MUSIC AS A WAY OF THINKING

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To think about music, one gives meaning to music. There are two types of meaning associated with music. They are emotional meaning and intellectual meaning. Emotional meaning is the only meaning that the majority of laypersons and some educated musicians give to music. Most educated musicians and some laypersons, however, give intellectual meaning as well as emotional meaning to music. When one gives emotional meaning to music, he associates concepts, events, and objects with music. For examples, a concept may be patriotism, an event may be a wedding, and an object may be a galloping horse. Emotional meaning is extrinsic to music. When one gives intellectual meaning to music, he interprets the elements of the music itself. He is aware of whether the music is, for example, in major or minor tonality, and whether the music is, for example, in duple or triple meter. Moreover, in addition to other aspects, he makes decisions about the keyality, the harmonic progressions, the style, and the form of the music. Intellectual meaning is intrinsic to music.

The emotional meaning and the intellectual meaning that one gives to music are the basis of his appreciation and understanding of music. If one gives only emotional meaning to music, he can achieve only an elementary appreciation of that music. On the other hand, giving intellectual meaning to music is a means of achieving an understanding of that music. Without the understanding of music, one is unable to appreciate music beyond its simplest appeal. For example, as one can appreciate simply the tone quality and inflections of a speaker who is speaking a language that one does not understand, so one can appreciate only the tone quality and nuances of a performer who is performing music that one does not understand. To the extent that one understands music, he is able to choose

for himself, with confidence, the form and style of music that he will listen to, perform, and compose. It is these two kinds of meaning, intellectual and emotional, that a music curriculum should be designed to impart.

As one gives meaning to music emotionally or intellectually, one thinks about music emotionally or intellectually. Emotional thinking about music is naive thinking. Intellectual thinking about music is significant thinking. Consider a spoken language. As one listens to another speaking, he is perceiving the words that are being spoken. As a result of remembering and interpreting the essential words that were spoken just a few seconds before, one is able to think about and give meaning to what he has heard. He thinks about and gives meaning to the words after they are spoken, not as they are spoken. Moreover, as one is perceiving words and remembering essential words, he is predicting what words he expects to hear next. To the extent that the listener can reasonably perceive words, remember the essential words, give meaning to those words, and predict the words that will be heard next, one is engaging in significant thinking in language.

To understand how significant thinking about music takes place, audiation must be explained. Audiation takes place when one hears the sound of music that is not physically present. He is silently hearing music in his mind's ear. Audiation is to music what remembering is to language. Without the ability to audiate, one cannot think significantly about music. When listening to music, one perceives tonal patterns and rhythm patterns. As he is perceiving tonal patterns and rhythm patterns, he is audiating and giving meaning to the essential tonal patterns and the essential rhythm patterns that he perceived just a few seconds before. And, as he is perceiving tonal patterns and rhythm patterns and rhythm patterns and rhythm patterns and rhythm patterns, he is predicting tonal patterns and rhythm patterns that he thinks he will hear next

in the music. The more developed his sense of tonality (that is, his ability to know whether the music is, for example, in major or minor tonality), the better he will perceive, audiate, give meaning to, and predict tonal patterns. Similarly, the more developed his sense of meter (that is, his ability to know whether the music is in, for example, duple or triple meter), the better he will perceive, audiate, give meaning to, and predict rhythm patterns.

When one engages in significant thinking about music, he audiates tonal patterns and rhythm patterns. Tonal patterns and rhythm patterns are fundamental to music. One does not audiate individual notes as he listens to music any more than one remembers individual letters as he listens to speech. Just as words are groups of letters, so tonal patterns and rhythm patterns are groups of notes. In significant thinking about music, one perceives, audiates, gives meaning to, and predicts tonal patterns and rhythm patterns concurrently. The same group of notes may or may not constitute a tonal pattern and a rhythm pattern. Thus there are important differences in thinking about music and thinking about language. To think significantly about music requires multi-dimensional (tonal and rhythm) audiation. To think significantly in language requires an extensive vocabulary. Moreover, unlike language, music does not have a grammar. There are no nouns, verbs, or adjectives in music. One audiates only syntax in music. Syntax in music is the orderly arrangement of sounds that constitute tonal patterns and rhythm patterns, and the orderly arrangement of tonal patterns and rhythm patterns within a piece of music. One is able to audiate syntax in music as a result of his sense of tonality and his sense of meter. Just as it is strange to say "the red, big, beautiful house", it is strange to perform sequentially inappropriate sounds and patterns in a given style within a particular tonality and meter.

The composer, conductor, and performer audiate in the same way as the

listener. A composer also audiates music that he is creating and then audiates that music as he puts it into notation; a conductor also audiates music through recall or he audiates music that he is reading and interpreting from a score; and a performer also audiates music that he is reading, recalling, improvising, or creating. When one gives meaning through audiation to notation as he is either reading or writing music, rather than attempting to take theoretical meaning from notation, he is engaging in notational audiation.

In all, there are seven ways in which a musician audiates when he thinks significantly about music. He uses them when he 1) listens to familiar or unfamiliar music, 2) reads familiar or unfamiliar music, 3) writes familiar or unfamiliar music, 4) recalls familiar music without the aid of notation and performs it silently, vocally, or instrumentally, 5) recalls familiar music and puts it into notation, 6) creates or improvises music silently, vocally, or instrumentally, and 7) creates or improvises music and puts it into notation.

Learning to audiate and to think significantly about music does not happen automatically. School supervisors must provide appropriate conditions under which students can be taught. Curriculum directors must assist music specialists and classroom teachers in developing correct teaching procedures and in organizing subject matter content so that students can learn. The goal associated with too many music programs is music appreciation, or "love" of music. As lofty a goal as that may be, school personnel must accept the fact that students will not learn to appreciate music fully unless they learn to understand it. Musical understanding, which is a result of significant thinking about music through audiation, is basic to music appreciation. Musical understanding is best acquired when students learn skills in sequential order as those skills interact with levels of subject matter content that are also learned in sequential order. Of equal importance is that students learn tonal

patterns and rhythm patterns in the proper sequential order. Easy patterns must be learned before moderately difficult patterns, and moderately difficult patterns must be learned before difficult patterns. There is sufficient research in the psychology of music to offer guidance in how to apply learning theory to the teaching and learning of music. Curriculum development in music should be based upon that current research. Supervisors should know, for example, that general music classes in the elementary and middle schools in which audiation is taught should meet for periods no longer than 30 minutes and at least twice, and preferably three times, a week. Longer periods and four or five classes a week offer no advantage.

Consideration should be given to music aptitude in curriculum development in music. Music aptitude is normally distributed. Because every student has at least some music aptitude, every student can achieve in music. Thus, whether students are being taught general music or beginning instrumental music, or are members of music performance organizations, their individual musical differences should be taken into account. When a class or a performance group is taught as if every student has average music aptitude, mediocrity is the result. Students with low music aptitude become frustrated, and students with high music aptitude become bored. When a mature teacher wisely uses objective information that is derived from a valid test of music aptitude, students' music achievement is enhanced and their psychological well-being is sustained. No student is denied music instruction, and all students in a classroom receive music instruction appropriate to their levels of music aptitude. Certainly, no student is typecast throughout his school career.

Music aptitude is developmental from birth through approximately age eight. It is stabilized from approximately age nine throughout one's life. That does not mean that a student cannot achieve in music after he is nine years old. What

it does mean is that students approximately nine years of age and older will achieve in music at a level no higher than that at which their music aptitudes have stabilized. The younger a child is when he learns to audiate, the higher his level of music aptitude will be when it stabilizes. Thus the preschool years through grade three, when a child is in the developmental music aptitude stage, are the most important years for a child to be taught and to learn music. Up to age nine, a child's musical environment has a profound effect on his music aptitude. The richer his musical environment and the higher the musical potential he was born with, the greater his music aptitude will become. Moreover, all things being equal, a child in the first grade can learn to audiate more quickly than can a child in the second grade, a child in the second grade can learn to audiate more quickly than can a child in the third grade, and so on. It follows that the very best of both vocal and instrumental music teachers should be teaching in the elementary school, possibly in addition to their assignments in the middle, junior high, and senior high schools. If the very best music teachers do not teach in the elementary school, they at the very least should cooperate with the elementary school music teacher in developing the best music curriculum possible. If children receive appropriate and adequate music instruction in the lower grades, they will be more able to learn about music in the upper grades and, in turn, will be more able to contribute to the school's music program.

When developing curricula in music, it is important to remember that in most cases, the typical child enters school with a limited background in music. A typical child has gone through a language babble stage and brings to school at least a speaking vocabulary of possibly more than a thousand words along with some understanding of grammar. But he seldom has gone through a music babble stage. He usually does not bring to school even a listening vocabulary, let

alone a performing vocabulary, of tonal patterns and rhythm patterns. Moreover, in regard to music syntax, a typical child in the elementary grades seldom has a sense of tonality or a sense of meter, and he cannot keep a consistent tempo. Unfortunately, formal instruction in music is usually begun before the child has those basic readinesses to profit from such instruction. Children should be given informal instruction in music before, or at least along with, formal instruction in music. Such informal instruction in music, which guides a child through the music babble stage, should be undertaken as soon as a child enters school, preferably in kindergarten or preschool. To be complete and appropriate, curriculum development in music must give as much consideration to the preschool child as to the child of school age. To do less than that is to do less than the best. Only after proper instruction, begun in his preschool years, can a student achieve the intellectual understanding and emotional appreciation of music that is the goal of music education.

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