

2021

Learning Sequences and Music Learning

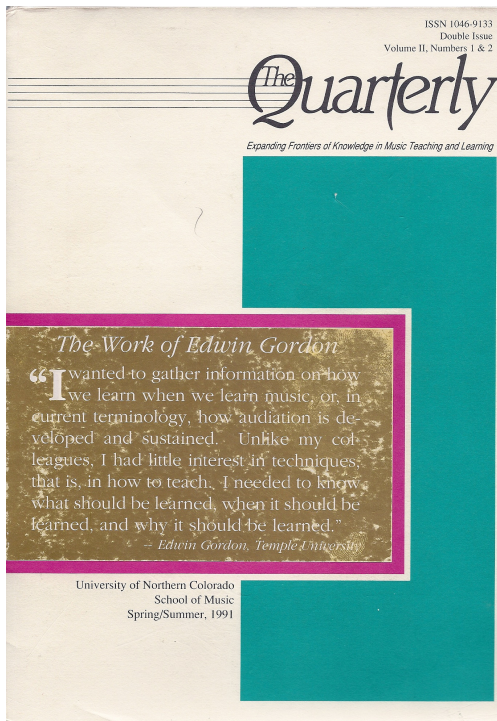
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Recommended Citation

Beall, Gretchen (2021) "Learning Sequences and Music Learning," *Visions of Research in Music Education*: Vol. 16 , Article 12.

Available at: <https://opencommons.uconn.edu/vrme/vol16/iss2/12>



Title: Learning Sequences and Music Learning

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Source: Beall, G. (1991, Spring & Summer). Learning sequences and music "ĩ š@ ¥ £ *The Quarterly*, 2(1-2), pp. 87-96. (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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“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.”

--Christopher Azzara

Section 4:
*Music Learning
and Teaching*

Learning Sequences and Music Learning

By Gretchen Beall

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The research and writings of Edwin Gordon concerning the aptitude for and the processes of learning music have been remarkably consistent and persistent in direction for the past 25 years. From the publication of Gordon's *Musical Aptitude Profile* in 1965 and *The Psychology of Music Teaching* in 1971 through the 1989 edition of *Learning Sequences in Music: Skill, Content, and Patterns*, Gordon's point of view, objectives, and methods for achieving those objectives have varied little. There are some transpositions of ideas that are significant; the point of view has changed very little.

Introductory Remarks

Gordon has defined music learning theory and music learning sequence as being synonymous. In addition, method is entirely determined by skill learning sequence, so that learning sequence is central. It follows that in any discussion of music learning sequence, there will necessarily be an overlap with music learning theory as well as reference to method, in order to assess music learning sequence in application. Such overlaps will therefore occur in later sections of this discussion.

One of the difficulties in reading, understanding, and assessing the value and direction of Gordon's work is that there is an implicit assumption in his writing that the reader has a knowledge of his research and writing over the years, or that the reader is willing to accept what Gordon says at face value. In his later works, he supplies only a general bibliography and no notes. Footnotes are content footnotes only, and there is not even general reference to the research or writings that support such statements as "Research has shown that . . ."

The style of writing is didactic. Certainly there are some points where overall organi-

zation is given so that ideas may be understood in context, as in the chapter on music learning theory or in the presentation of the entire structure of skill learning sequence, before each level is considered. More often, it is necessary to read step by step through a great deal of material and to accept a new and specialized vocabulary with some conceptual redefinition before the reader can find where he is going or even where he has

“Audiation, for Gordon the basis for all true musical thinking, is dependent on a large vocabulary of patterns from our music culture.”

been. The use of specialized vocabulary is not unique to this theory, but the constant need for redefinition makes for slower reading and understanding. Companion tapes have been supplied to try to clarify and expand the materials, but this lengthens the task for the experienced reader.

Between the publication of *Learning Sequence and Patterns in Music* (1976, 1977) and *Learning Sequences in Music: Skill, Content and Patterns* (1989), there was a great surge of research and publication in music learning and music psychology in the profession at large. Many books also appeared in the field of cognitive psychology, advocating new ways of thinking about how the mind functions. Many of these new books may be found in the bibliography of *Learning Sequences in Music* (Gordon, 1989): Deutsch (1982), Gardner (1973), Hargreaves (1986), Rowell (1983), Sloboda (1986), and Vygotsky (1967). The thinking of these

authors has had significant influence on thought and practice in the music education profession. There is no indication of positive or negative relationships between Gordon's thinking and these writings. There is a clearer relation to Gagné (1970), earlier writings by Gordon himself, and Hilgard and Bower (1974). The former group of references reflects the "cognitive" approach to the organization of music learning. The latter works cited reflect a leaning toward behavioral organization. The more recent writings of those psychologists identified with cognitive psychology—Gardner (1982, 1983), Bruner (1979, 1986), and Goodman (1968)—are not mentioned in the bibliography, nor are such issues addressed anywhere. Cognitive psychology is mentioned in passing, and the implication is that music learning theory is supported by cognitive psychology. It would be helpful if Gordon would address these theories within the context of his own ideas on music learning in order for the profession to understand how he sees his work in the light of these theories.

For those readers who have been involved in music and music education over a number of years, the neglect of providing a clear context of a tradition in learning theory and the use of special language tend to isolate Gordon's writings and make the real understanding of his work available only to his students or to those who have the time and luxury to study his work at length. This tends to create "followers"—people who follow methodologies without question because "they work for me," without understanding the total approach. This also leads to inflexibility, limiting the effectiveness of those teachers using Gordon's theories. Furthermore, it limits the positive influence the extensive research and writing could have in the profession.

Learning Sequences

In order to understand learning sequence, it is necessary first to have a grasp of the total structure, including the relationships of the parts, and then to understand to some degree the basis for the structures and how they evolved. There are actually three learning sequences:

- the skill learning sequence,

- the tonal content learning sequence, and
- the rhythm content learning sequence.

The combinations of skill learning sequence with tonal content sequence and rhythm content sequence is delineated. Finally, the combination of classroom activities with learning sequence and performance activities with learning sequence are thoroughly explained. All of the principles and content of the learning sequences are carried in *Jump Right In: The Music Curriculum* (Gordon & Woods, 1986), an elaborate curriculum for schools.

Skill Learning Sequence

Most basic to Gordon's theory of learning sequence is the skill learning sequence. Figure 1 shows the structure Gordon uses to illustrate his theory. This has remained the same through all of Gordon's writing, from 1976 to 1989, although the 1989 version of *Learning Sequences in Music* has more detail. Gordon has inverted the structure from the usual hierarchical form, putting the earliest and simplest learnings at the top and the

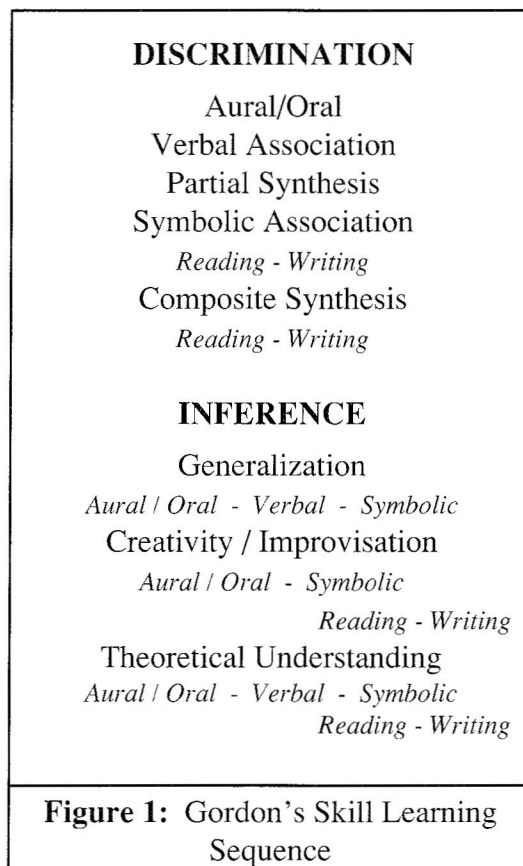


Figure 1: Gordon's Skill Learning Sequence

most complex at the bottom. (Gagné's hierarchies put complexity at the top.)

Discrimination and Inference Learning

The skill learning sequence consists of two levels and kinds of learning: discrimination learning and inference learning. The two are not mutually exclusive in practice. Discrimination is largely rote learning, and inference learning is largely conceptual in nature. At the discrimination level, the teacher teaches the students what to learn and how to learn. The students are conscious of what they are learning. At the inference level, the teacher teaches the students how to learn but not what to learn, and the students might not be conscious of what they are learning. Discrimination learning is necessary before the students can make inferences for themselves. Discrimination is a higher form of learning than perception, and perception is higher than sensation. Thus, sensory and perceptual learning precede discrimination learning. These hierarchies are very important for implementation of skill learning sequence. It is also important, within this theoretical structure, to be aware that the various types and stages of audiation should function at varying junctures in the learning sequences. (See Gordon, 1989, pp. 10-18, for an explanation of types and stages of audiation.) It could be said that mastering all types and stages of audiation is the objective of skill learning sequence, in the areas of both discrimination and inference learning.

Aural/Oral

Aural/oral learning is basically rote learning and takes place in an organized context. Patterns in tonal content and patterns in rhythm content are learned on neutral syllables. They are learned separately, never in conjunction with each other. Gordon emphasizes that singing, chanting, and moving are all essential at this stage. Since aural/oral discrimination is the basis for all higher discrimination, rigor is very important. This rigor includes attention to listening (aural) as well as performing (oral) in order to "audiate" and in order to learn a broad vocabulary of tonal and rhythm patterns. A large number of patterns will aid the student

in generalizing so that each tonality and each rhythm structure will become more definite and distinct. And "audiation," for Gordon the basis for all true musical thinking, is dependent on that large vocabulary of patterns from our music culture.

Verbal Association

Next is the association, through performance and listening, of the learned tonal and rhythm patterns with proper names and vocabulary names. Proper names describe tonal and rhythm patterns and functions (e.g., major, minor, mixolydian; tonic, dominant functions; duple and triple meters; macro and micro beats, and division and elongation). Vocabulary names are those syllables used to perform and discuss specific tonal and rhythm patterns: movable *do* syllables and rhythm syllables.

Partial Synthesis

At this level, learning becomes inferential in one sense. The learner becomes aware of the internal logic of tonal patterns and of rhythm patterns. Further, the student synthesizes patterns into series of patterns, recognizing patterns learned earlier regardless of their order in series. At all levels of discrimination learning, rhythm patterns are learned on a single pitch, and tonal patterns are learned with tones of equal duration.

Tonal and rhythm syntax are established at this level. Gordon emphasizes the importance of the development and the nature of musical syntax. He is especially emphatic concerning the essential role of audiation in establishing syntactical organization. Even though the precise nature of syntax is not known, Gordon explains structure as having a foreground of completed patterns, a middle ground of essential pitches or durations, and a background of tonality or meter. Each of these are given to the music through audiation by the listener.

Symbolic Association

Students learn to associate syllable names and proper names with the written symbols that represent them. The association is with the written score itself, not with note names or note values. Partial synthesis is essential to symbolic association, since learners will have learned to audiate patterns in series—as

they will now learn to read and write familiar patterns in series. Audiation is the key to correct symbolic association.

Composite Synthesis

The dimension added to the learner's skill at this level is musically intelligent reading and writing; the student accomplishes musically intelligent listening at the partial synthesis level. In the writing portion, the learner moves from audiation to symbol, and in the reading portion, the learner moves from symbol to audiation. The learner must be able to read, write, or recall one or more series of familiar patterns in both familiar and unfamiliar order before proceeding to the inference learning stage.

Inference Learning: Generalization

In inference learning, students assume half of the task of learning: They teach themselves what they learn. The teacher teaches them how to learn. High music aptitude is extremely important if inference learning is to be successful.

In the process of generalization, the student is expected to echo the teacher's performance of sets of familiar and unfamiliar patterns in unfamiliar order on neutral syllables (aural/oral); to echo the performance of series of familiar and unfamiliar patterns in unfamiliar order using tonal or rhythm syllables (verbal); and to read or write series of unfamiliar or familiar patterns in unfamiliar order (symbolic).

Creativity/Improvisation

Students can move on to creativity and improvisation if they have the requisite audiation and performance skills as well as a large vocabulary of tonal and rhythm patterns. Creativity is easier than improvisation because it has fewer restrictions; improvisation always has a structural foundation. Verbal association is not part of this level, but it may make the teaching of creativity and improvisation easier.

Theoretical Understanding

For Gordon, it is essential that students perceive, perform, and audiate all tasks in earlier stages of both discrimination and inference levels as well as their individual musical aptitudes allow before they attempt

theoretical understanding. "Music theory should be thought of as an outcome of musicianship" (Gordon, 1989, p. 76). Gordon lists 17 desirable outcomes at this level, ranging from the identification of whole and half steps and the letter names of lines and spaces to "the reasons for difference in construction of scales in various cultures" and "the application of aesthetics to music" (Gordon, 1989, p. 76).

Tonal Content and Rhythm Content

Tonal content emphasizes the basic structure of tonal materials—in Gordon's writings, tonality refers only to mode and "keyality" (a coined word) refers to tonal center. Gordon specifies the functions of patterns as they relate to tonalities and to music that is multitonal, multikeyal, inter-tonal, or interkeyal. The taxonomy of tonal patterns ranges from easy to difficult concerning the specified functions, moving from tonic and dominant functions in major and minor tonalities to all functions in other modes, and finally to patterns in multitonal, multikeyal areas. Most patterns are two or three notes in length; a few are as long as five notes. All are based on syntactical theoretical functions. Gordon explains that patterns were kept short and were selected to make research possible. The outline of tonal content is found in Gordon's *Learning Sequences in Music* (1989, p. 126).

Rhythm content is based on a concept of rhythm which is a perception of, first, a sense of meter, and, second, rhythm patterns superimposed on meter. "Just as audiation of tonality is the basis for tonal syntax, so the audiation of meter is the basis of rhythm syntax" (Gordon, 1989, p. 127). The three elements of rhythm (macro beats, micro beats, and melodic rhythm) are audiated in perception, performance, or simultaneously in deriving rhythm syntax.

Rhythm is very detailed and complex. Gordon explains that this is necessary because of his approach to aural rhythm structure, and it requires a good deal of education of the teacher/reader. Meter classification and pattern functions as they relate to patterns parallel tonality and pattern

function in the taxonomy of tonal content. There are 10 pages of rhythm patterns compared with 18 pages of tonal content, but the abstractions and complexity are great enough that rhythm content would require an equal amount of time to learn. The outline of rhythm content may be found in Gordon's *Learning Sequences in Music* (1989, p. 182).

Pattern Learning Sequence

Difficulty levels for tonal and rhythm content were established by Gordon in relation to audiation, not in performance or reading and writing. Audiation is necessary for all of those skills. Difficulty level had little or no correlation with frequency of occurrence in music literature. It is important for this theory that patterns be learned in the order of difficulty established by Gordon.

Combining Learning Sequence Activities

Most learning activities will follow stepwise through the hierarchy, taking care that each level is solidly accomplished before going on. Gordon also allows temporary skips upward in the hierarchy. Such temporary skips are called "bridging" movements, and the nature of bridging is carefully specified. Bridging delays stepwise movement. Bridging is valuable both as a motivational device and as a way of strengthening the lower level being bridged from. Bridging always takes place from a discrimination level to an inference level. The higher the discrimination level, the greater the advantage that will be gained from bridging.

Tables specifying stepwise and bridging movements for skill learning sequence, tonal content learning sequence, and rhythm content learning sequence may be found on pages 195, 199, and 201 (Gordon, 1989). Gordon emphasizes the variety of methods that are possible with combinations of stepwise movements and bridging movements with skill learning sequence activities and with content learning sequence.

Combining Learning Sequence with Classroom and Performance Activities

Although the enactment of this theory in conjunction with classroom activities may be

seen in *Jump Right In: The Music Curriculum* (Gordon & Woods, 1986), there are several principles important to understanding further aspects of the combinations. Gordon specifies three guidelines for combination. First, both rhythm content levels and tonal content levels must be presented in classroom activities before they are used in learning sequence activities. Second, skill content must be taught in learning sequence before skills are used in classroom activities. Third, skill learning sequence may not be taught with content unless that level of content has been taught in classroom activities (Gordon, 1989, p. 211). Gordon describes this order to parallel a whole, part, and whole sequence—introduction of content in classroom activities, application in conjunction with skill learning sequence, and further consolidation in classroom activities of both content and skill.

Content may or may not be coordinated with musical material used in classroom activities. Establishment of skill level through audiation of content is foremost in importance. A complete illustration of correct coordination of skill content and classroom activities is given by Gordon (1989).

Gordon goes on to illustrate how coordination of learning sequence activities and performance activities follows principles similar to those found in classroom activities. Practical helps are then given for execution in performance groups. The total method is completed with discussion of tonal solfege, rhythm solfege, music readiness, beginning instrumental music, and measurement and evaluation. Some issues connected with these topics will be treated below.

The Basis for Learning Sequence

The hierarchical nature of this theory owes a great deal to Gagné's *The Conditions of Learning* (1970). In Gordon's *The Psychology of Music Teaching* (1971), Gagné's theory is cited especially for the applicability of types of learning to music learning. Gordon viewed Gagné's first four types—signal learning, stimulus-response learning, chaining, and verbal association—as basically perceptual in nature. The last four types—multiple-discrimination learning, concept

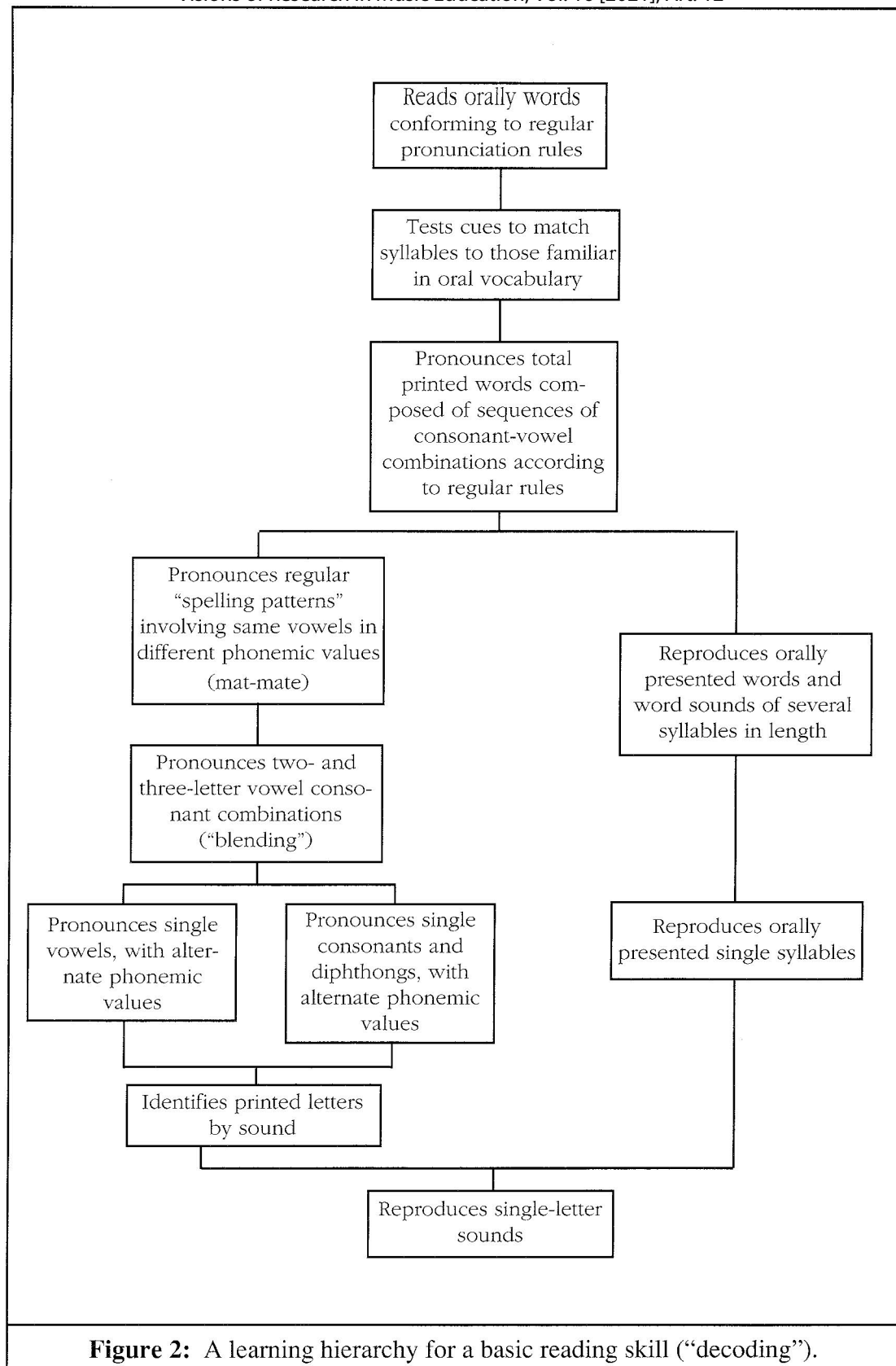


Figure 2: A learning hierarchy for a basic reading skill ("decoding").

learning, principles learning, and problem solving—he saw as conceptual. This approximately corresponds in structure, if not in detail, to the hierarchy of discrimination learning and inference learning in the skill learning sequence.

Gagné's learning hierarchies and the methods of deriving them show a great deal of similarity to Gordon's later hierarchies. Figure 2 is taken from Gagné (1970) and shows his conception of initial reading (decoding). It analyzes the task into its simplest components, and they are then chained. Gagné states that these are necessary for early reading and that appreciation of literature will be possible only after a great deal of practice in decoding and with a wide variety of reading material (Gagné, p. 271). (Contemporary teaching of reading practice emphasizes the importance of the role of meaning and appreciation from the outset.) This step-by-step approach roughly parallels Gordon's ideas of acquiring musical symbols.

Some general comments concerning the changes in Gordon's approach over time are in order here. The direction and basic approach as found in the latest skill learning sequence and tonal and rhythm content sequences are to be found in his text, *The Psychology of Music Teaching* (1971). The influences of Gagné in hierarchical learning, the ideas concerning tonal organization and rhythm organization, and their teaching are stated clearly. Between that publication and the 1977 publication of *Learning Sequences and Patterns in Music*, Gordon developed his entire structure. Reading the 1977 edition is very enlightening because Gordon explains the nature of discrimination learning and inference learning in a more general context. In the 1989 edition, most references are internal. His explanations are more concise, direct, and without general reference. They state "facts" without much explanation—almost in a form demanding rote memorization rather than understanding.

Some Critical Remarks

The task of evaluating this body of work in learning sequence is certainly daunting. Gordon's work could be seen as impressive on sheer amount of work and detail. What

makes it most impressive is that Gordon has taken a position concerning how learning in general takes place and about the nature of musical content. He has then derived learning and content sequences, accounted for the roles of aptitude, readiness, proposed the enactment of theory in program, and finally the nature of appropriate measurement and evaluation. It can be seen as a unified theory. Such definite, clear theories are important in education.

Several principles emphasized by Gordon are especially noteworthy. First is the importance of early experience and of readiness before music study begins. He advocates offering broad experiences to young children until such readiness is accomplished. Gardner describes this process of development in Chapter 13, "In Search of the Ur-Song" in *Art, Mind, and Brain* (1982). It is an acquisition of stable components of musical "language:" being able to sing a song in a stable key with a stable meter and accurate tonal patterns and words. This may be accomplished by the end of the fifth year in normal development.

Development of aural/oral discrimination skills before any attempt is made toward verbalizing or using music symbols or any aspect of music theory is a cornerstone of Gordon's theory. Another principle frequently neglected in music teaching is the importance of not just encouraging but of teaching "inner hearing" (or tonal "thinking"). Gordon calls this "audiation," and he sets this forth as the central goal of music instruction. For him, audiation is a part of every learning experience. It is certainly neglected in general music instruction, although music listening is emphasized in many programs. Furthermore, such inner hearing is a vital part of performance instruction; it is frequently ignored by many music educators in favor of "technique."

Gordon also faces the question of individual differences squarely. His early interest in aptitude is shown in his advocacy of adequate testing to ensure that aptitude is identified and that teaching is appropriate for aptitude. His belief in general education requires that all students receive instruction as far as their aptitudes can carry them. The

hierarchical structure of the learning sequence and the difficulty levels of the tonal and rhythm content sequences make it possible for teachers to take students only as far in the structure as individual aptitudes allow. Because of a “fuzzy” attitude in the teaching profession concerning “talent,” many students in our programs receive instruction that is inappropriate and lacks rigor. It should be noted that Gordon is not a behaviorist because he recognizes the limitations of environmental influence.

There are several aspects of Gordon’s learning sequence that make it problematic in the profession today. First, let us consider the analogies with language learning that have been important in Gordon’s theory and in critiques of his theory. Gordon’s use of analogy with language learning is both explicit and implicit. He cites the stage of “music babble,” emphasizing the importance of listening in early years in order to acquire the music vocabulary of the culture. Children babble tonally and rhythmically; they leave the babble stage when they acquire both stable tonality (and accurate pitch production) and stable meter (and appropriate physical response).

Gordon’s other prominent analogy is that of the nature of syntax. His syntactical structure may have come in response to various syntactical theories. [Chomsky’s “deep structure” and “surface structure” (1977) might be compared to the foreground, middle ground, and background of rhythm or tonal syntax proposed by Gordon.] Implicit comparisons with language may be found in the tonal and rhythm content sequences, as well as his concern with tempo, inflection, and so on.

The building units of music that Gordon derives from music culture—tonal patterns or rhythm patterns—seem at odds with contemporary linguistic theory and aesthetic theory. Current linguistic theory was transformed by Chomsky and the theory of generative or transformational grammar in the 1960s. The emphasis is on an internalized set of rules concerning language that enables one to speak and understand language (Aitchison, 1976, p. 145). Current debate is on the nature of our genetic linguistic inheritance (content as proposed by Chomsky or process

as Aitchison sees it) and on the relationship of language performance and language understanding.

In the study of language, no one proposes that we teach reading, speaking, or understanding by teaching the smallest, simplest units in the hierarchy (sounds of consonants and vowels), chaining them in all possible combinations, then coming to words, phrases, sentences, paragraphs, and finally meaning. This analogy to Gordon does not completely negate the hierarchical nature of skill learning sequence, because Gordon does use patterns from musical culture. On the other hand, he does, throughout the discrimination level, isolate tonal and rhythm patterns from each other, something that never happens in music. The expressive grammar of music is unlikely to be experienced with learning sequence.

In language learning, there is a great deal said about the “whole language” approach. On one hand, that could be compared to “music babble,” but few linguists would advocate then going back to phonics to prepare for speech as well as for reading and understanding. Meaning as it exists in the world and in literature is the most important guide in reading. Musical meaning lies in tonal patterns as they exist in time. The separation into tone and time take away meaning as it exists in music, and probably the identity of the patterns themselves.

An analogy with artificial intelligence may help us to understand why current psychology is in conflict with Gordon’s learning sequence. The dominant direction in psychology may be seen in cognitive psychology. It grew up alongside behaviorism, emerging in the 1950s but not coming into its own until the 1970s. Cognitive structures are seen as wholes, certainly made up of parts, but wholes seen as different from and greater than parts. Artificial Intelligence (AI) was and is seen as a way to study the nature of cognition, and the effort has been to create computers that can think independently. The principal programming device for giving the computer information is the algorithm. When knowledge is logically analyzed into all possible units and operations, the individual units are algorithms. In one sense, Gordon’s effort is to analyze music of our

culture into all possible units, and, given hardware (or students) capable of absorbing the information, programming those units and all possible connections through discrimination learning until inference learning (or independent thinking) takes over. This is similar to AI theory—that given enough information and function, the computer may truly think.

Although the above strategy has appeal to logic and to our practical nature, it may not be the best way to conceptualize the musical mind. The mind frequently proceeds on very limited information to create its world. It does not need all possible information or choices in order to solve problems most efficiently. The cognitive psychologists—and many researchers in AI—see the mind as functioning differently from the computer model at the outset. Rather than assembling many bits of information to form a reality, the mind starts with an hypothesis and assembles and uses information bits to test its interpretation of the world. The mind constructs its world through all of its symbol systems—language, music, images, mathematics, and the like. This is the point of view taken in the writings of Susanne Langer, Nelson Goodman, Jerome Bruner, Howard Gardner, and many others. Langer, in her theory of the symbolic transformation of experience, places meaning in a central position in all symbol systems. For Langer, all symbol systems form a fabric of meaning, of which the warp is data and the woof is symbolizations. Meaning is the preoccupation of philosophy, science, social science, linguistics and psychology, and, in the opinion of Langer, the arts (1942).

Langer's explication of this theory was an early expression of the ideas lying at the base of cognitive psychology. Gardner recognizes the importance (as well as the limitations) of Langer's ideas on symbolization in *Art, Mind and Brain* (Gardner, 1982).

Langer posited a basic and pervasive human need to symbolize, to invent meanings, and to invest meanings in one's world. It was a property of the human mind to search for and to find significance everywhere, to transform experience constantly to uncover new meanings (1942, p. 50).

Nelson Goodman went further in analyzing

meaning in art symbols and how those symbols function. Music, for example, may exemplify some properties such as speed or loudness and express other properties such as gaiety, anger, or conflict (Gardner, 1982, p. 50). The focus for Goodman is on the making of a world of meaning through various symbol systems.

Bruner was concerned with cognitive psychology from its beginnings, and he chronicles his interests in his autobiography, *In Search of Mind* (1983). An early discovery of his was a new view of language. "Certainly, my own interest in language started with concern for its impact on mind — again language as instrument of mind" (Bruner, 1983, p. 157). The importance of the role of education as it leads to function and formation of mind is also a central concern of Bruner's. "Indeed, if it is the mark of our species that we create our own environments in very considerable measure, then education is one of the most crucial aspects of that creation" (1983, p. 198). And it was his further concern that schools must be restructured to fit with our knowledge of mind and society if they are to accomplish that end (1983, p. 198).

Finally, Gardner, throughout *Art, Mind, and Brain*, in his accounts of how children approach artistic media, speaks constantly of the child's creating, his artistic motivations — thus putting artistic meaning at the heart of the child's attempts and successes (1982).

Conclusion

In the last analysis, the nature of the teaching and learning process will be determined by the view taken concerning the nature of its subject matter. If we view music as a symbol system, capable of expressing meaning that is unique and essential to human life, then the nature of our teaching and of the learning process should reflect the nature of music. All learning in music should proceed from intelligible musical problems. Tonal patterns and rhythm patterns, isolated from each other and from meaningful structure, seem unlikely to supply cues for apprehending music, for expressing musical ideas, or for creating a musical world. The upper levels of learning sequence—especially generaliza-

tion and creativity/improvisation—are promising in concept for describing higher order learning, but in practice they are still dependent on the chaining of tonal or rhythm patterns. Finally, aesthetic ideas in Gordon are employed only at the highest level in the hierarchy, when in other systems, such consideration can be employed throughout the structure to give meaning and direction to—even to empower—music learning and teaching.

Learning sequence is the core of Gordon's effort through the years to arrive at a unified theory of music learning. This is a remarkable body of work. Unified theories may not be best to guide all of our efforts in music teaching and learning. They may be better for guiding us at some tasks and at some levels, but not yet to conceptualize and guide all of music learning.

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