading music with meaning. Nevertheless, when students have the audiation skills necessary to improvise, the relationship between composition and performance is put into its proper perspective.

The word "improvisation" has been used as a catch word to describe a variety of activities ranging from aleatoric exploration to unrestricted creativity. While creativity and improvisation are similar, there are important differences. Creativity involves less restrictions than improvisation. While improvisation is a creative activity, it is important to specify precisely what is meant by the word "improvisation." A refined definition brings focus to activities and allows for a clearer understanding of improvisation's role in musical education.

Improvisation means that an individual has internalized (can audiate) a music vocabulary and is able to express intended musical ideas spontaneously. Students accrue an "audiation dictionary" from which to draw when engaging in improvisatory endeavors. Gordon states that without an ample amount of tonal and rhythm patterns in various tonalities and meters, students will only engage in aleatoric exploration. Audiation of various patterns crystallizes the difference between having to create something and having something to create (Gordon, 1989).

Improvisation is not exclusive to jazz; opportunities to improvise in various settings should be provided. Individuals improvise *daily in language when engaging in conversation.* Yet, with the exception of *some experiences in general music classes and various jazz ensembles*, many students are never given the opportunity and encourage-

ment necessary to improvise music with syntactical meaning. Developing improvisation skills involving audiation yields improvisation that is as natural and interactive as stimulating conversation.

Many of today's audience members are passive listeners. Many concert-goers attend more to the visual and acoustic aspects of a performance than to the aural/musical aspects. Music in many people's lives is synonymous with ambience and entertainment. One of our goals as music educators should be to facilitate the development of independent music makers and active listeners. Aural understanding—audiation—and improvisatory experiences are at the root of accomplishing this goal.

### Future Needs and Implications

Just as each culture has its language, each culture also has its music. Music class is the place to learn the understanding of music, just as English class is a place to understand English. If all students have some aptitude for music and many students, indeed, have the capacity to succeed in music more than in any other subject area, then all students should be provided with opportunities to develop the music knowledge and skills

necessary to optimize music understanding.

While technology and media continually change, audiation and the ability to create and improvise remain fundamental. Future research should involve an examination of the role and definition of improvisation and creativity in music education.

An increased awareness of musical behaviors, the learning sequence process, method and related techniques, achievement in terms of aptitude, and the use of measurement and evaluation tools provides the practical foundation for good music instruction. Developing musicianship in terms of audiation provides for more meaningful performances and musically intelligent audiences. Music is a vital part of life; music educators have the opportunity to enhance the experience.

### Footnote

1. Statements in italics are published and unpublished quotes of Edwin Gordon.

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