

METHODS FOR TEACHING CONCEPTS OF RHYTHM AND MELODY
TO CHILDREN BASED ON THE INTELLECTUAL GROWTH
THEORIES OF PIAGET AND BRUNER

by

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In recent years educators have come to realize that a child's early training is important in the development of basic skills and concepts. Experiences in creative musical activities as well as developing basic and specific concepts help the child to enjoy and appreciate his world of sound. A child's early musical training is essential for building concrete foundations in basic rhythmic and melodic skills and for developing positive attitudes towards music. While the learnings of these concepts can be successfully begun at any age level, it probably is best to begin when the child is quite young.¹ How young would be appropriate? Kodaly has stated that music experiences should begin as early as nursery school.² The report of the Tanglewood Symposium agrees with Kodaly when it recommends that,

children should begin some type of formal schooling at the age of three or thereabouts. It is generally agreed that children who are receiving inadequate musical exposure at home should be introduced to music in the school as early as three years of age.³

It is evident that when music instruction is begun at an early age, the child is afforded more opportunities and time to create, experience, and absorb the many aspects of music.

The first part of this paper is a brief presentation of the learning capabilities of young children as described by psychologists Jean Piaget and Jerome Bruner, and the second part

¹Flavis Evenson, "How Music Concepts are Developed and How They are Applied," Music Educators Journal (hereafter referred to as MEJ), Vol. LVI No. 6 (Feb. 1970), p. 57.

²Marjorie Kemper, "The Preschool Child, How Young is Early Enough?" MEJ, Vol. LVII No. 6 (Feb. 1971), p. 36.

³Kemper, p. 36.

concerns some of the different methods available for teaching concepts of rhythm and melody to young children.

LEARNING OF CHILDREN AS DESCRIBED BY PIAGET AND BRUNER

Piaget's theory of mental growth stages has had widespread influence in the field of education and music education. His studies have led to an ever-increasing amount of research about the various levels of a child's intellectual growth. Bruner's ideas on learning not only described the child's mental growth stage, but his theories of instruction also have been incorporated into many curriculum guides and various kinds of material for use in teaching music. To establish the validity of the teaching methods discussed in the second part, it is necessary to consider in more detail the studies of Piaget and Bruner.

Piaget designated the first period in an infant's mental life as the sensori-motor stage, lasting until the child is about two years old. In this first stage,

the child learns to use his muscles and senses to deal with external objects and events while his language begins to form. He also begins to deal with and know that things exist even if they are beyond his sight and touch.⁴

The second stage is called the "preoperational representation stage." In this period the child "represents the external world through the medium of symbols established by simple

⁴Helen B. Redl, "Preschool Education," Encyclopedia Britannica, 1974.

generalizations."⁵ This period includes two phases: 1) "The preconceptual phase from 18 months or two years to age four" and 2) "The intuitive phase from age four to age seven or eight."⁶ In the preconceptual stage the child can focus "on only one aspect of a situation to the exclusion of other aspects; hence he can deal with only one problem at a time and is unable to coordinate relationships."⁷ For example, the movement of the piano keys may so captivate the child that he is unable to hear the melody being played, or he may be so engrossed in the tone color of a trumpet that he excludes any other information about the music from his ears.⁸ Piaget calls this tendency to focus on a dominant element "centration." In the intuitive stage, children are able to decentrate and to explore other aspects of what they are hearing or doing. They then "receive more complete and undistorted information about the music, information they can derive musical concepts from."⁹ One of the most important concepts to be learned following the period of centration is "conservation." A child who attains "conservation" has the ability to stabilize a particular concept in his mind. A child demonstrates "conservation" when he can see "that the total

⁵ Marilyn Pflederer, "The Responses of Children to Musical Tasks Embodying Piaget's Principle of Conservation," Journal of Research in Music Education (hereafter referred to as JRME), Vol. XII No. 4 (Winter 1974), p. 252.

⁶ Pflederer, p. 252.

⁷ Pflederer, p. 252.

⁸ Marilyn Pflederer Zimmerman, "Percept and Concept: Implications of Piaget," MEJ, Vol. LVI No. 6 (Feb. 1970), pp. 49-50.

⁹ Zimmerman, p. 50.

amount of a quantity remains the same even when divided into smaller units."¹⁰ And, "conservation" is confirmed when a child "is able to return to the initial state of a given material by an inverse operation."¹¹ For example, when a child can divide a whole note into four quarter notes and realize that the quarter notes have to be played faster to maintain the same time span, he is displaying reversibility of thought.

The last stage of Piaget's intellectual growth theory involves the symbolization of concepts. The child is now able to deal with abstractions by means of symbolic representation. Thus, according to Piaget, the child's intellectual development revolves from the perception of concrete relationships, to symbolization of these relationships and their manipulation in abstract thought.

In investigating the possible applicability of Piaget's theory to teaching music, Phlederer examined students from ages 5-8 on their ability to conserve meter, tone, and rhythm. Her findings showed that: 1) "conservation" was apparent in the child's solutions to rhythmic tasks; 2) the child arrived at correct solutions to musical tasks she had for him by using overt methods such as clapping, swaying, tapping, and counting; 3) musical experiences should "stimulate a maximum amount of growth at each stage of development" with the teacher supplying a variety of musical experiences for these stages; 4) a large

¹⁰ Zimmerman, p. 49.

¹¹ Marilyn Pflederer Zimmerman, From Research to the Music Classroom No. 1 Musical Characteristics of Children (Washington, D.C.: Music Educators National Conference, 1971), p. 17.

repertoire of tonal and rhythmic patterns in "many and varied guises is necessary to discriminate between patterns and to follow thematic development of the patterns; 5) original rhythm and tonal patterns should be employed in various activities to help clarify tonal and rhythmic relationships and to "provide the child with the kind of experience needed to build a conceptual musical framework."¹²

A study of children's auditory perception by Petzold indicated that the

greatest gains in a child's ability to perceive auditory stimuli and relate them to musical symbols occur between grades one and two. . . . Early experiences are the most vital in the student's life and generally condition the later acquisition of knowledge and skills.¹³

Bruner's theory of intellectual growth in relation to teaching music to children is clearly presented and discussed by Aronoff in her book, Music and Young Children. Bruner's description of intellectual growth recognizes three modes of representation which in a sense are sequential-- 1) the enactive; (2) the iconic; and 3) the symbolic modes.¹⁴

The enactive mode develops through the child's ability to perform actions and manipulations. It is a

direct representation through an appropriate motor response. Minimum reflection is involved. The simplest musical example is the representation of an

¹² Pfloderer, "The Responses of Children to Musical Tasks," p. 266.

¹³ Evenson, p. 57.

¹⁴ Frances Webber Aronoff, Music and Young Children (New York, Chicago, San Francisco, Atlanta, Dallas, Montreal, Toronto, London, Sydney: Holt, Rinehart and Winston, Inc., 1969), p. 7.

even beat by walking, or by the recurrent swinging of another part of the body. No imagery or words are needed for this experience of the beat. This way of knowing might be called 'knowing with one's muscles' or 'knowing with one's feelings.' ('Feeling' could mean through the senses or through the emotions as well as the senses).¹⁵

A child has reached the iconic stage of development when he perceives organization and imagery using his aural, kinesthetic and visual skills. In this stage,

what the child has seen or heard or experienced through movement becomes transformed into mental images that stand for events as pictures do. These images--visual, aural, or kinesthetic--become his 'storage system' which corresponds to the environment. The child is increasingly able to separate what is internal . . . from what is external. . . . As he develops . . . he becomes able to go beyond the information encountered on a single occasion. Not only can he recall rhythmic patterns and muscular tensions, he can supply new sequences of these representations.¹⁶

In the symbolic level, the child perceives through words and other symbols. Through these symbols the child

can go far beyond what he has done with acts or images. He can go beyond the experience of the moment, using longer sequences of events. . . . In a music activity, he may notate his improvisation, at first perhaps with his own devised symbols, later in conventional score. . . . As he learns to translate from symbols to sounds, the music of other times and places becomes available to him.¹⁷

The work of Piaget and Bruner, and research based on their views, emphasizes the value of viewing the child's intellectual growth as developing through logical, sequential stages. Consequently, the music educator may take advantage of these

¹⁵ Aronoff, p. 32.

¹⁶ Aronoff, p. 32.

¹⁷ Aronoff, p. 33.

studies to develop a music curriculum modeled after these stages of growth.

METHODS FOR TEACHING RHYTHMIC AND MELODIC CONCEPTS

The ultimate goal of any music educator is to guide the young child through many meaningful music experiences. These experiences should progress from simple concepts to more complex ones in what Piaget would label respectively as learning from perceptual to conceptual levels. When the child is presented musical concepts in this manner, he progresses in a logical sequence through what Bruner would call the enactive, the iconic and the symbolic modes.

To present any concept, the teacher must be versatile, adaptable, and imaginative in helping the child to explore and to make his own discoveries. The importance of exploration should not be underestimated. It is "undoubtedly the simplest and the most general form of perceptual activity."¹⁸ With guidance through exploration, the teacher can "nurture, develop, refine, and deepen the child's perception of music, his increased awareness of music's structural and stylistic elements will help nurture his responses to it."¹⁹

Reimer has emphasized the importance of understanding a structure in musical growth. From his study of teaching music at various levels, he has derived three approaches. The first

¹⁸ Jean Piaget, The Mechanisms of Perception, trans. by G. N. Seagrim (London: Routledge and Kegan, 1969), p. 137.

¹⁹ Aronoff, p. 18.

is "the development of factual knowledge and concepts about music;" the second is "analysis--studying concepts of music" (an approach which focuses on particular elements in music). Analysis of music improves "the individual's perception of the music by recognizing the particular use of the elements and how they are put together."

Reimer's third approach involves performance; this includes the development of skills and repertoire. "Listening is the most important skill, it is essential to singing, playing, moving, and later, reading and writing of music." The children's repertoire should include a variety of learned material as well as improvising and composing.²⁰

Aronoff agrees with these approaches and adds that "for a viable music curriculum, all three of these approaches must be used, and integrated, from the very beginning of music experiences--even in pre-kindergarten and nursery school."²¹

She goes on to say that

the potentials of interrelated cognitive and affective growth through the discipline of music cannot be ignored. . . . Music through movement can be an important part of curricula for young children. It affords a variety of opportunities for integrating cognitive and affective growth because, by its very nature, it involves perception and participation and the accompanying feelings of the perceiver-participant.²²

²⁰Aronoff, p. 18.

²¹Aronoff, p. 18.

²²Aronoff, p. 4.

According to Orff, rhythm and melody are the "elemental forces out of which all music grows."²³ Consequently, he believes that the child's musical growth should begin with the study of rhythm and melody. Basic concepts of rhythm and melody cannot be hastily presented or gone over too lightly. Each child must "form his own concepts out of his own experiences."²⁴

Labeling each concept is important for reinforcing what the child has learned. Many times, however, children confuse labels, such as high and low with loud and soft. Therefore, it is extremely important that the teacher stress the label for each concept taught. A research study conducted by Andrews and Deihl verifies a number of cases in elementary education in which "the subject possessed the concept being measured but exhibited confusion regarding the appropriate label. This suggests a need for increased emphases on teaching labels for musical concepts."²⁵

Teaching rhythm and melody begins with simple concepts and progresses gradually to the more complex ones. Newman says that the teacher "must guide the child logically and continuously through every progressive step, from simple to complex without

²³Jane C. Frazee, "The Mystery of the Orphs," MEJ, Vol. LV No. 2 (Oct. 1968), p. 66.

²⁴Evenson, p. 55.

²⁵Francis M. Andrews and Ned C. Deihl, "Development of a Technique for Identifying Elementary School Children's Musical Concepts," Council for Research in Music Education (hereafter referred to as CRME), No. 13 (Spring 1968), p. 7.

omitting any of the essential limbs."²⁶ These "essential limbs" in rhythm in order of difficulty are beat, accent, meter, duration, the visual recognition of rhythms, and the reproduction of rhythm patterns. Basic melodic concepts include direction (high and low or up and down), melodic contour, recognition of same, different and similar phrases by ear and by sight, visual and aural recognition of interval relationships, recognition of steps, skips or repeated tones, reproduction of melodies, recognition of treble and bass clef signs, and labeling the notes in treble and bass clef.

As the child's perceptual abilities develop, he should be able to see many interrelationships between rhythmic and melodic concepts.

Rhythmic Concepts

Rhythm is present in all aspects of music. It is "the strongest of all of the elements" and therefore is "the logical starting point for education in music."²⁷

It is the aim of the good teacher to help children hear, feel, and see rhythm. They will listen to rhythm, they will feel it and express it in movement with their bodies, and they will see it in the world around them--in the motions of people, in the movement of waves against the shore, in painting and architecture,

²⁶ Elizabeth Newman, "A Rational Approach to Music Teaching," in Creative Expression The Development of Children in Art, Music, Literature and Dramatics, 2nd ed. edited by Gertrude Hartman and Ann Schumaker (Milwaukee: E. M. Hale & Co., 1939), p. 86.

²⁷ Beth Landis and Polly Carder, The Eclectic Curriculum In American Music Education: Contributions of Dalcroze, Kodaly, and Orff (Washington, D.C.: Music Educators National Conference, 1972), p. 72.

and in notation which is man's remarkable way of recording sound on paper.²⁸

Understanding fundamental rhythmic concepts is important for the child's comprehension of further, more complex rhythmic concepts. All basic rhythmic concepts begin with movement. Movement through music contains the key for understanding all rhythmic concepts. Children enjoy moving and

it develops, without any help, out of itself. The child likes to run, jump, skip, turn and to do many other things without any purpose; just for fun. So, he is able to create his own kind of movement which is mostly full of lively expression. The child in the first few years is not as able to express his thoughts and feelings by word as he is in movement or painting.²⁹

Beat is the first rhythmic concept taught. It is expressed by whole body movement to music. By moving and hearing various rhythmic beats, the child increases his sensitivity to rhythm.³⁰ His spontaneous responses to rhythm gradually develop into a progressive awareness of tempo, accent, meter, phrasing, dynamics, and duration. The teacher can provide many activities in which the children can develop an awareness of rhythm through motor movement. Every child needs time in which to explore his own tempo. Hand clapping and tapping prepares the child for listening to the rhythm in music. Galloping, skipping, running, walking, sliding, and many other movements should be encouraged.

²⁸Robert Evans Nye, Music in the Elementary School, 3rd ed. (Englewood Cliffs, New Jersey: Prentice-Hall, 1970), p. 182.

²⁹Landis and Carder, p. 83.

³⁰Catherine Landroth, Education of the Young Child (New York: John Wiley & Sons; London: Chapman and Hall Limited, 1942), p. 190.

Thus, at first, the child explores and discovers the tempo for himself before he is asked to conform to selected rhythmic response.³¹

The approach to music through movement is not a new one. Maria Montessori and Emile Dalcroze were two of the first who concerned themselves with this type of learning. They were aware that movement through music not only helps muscular coordination, but it also helps to develop the child's sensory perceptions. When moving to music, the child gradually becomes aware of his surroundings and he becomes aware of the music being played. He responds to the different tempos in music and changes his gait accordingly. He flies like a bird, pretends he is a cloud, or he marches, runs, skips, hops or gallops. These movements are "valid ways of expressing feelings and of discovering the possibilities of creative movement."³² They will help the child develop a "greater self-awareness" and he will begin "to actualize his expressive potential. And the development of perception will not only contribute to a firm foundation in music education, but also will provide the roots for a life of aesthetic education."³³

Montessori introduced the concept of beat by having the children walk on a line which had been drawn on the floor.

³¹Irving Cheyette and Herbert Cheyette, Teaching Music Creatively in the Elementary School (New York: McGraw-Hill Book Co., 1969), p. 56.

³²Landis and Carder, p. 84.

³³Landis and Carder, p. 84.

Gradually music was added. The children would gallop, hop, run, march, or skip, all of which would "develop on the impulse of the rhythmic movement."³⁴ Presenting rhythm in this way enables the child to "interpret the rhythm by moving in harmony with it."³⁵ He is not inhibited. "If we were to tell the children to hop, run, or march, there is no use in our giving them music."³⁶ After some time, children seem to step harder on the first beat of every measure and an awareness of accent has been developed naturally.

Dalcroze calls these elemental movements of children Eurythmics. Eurythmics means understanding musical sounds in one's own mind through movement. This understanding "can be facilitated by drawing upon one's movement experience of time, space and energy."³⁷

Taylor also stresses the importance of the child's experience with spacial relationships and adds that as the child "explores and uses space, he develops a sense of his own identity in it, and becomes keenly aware of his spatial relationship to others."³⁸ A variety of activities can contribute to this accomplishment. For example:

³⁴ Maria Montessori, Montessori Elementary Material (The Advanced Montessori Method), trans. by Arthur Livingston (Robert Bentley, Inc., 18 Pleasant St., Cambridge, Mass., 1965), p. 342.

³⁵ Montessori, p. 342.

³⁶ Montessori, p. 346.

³⁷ Aronoff, p. 165.

³⁸ Elizabeth Medert Taylor, "Teach Music Concepts Through Body Movement," MEJ, Vol. LIX No. 8 (April 1973), p. 50.

Each child finds a place in the room where he is able to swing his arms freely, identifies his spot verbally, upon signal moves about the room at will, and returns to his own place. He then becomes a bird in flight--dipping, wheeling, veering away from collision, yet moving with complete freedom; thus he feels and utilizes space in its several dimensions.

A group with eyes closed huddles together on the floor; they search for each other's hands as they rise to a standing position; they open their eyes to discover they have formed a circle.³⁹

A child can also learn to feel and understand the relationship between space and tempo. With eyes closed, a child may

listen to the bounce of a large rubber ball; he hears the sounds come close together, faster and faster in a perfect accelerando. With eyes open, he sees the ball, pulled down by gravity, move closer and closer to the floor until there is no space left, and it comes to rest. The child then feels and transfers to his own body the up and down movement of the ball. He may step the sounds, discovering that he must take smaller and smaller steps as he accelerates. He may clap the accelerando, beginning with hands far apart and discovering that his hands must be closer and closer together as the sounds become faster.⁴⁰

Phrasing can also be approached through movement. The child can represent different phrases heard by changing his walking directions or by moving first one arm with the phrase then the other with a new phrase. This concept requires much concentration and self discipline. It "is an exercise in ear-training, in attention and in the creation of new ways of expressing the beginning of a phrase."⁴¹

³⁹Taylor, p. 50.

⁴⁰Taylor, p. 51.

⁴¹Landis and Carder, p. 21.

Dynamics and duration are also approached through movement. Children can interpret different dynamic levels by stamping when they hear loud music and by tip-toeing when they hear soft music. In this way the children can feel as well as hear the concept of loud and soft.

Duration, as approached by Montessori, is begun by having the children walk on a line as the teacher plays a series of half notes, quarter notes, eighth notes, or whole notes. The children walk only when they hear the next note. Montessori says that listening for note values is essential before looking at the symbol for it.⁴²

Dalcroze teaches duration in much the same manner.

. . . the teacher plays a series of measures and the pupils, after listening to them, realize in their movements the rhythm which they have heard--expressing the note values, the meter, the shading, the quickness or slowness--they reproduce the rhythm in movement as definitely as though it were written in ordinary musical notation.⁴³

Rests are begun when all rhythmic combinations of the whole, half, quarter, and eighth notes are secure in the child's movements. Each rest is introduced one at a time as silent musical beats. To sense this silent pulse the children should

alternately tap a $\frac{2}{4}$ measure in a walking tempo and think a measure in $\frac{2}{4}$, the test being whether they can resume the beat at the proper time in proper tempo. Gradually increase the number of silent measures. If the children have difficulty thinking tempo at first, let them beat time with their right hand through the

⁴²Montessori, p. 361.

⁴³Landis and Carder, p. 21.

tapped and silent measures; then only in the silent measures; then eliminate beating time entirely.⁴⁴

When rhythm patterns are presented through movement, the child comes to realize that "all of the elements of music are to be found within himself and can be expressed by his own body."⁴⁵ He is realizing his aural and physical perceptions: and, these sensory perceptions cannot be neglected.

Sensori-motor intelligence lies at the source of thought, and continues to affect it throughout life through perceptions and practical sets. . . . The role of perception in the most highly developed thought cannot be neglected, as it is by some writers.⁴⁶

Another approach to basic rhythm concepts was conceived by Carl Orff. While movement is important in the Orff method, "it is not the central focus through which all or most musical study is approached."⁴⁷ In Orff's method, rhythm is introduced through body sounds and speech exercises which eventually culminate in instrumental playing. Body sounds, which are used extensively to accompany speech patterns, include clapping, foot-stamping, finger-snapping, and patting or knee-slapping. These body sounds "provide a way for children to sense rhythm through movement in addition to hearing them; they are used extensively to accompany singing and chanting and they give practice in performing rhythms."⁴⁸

⁴⁴Cheyette, p. 62.

⁴⁵Taylor, p. 50.

⁴⁶Jean Piaget, The Psychology of Intelligence, trans. from the French by Malcolm Percy and D. E. Berlyne, M.A. (London: Routledge and Kegan, 1959), p. 119.

⁴⁷Landis and Carder, p. 85.

⁴⁸Landis and Carder, p. 84.

Orff felt that learning music through speech and body sounds was the most natural way for a child to begin. Speech exercises are formed from familiar words such as the child's name. The teacher claps and speaks the word in a rhythmic pulse; the children repeat. Later the children organize many familiar words to produce an interesting rhythm pattern. Gradually, sub-divided figures are introduced and practiced by alternately stamping, clapping, and speaking the words. These speech exercises, performed with or without body sounds, are said at "several levels of pitch, in various registers (falsetto, humming, whispering, nasal voice etc.), and at all dynamic levels."⁴⁹ Speaking in this manner offers an excellent opportunity for a variety of vocal expression in terms of "dynamics, mood, and tempo. For some child this may be the way to ultimate tonal singing."⁵⁰

The next step in Orff's approach is to have the rhythm patterns clapped and stamped while they are spoken. Finally, the child claps or stamps them without speaking them aloud. Speech patterns are eventually expanded into rhythmic sentences and sayings which are started by echo-clapping. The teacher claps the sentence while speaking it in a rhythmic pulse; the children repeat without pause. This is not really imitation but rather "taking up and carrying on an ongoing rhythm, strengthened

⁴⁹Wilhelm Keller, Orff-Schulwerk Introduction to Music for Children, English trans. by Schoot (New York: Belwin-Mills Pub. Co., 1974), p. 24.

⁵⁰Judith Bevans, "The Exceptional Child and Orff," MEJ, Vol. LV No. 7 (March 1969), p. 43.

by the fundamental technique of construction: repetition."⁵¹

The importance of repetition cannot be underestimated.

The development of thought will thus at first be marked by repetition, in accordance with a vast system of loosening and separations, of the development which seemed to have been completed at the sensori-motor level, before it spreads over a field which is infinitely wider in space and more flexible in time, to arrive finally at operational structures.⁵²

Changes in dynamics or tempo make the sentence interesting and also reinforce these concepts. For a variation of echo-clapping, the children can repeat the pattern, using a different body sound. For example, a clapped rhythmic sentence can be answered by repeating it with knee-slaps.⁵³ Later these sentences and/or sayings can be developed in a two-part choral composition. Some of the children can repeat a sentence such as "Forbidden fruits are sweet" in a rhythmic pulse while the other children clap the word "forbidden" in an ostinato accompaniment. Eventually more parts can be added.⁵⁴ (See Figure 1) These two- to four-part choral compositions aid in the development of rhythmic independence which is so important for later score reading. "Phrasing, staccato, legato, repetition, contrast, specific and simple binary, ternary and rondo forms"⁵⁵ all can be learned through Orff's program of choral speaking

⁵¹Keller, p. 28.

⁵²Piaget, The Psychology of Intelligence, p. 123.

⁵³Keller, p. 53.

⁵⁴Landis and Carder, p. 80.

⁵⁵Landis and Carder, p. 79.

"Forbidden Fruits are Sweet"

The musical score is divided into two main sections. The first section features two groups of children and clapping. Group I has a melody starting with a quarter note, followed by a dotted half note, and ending with a quarter note. The lyrics are "For -bid-den fruits are sweet. For-". Group II has a melody starting with a quarter note, followed by a dotted half note, and ending with a quarter note. The lyrics are "For -bid-den fruits are". Clapping is indicated by a vertical line with a colon and a vertical line with a colon. The second section features two groups of children. Group I has a melody starting with a quarter note, followed by a dotted half note, and ending with a quarter note. The lyrics are "bid-den fruits are sweet. For". Group II has a melody starting with a quarter note, followed by a dotted half note, and ending with a quarter note. The lyrics are "sweet. For -bid-den fruits are". Clapping is indicated by a vertical line with a colon and a vertical line with a colon.

Figure 1

and body sounds. Children soon realize that many musical concepts can be expressed through their own body; they therefore understand musical concepts on their own level in what Bruner would call an "enactive" form.

Once basic rhythmic concepts of beat, accent, meter, and duration are firmly established in the child's mind, rhythmic notation can begin. Children should realize that notation, either rhythmic or melodic, is just a "means of storing and communicating musical ideas."⁵⁶ Children discover for themselves

⁵⁶Landis and Carder, p. 24.

the importance of a universal system for communicating musical ideas on paper before the actual rhythmic or melodic notation is given. This can be accomplished by having the children notate a rhythmic pattern or melodic phrase using symbols or signs of their own choosing. Students can then perform each other's compositions by clapping or singing them on a neutral syllable. They will discover that each one of them has different ideas for interpreting the "composition" and will then realize the need for a universally understood program of rhythmic and melodic notation.

Dalcroze introduced rhythmic notation by having the children respond physically to the rhythms they hear. They walk or run in a synchronized movement with the music. Later, they write the rhythm patterns they hear by using a system of dots and dashes. "Dots represent the shortest note values and dashes of varying lengths represent longer note values."⁵⁷ After a number of exercises, the children observe in musical notation the rhythm patterns they have experienced in movement and "dictation." "When these patterns are later encountered in a musical score, students can recognize and respond to them because of physiological, as well as intellectual, associations."⁵⁸

Along this same line, duration values can also be noted by underlining the text of a familiar song. The length of the line

⁵⁷Landis and Carder, p. 24.

⁵⁸Landis and Carder, pp. 24-26.

represents the rhythmic emphasis to be given each word. For example:⁵⁹

"Jumping Rope"

American Folk Song

One, Two, Three, 0' - Lea - ry,

Four, Five, Six, 0' - Lea - ry,

Sev'n, Eight, nine, 0' - Lea - ry,

Ten, 0' - Lea - ry Post - man.

Figure 2

From experience with line values, or dots and dashes, the children can proceed to actual rhythmic notation.

Kodaly's method for teaching rhythmic notation is considered by many to be the best method for young children. In his approach to rhythmic notation, a system of rhythm symbols is used for each kind of note. Each rhythm symbol is introduced in a pattern which is placed upon the basic beat. No staff is used. The quarter note, called a ta, is written as a straight vertical line without its "head" | . Eighth notes, called "ti's" are written as two straight vertical lines joined by a ligature \sqcap . Later, when children can correctly count and clap these rhythms, "feet" are put on the stems. The half note is labeled ta-a, the dotted half note ta-a-a, and the whole note ta-a-a-a. Each pattern is learned separately and is experienced

⁵⁹Cheyette, p. 59.

in song and movement before combinations of these patterns are used.⁶⁰

Children are already familiar with different note values from movement exercises using music. Now, instead of just listening and moving to each note played, the children look at the written notation, hear it, and follow accordingly by stepping with each note. When combinations of these rhythm patterns are approached in this same manner, children discover that the shape of the note "bears a relation to the difference in the time value of each note."⁶¹

Children should also have experience in writing these rhythm patterns, by copying them from the board and from dictation exercises. These exercises give the child practice in writing musical symbols and they reinforce the note-time relationships. It also develops discipline in their listening habits.

Dictation exercises start after the children have had experience in seeing the notation and experience in moving to it. As in movement, these exercises should first consist of all of the same kind of note, e.g. all quarter notes, before combinations are used. The teacher starts each rhythmic dictation by first establishing a steady beat before the pattern is clapped. The children repeat and then immediately write it down. The teacher can eventually change from clapping these patterns to

⁶⁰Landis and Carder, p. 57.

⁶¹Montessori, p. 359.

playing them on the bells or the piano. This will be beneficial to them when they later notate both the rhythm and the melody.

Melodic Concepts

Although rhythm is taught first, it cannot be logically separated from melody. Children are surrounded by sounds which not only have a rhythm pattern but also a distinct pitch. Therefore, the first step in teaching melody is to train the child to hear and to distinguish pitches.

A young child exposed to varied musical sounds will gradually realize that musical pitch exists everywhere; in a struck drinking glass, in a soda pop bottle converted into a flute, in his mother's crockery, in his voice, and in musical instruments.

. . . Once conscious of pitch and rhythm, he will be able to understand that the sounds called music are those organized solely for the purpose of creating recognizable patterns.⁶²

Most children love to sing and should be given the opportunity to learn many kinds of songs. Many believe that the best songs for children to sing at first are those based on the pentatonic scale.

Children cannot sing the diatonic scale in tune. Those half-steps are difficult to sing perfectly and so we use the pentatonic songs that do not have difficult half-steps and confusing tonal implications. The ear and the eye are trained first upon these five strong pillars. When the relation between these five tones is thoroughly learned, then we can move to the more difficult sounds of the diatonic scale.⁶³

The pentatonic scale can provide many opportunities for improvisation. Children can compose ostinato patterns or a new

⁶²Cheyette, pp. 32-33.

⁶³Mary Helen Richards, "The Kodaly System in the Elementary Schools," CRME, Bulletin No. 8 (Fall 1966), p. 45.

accompaniment to a song. Burdon accompaniments, popular in Orff's method, "are used extensively because their open fifths, like the droning of a bagpipe, sound well with pentatonic melodies as well. The burdon tones also begin to suggest tonal center relationships."⁶⁴ Because there is no half-step relationship in the pentatonic scale, anything the children create will sound "correct," resulting in more immediate satisfaction.

Through singing, children can learn the important concepts of high and low (up and down) and same, different, and similar. The concept of high and low (up and down) is sometimes confused with the concept for large and small.

For little children, pitch is easily confused with tonal volume; high and low being equated with large and small. The pitch of the low or bass strings of the piano seems larger rather than lower than the higher pitched strings, which the child will describe as having a smaller sound. This is a natural reaction, since most higher pitched instruments are smaller than those whose pitch is lower; that is, a child is smaller than an adult, a violin smaller than a cello, a piccolo smaller than a flute, a trumpet smaller than a tuba.⁶⁵

Also, many times the concept of high and low (up and down) may be confused with the dynamic levels loud and soft. For instance, a child's mother might say, "Turn the volume down," which means to turn the volume softer. So, when a musical passage steps downward, the child might think it is getting softer rather than lower. Therefore, this concept plus its appropriate label should be given a great deal of attention.

To approach the high and low concept, the children should first be acquainted with familiar high and low opposites, e.g.

⁶⁴Landis and Carder, p. 83.

⁶⁵Cheyette, pp. 35-36.

the sky is high, the ground is low. The children can practice these concepts by reaching toward the sky for high notes that are played and by touching the ground for the low notes that are played. Even three-year-old children

experiment with pitch through body movement, using the space around them to explore highness and lowness. They discover first the wider differences, or the extremes in pitch. In successive lessons smaller intervals are introduced, and they respond to the direction of a melody as they hear it in ascending, descending, or repeating tones.⁶⁶

To visually recognize this concept before a staff is used, the teacher draws one line high and one line low on the chalkboard. The children point out which line is high and which line is low. Again, the distance between the lines should be gradually reduced. Later, lines can be drawn to represent ascending, descending, or repeating scale tones. These lines, used in conjunction with listening and moving, provide both enactive and iconic representations of the concept of high and low. These are necessary prerequisites for understanding the concepts when represented symbolically on the musical staff.⁶⁷






The concepts of same and different, can be approached through many mediums. Again, using familiar opposites, the children can learn to make this distinction. Two squares and a circle can be made from construction paper. The children can pair the "same" items or single out the "different" one.

⁶⁶Landis and Carder, p. 23.

⁶⁷Marvin Greenberg and Beatriz MacGregor, Music Handbook for the Elementary School (New York: Parker Pub. Co., Inc., 1972), pp. 62-67.

Same and different can also be approached through rhythm patterns and song. Have the children finger-snap four quarter notes, clap eight eighth notes, and return to finger snapping the four quarter notes. They will discover that the finger-snapping parts were the same; the clapping was different.

Children can hear the concept of same and different through melodies. Play a familiar song such as "Twinkle Twinkle Little Star." Have the children clap while they sing the words "twinkle twinkle little star how I wonder where you are" and clap and sing it again when the words and the melody repeat the same pattern. They will find that the first and last phrase of the song was the same; the middle section, "up above the world so high, like a diamond in the sky" was different.

Once the concept of same and different is firmly established, the concept of similar can be introduced. Begin this concept as above; first with familiar objects (such as a rectangle) and then in rhythm patterns and songs. When the aural recognition of same, different, and similar is understood, the visual recognition of this concept may be introduced. Again, lines should be drawn on the board to represent the differences among these concepts. Line patterns such as ,  can be used to represent the concept of same; line patterns such as , ,  can be used to represent the concept of different. Later, line patterns corresponding with familiar songs such as "Hot Cross Buns" can be placed on the board. The children can then follow the lines while they sing the song. In this way, they will be able to see as well as hear same, different, and similar patterns.

"Hot Cross Buns"
standard notation



"Hot Cross Buns"
line notation



There are many ways for children to learn note names and interval relationships. Montessori introduces notes and intervals through the diatonic scale. The children sit on the floor in a circle while the teacher claps and sings a child's name. The children repeat and continue clapping and singing the child's name up the diatonic scale. Two sets of bells are put on a table. Each set produces the same diatonic scale. The child must pair the bells for identical sounds. When he can do this, the bells are scrambled and the child must find one diatonic scale by ear. He usually finds the scale by accompanying himself. The name of the note and its symbol are written on the side of each bell. The child can then check himself for errors.⁶⁸ Sometimes the teacher will choose a bell, strike it,

⁶⁸ Montessori, p. 319.

and say that this bell is "fa". From your table, find the note above it (or below it). The children then begin singing the note that should follow it (or go before it) and continue striking the bells until they have found the correct note.⁶⁹

A staff is used for the reading and writing of music but without treble or bass clef signs. Discs are used to insert in the staff. Each disc is labeled 1 do, 2 re, etc. "In this way even very young children are aware of notes as symbols of sounds."⁷⁰ This device also "enables the child to place the notes on their respective lines without making mistakes and to examine their relative positions."⁷¹

Half steps are represented by black discs. The child soon discovers a relationship between the major scales; ". . . he is able to build all possible scales by himself."⁷²

Another device used to help the child discover note relationships is a card which shows the construction of two octaves (starting with C) in black and white colors which correspond to the tones they represent. Another card is made showing the octave. This card is movable and is fastened to the first card by a ribbon. The child can slide his movable scale chart to any note of the first chart. In the illustration shown on the following page, the movable card slides to "mi". The child sees

⁶⁹ Montessori, p. 319.

⁷⁰ Paula Polk Lillard, Montessori A Modern Approach (New York: Schocken Books, 1972), p. 72.

⁷¹ Montessori, p. 326.

⁷² Montessori, p. 334.

again how the intervals of one scale are identical to that of any other scale.

Material for indicating the intervals of the major scale and its transposition from one key to another

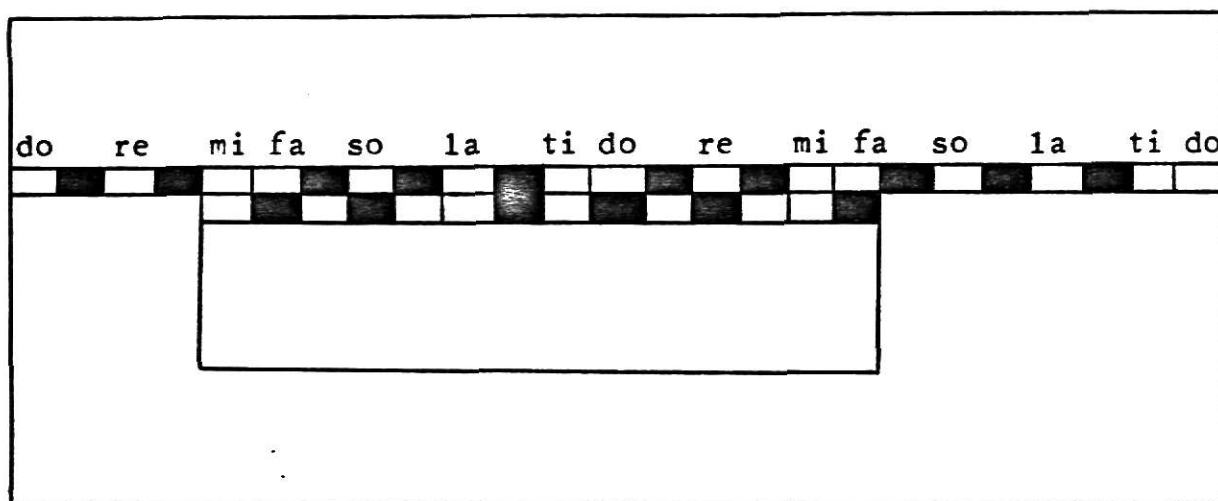


Figure 3⁷³

A xylophone-like instrument is then introduced. Its appearance resembles the cardboard charts. The child plays each scale on this instrument. The C scale is played first. Then the notes C and C# on the xylophone are removed; the instrument slides to the left. "Re" is now in "do's" place. The children then play the major scale on "re" noticing the intervals needed to complete the scale. Gradually all scales are played in this manner and copied down.⁷⁴

⁷³Montessori, p. 335.

⁷⁴Montessori, p. 334.

Montessori says that discovering scales in this manner enables the child "to see for instance that a scale with two dieses (sharps) has the same dieses (sharps) which appeared in the preceding scale."⁷⁵

The next step is practicing to read musical script. The discs first used to see the relationships of a scale, are introduced again. This time forty or fifty discs are made available for staff use. Each disc has the name of the note written on the back. The children must arrange the notes according to the disc names, placing the note name face down. When they are finished, the child can turn each disc over to check his work. Bells are used to play their "compositions." For more practice, notes are written on flash cards. When the children can successfully play the notes on the cards, they write the notes down. They can then create their own melody, play it, and write it down.

The children write and play in treble clef although no mention has been made yet of the two staves. To introduce treble and bass clef, the children write the C major scale, using the notes C below middle C to C above middle C and back down. This created a rhombus. When the rhombus is made,

separating the two staves, the arrangement of the notes in the higher and lower key (the C scale and bass) becomes apparent and the different significance of the two series can be emphasized by placing to the left of the staff the two clef signs.⁷⁶

⁷⁵Montessori, p. 334.

⁷⁶Montessori, p. 331.

Rhombus

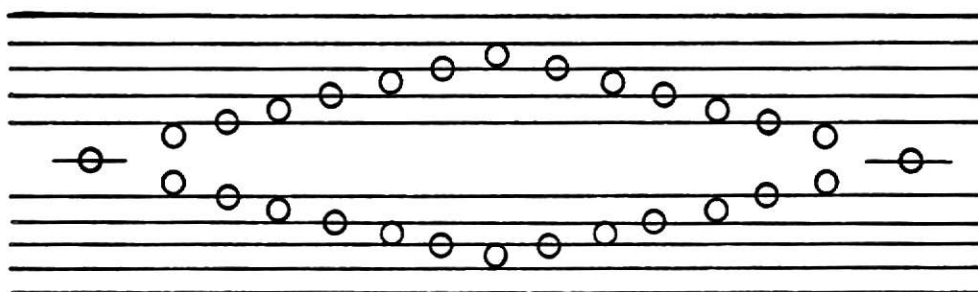


Figure 4

Another way of teaching interval relationships is through solfege. Dalcroze believes that solfege

awakens the sense of musical pitch and tone relations and the ability to distinguish tone qualities. It develops the ability to listen, the ability to hear, and remember (tonal memory). It should develop a consciousness of sound.⁷⁷

Dalcroze used the fixed "do" system of solmization.

The earliest solfege study begins to establish C in one's tonal memory. From C, a thorough study is made, hearing and singing the C major scale and the tonal relationships within the scale. All of this is done through the ear, through the muscular sense of singing and through hand positions, designating tones of the scale--all before any writing. First the instinct and then the intellect.⁷⁸

Pitch relationships are studied by "singing one or more measures aloud, then one or more measures silently"⁷⁹ and by singing the final pitch of one song and the beginning of a

⁷⁷Landis and Carder, p. 22.

⁷⁸Landis and Carder, p. 23.

⁷⁹Landis and Carder, p. 23.

second, naming the interval between them. Through his system, students eventually acquire "the ability to hear in their minds as they look at the musical score, rhythm patterns, melodic intervals, phrasing, and dynamic nuances."⁸⁰

Musical sign language is perhaps the best way to introduce melodic intervals because it creates a visual image of the note relationships. For the pre-school and kindergarten class the musical sign language Irving and Herbert Cheyette presents is taught as follows:

Have children stand.

low do	hands hanging at side
re	hands on hips
mi	hands on waist
fa	hands at chest level
sol	hands at shoulder level
la	hands at their chins
ti	hands at eye level
high do	hands on top of their heads

For notes below tonic or "do":

ti	hands on knees
la	hands on calves of legs
sol	hands on ankles

⁸¹

Hand signals are substituted for body signs when pitch relationships are well established. These hand signals, originated by the Englishman John Curwen, are used as an important teaching device in the Kodaly method. These hand signals are:

⁸⁰Landis and Carder, p. 23.

⁸¹Cheyette, p. 38.

Kodaly Hand Signals

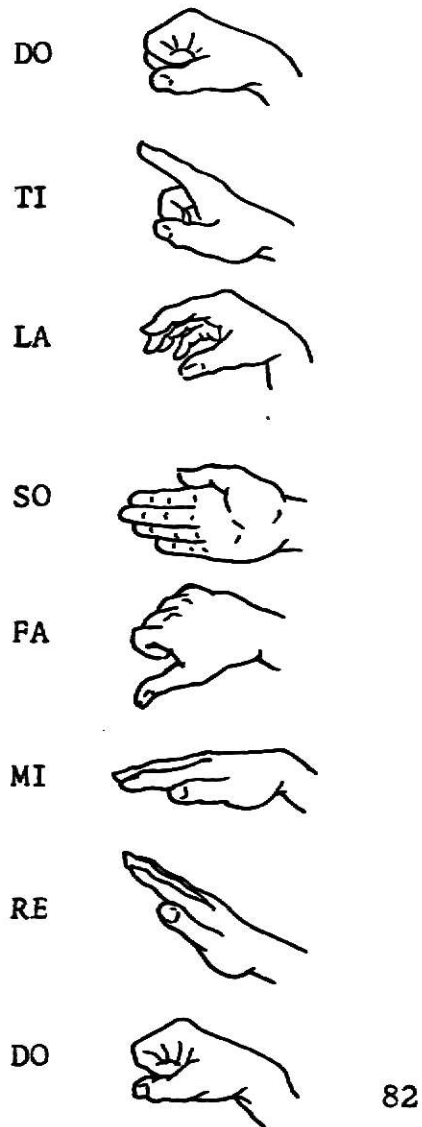


Figure 5

Low "do" should start at waist level and proceed upward with high "do" ending slightly above the head. Children learn to use syllables and hand signals from songs they have already learned by rote. Through these songs, melodic motives are "abstracted from the musical context and repeated many times."⁸³ The children hear these melodic patterns first, just as sounds. They are then asked to express these melodic ideas through body signals.

The first syllable and corresponding hand signal a child learns is the descending minor third so-mi. Many games and question answer songs are used on these two tones. "Pictorial representations are used, both with and without the musical staff, in discussing which tone is higher and which lower."⁸⁴ After the minor third is learned, la, re, and do are added. The children then have the full pentatonic scale. Since many folk songs are based on the pentatonic scale, the children have endless opportunities to practice these syllables and hand signals. Low la and so are learned next, followed by fa, ti, and high do. Children already begin to hear fa and ti by "ear in the early stages of teaching, but they do not pick them out consciously until they have learned the notes of the pentatonic scale."⁸⁵ Although Ceyette does not indicate a specific order

⁸³Landis and Garder, p. 46.

⁸⁴Landis and Carder, p. 54.

⁸⁵Frigues Sandor, Musical Education in Hungary, rev. trans. by Cynthia Jolly (London, Paris, New York: Boosey and Hawks, 1969), p. 29.

for learning syllables with body signs, it appears that the Kodaly order would be applicable.

From familiarity with intervals through body signs and/or hand signals, and through singing syllables, children come to realize the concept of steps, skips, and repeated tones. They can see these concepts by watching their body or hand signs while they sing the corresponding syllables. To visualize these concepts on the board, syllables, abbreviated by their initial letter, can be appropriately placed to show the pitch relationships. Syllables above and including high "do" are marked with a superscript, i.e. "high do" d^1 . Syllables below low "do" are marked with a subscript, i.e. "low do" d_1 . "These syllables were not intended to replace the standard staff notation, but were to be used as aids in teaching pitch and duration only in the early stages of study."⁸⁶ An example of these syllable abbreviations is:

1	m	s	d	1_1	
(1a)	(mi)	(so)	(do)	(low 1a)	

Children can also sing the syllables using their sign language while they read the notation from the board.

After a number of exercises, melodic dictation can begin. The staff, consisting first of only two lines, is introduced. Children practice dictation exercises using the syllables "so mi" on their respective lines or spaces. The teacher sings a pattern such as "so mi so mi" while using the corresponding hand signals. The children repeat singing the pattern and using their hand signals; they repeat the pattern with hand signals alone. They

⁸⁶Landis and Carder, p. 45.

then write the pattern on the two-line staff, using circles to indicate the pitches. Three lines are introduced next. From three lines the children have practice in writing the syllables which make up the pentatonic scale (do re mi so la). When the five-line staff is finally introduced, all syllables in the diatonic scale plus the tones above and below it can be used. Children should practice many syllabic exercises, placing "do" on different lines and spaces. In this way the children learn that pitch relationships within any key center remain the same. In essence they have a movable "do".

Kodaly used the movable 'do' system of solmization, in which syllable names indicate functions within the tonality and relationships among the constituent pitches in a given key rather than absolute pitch. . . . Kodaly called this system Relative So-Fa. The essence . . . is that 'do' can be placed on any line or space between the lines. To prevent it getting stuck to one spot, it should be moved about and shown in different positions. . . .

The ability to shift from one tonic to another is the secret of good reading. This is facilitated by using so-fa syllables and should be developed slowly and consistently.⁸⁷

Because melody and rhythm are taught together, the children will ultimately present the syllabic notation plus the rhythmic notation in a dictated phrase or song. The notation of the phrase first without, then with the staff, will require much practice in memory exercises and aural repetition.⁸⁸

After many exercises a neutral syllable such as "loo" replaces the syllable names. In this way, the children can

⁸⁷Landis and Carder, pp. 45-46.

⁸⁸Sandor, p. 43.

eventually take rhythmic and melodic dictation from the key-board.

The grand staff can be finally introduced. Treble and bass clef signs are presented as figures which distinguish the top and bottom staves. Children should have many exercises practicing syllabic and rhythmic notation on the grand staff. Dalcroze suggests the following exercises for this purpose.

A melody would be placed on the blackboard with some empty measures which the student would be expected to fill in, improvising, as he sang the melody for the first time.

Another exercise involved writing a melody on the blackboard and as the students sang it through, each phrase was erased upon completion of this initial singing. A student would then be asked to sing the entire melody by memory.⁸⁹

The final step in reading musical script is learning the names of the notes in treble and bass clef. Sayings can help the children remember the letter lines and spaces in treble and bass clef. These sayings for treble clef lines include: every good boy does fine; each good boy deserves fudge; the spaces in treble clef spell the word "face." The saying for the lines in bass clef is, good boys do fine always; sayings for the spaces are either: all cows eat grass or all cars eat gas.⁹⁰ Children can also create their own sayings for the lines and spaces. To help clarify the position of the note names in the lines and spaces plus the note names between the two staves, the teacher should present all of the note names on both staves from low A

⁸⁹Landis and Carder, p. 26.

⁹⁰Cheyette, p. 48.

in bass clef to high F in treble clef. In this way, the children will be able to see the rotating letter pattern, A through A.

Because music is necessary for a child's well-rounded education, it is important that the teacher structure a music program which will enhance the child's basic education. One approach would be to develop a program based on the intellectual growth theories of Jean Piaget and Jerome Bruner. Piaget described the child's learning process as developing in stages from perception, through concrete operations, to symbolic representation, and finally into formal thought. Bruner described the three stages in a child's intellectual growth as the en-active ("through action and manipulation"), the iconic ("through perceptual organization and imagery--aural, kinesthetic and visual"), and the symbolic ("through words and other symbols").⁹¹

There are many methods available for teaching musical concepts. The methods discussed in this paper were the ideas of Maria Montessori, Emile Jacques-Dalcroze, Zoltan Kodaly, and Carl Orff. Each of these individuals has suggested usable ideas for introducing rhythmic and melodic concepts which seem to be in harmony with the intellectual growth theories of Piaget and Bruner.

Movement through music is the best way to introduce concepts of beat, accent, meter, contour, dynamics, duration, direction of the melody, and same-different- similar. When musical concepts are approached through movement before the symbol is given,

⁹¹Aronoff, p. 7.

the child progresses from concrete experiences to more abstract levels.

Rhythmic and melodic concepts that are learned in the primary grades and reinforced in the upper grades, will stay with the child the rest of his life. When music is a personally rewarding experience, it will bring an enjoyment that will be his forever.

BIBLIOGRAPHY

- Andrews, Francis M., and Ned C. Deihl. "Development of a Technique for Identifying Elementary School Children's Musical Concepts," Council for Research in Music Education, No. 13 (Spring 1968, 1-7.
- Aronoff, Frances Webber, Music and Young Children. New York, Chicago, San Francisco, Atlanta, Dallas, Montreal, Toronto, London, Sydney: Holt, Rinehart and Winston, Inc., 1969.
- Bevans, Judith. "The Exceptional Child and Orff," Music Educators Journal, LV No. 7 (March 1969), 41-43, 125-127.
- Cheyette, Irving, and Herbert Cheyette. Teaching Music Creatively in the Elementary School. New York: McGraw-Hill Co., 1969.
- Encyclopaedia Britannica. Redl, Helen B. "Preschool Education," 1974.
- Evenson, Flavis. "How Music Concepts are Developed and How They are Applied," Music Educators Journal, LVI No. 6 (Feb. 1970).
- Fraze, Jane C. "The Mystery of the Orphs," Music Educators Journal, LV No. 2 (Oct. 1968), 64-67.
- Greenberg, Marvin, and Beatriz MacGregor. Music Handbook for the Elementary School. New York: Parker Pub. Co., Inc., 1972.
- Keller, Wilhelm. Orff-Schulwerk Introduction to Music for Children. English trans. by Schoof. New York: Belwin-Mills Pub. Co., 1974.
- Kemper, Marjorie. "The Preschool Child How Young is Early Enough?" Music Educators Journal, LVII No. 6 (Feb. 1971), 36-37.
- Landis, Beth, and Polly Carder. The Eclectic Curriculum in American Music Education: Contributions of Dalcroze, Kodaly, and Orff. Washington, D.C.: Music Educators National Conference, 1972.
- Landroth, Catherine. Education of the Young Child. New York: John Wiley & Sons. London: Chapman and Hall, Limited, 1942.
- Lillard, Paula Polk. Montessori A Modern Approach. New York: Schocken Books, 1972.

- Montessori, Maria. Montessori Elementary Material (The Advanced Montessori Method). trans. by Arthur Livingston, Robert Bentley Inc., 18 Pleasant St., Cambridge, Mass., 1965.
- Newman, Elizabeth. "A Rational Approach to Music Teaching," in Creative Expression The Development of Children in Art, Music, Literature and Dramatics. 2nd ed. edited by Gertrude Hartman and Ann Schumaker, Milwaukee: E. M. Hale & Co., 1939.
- Nye, Robert Evans. Music in the Elementary School. 3rd ed. Englewood Cliffs, New Jersey: Prentice-Hall, 1970.
- Pflederer, Marilyn. "The Responses of Children to Musical Tasks Embodying Piaget's Principle of Conservation," Journal of Research in Music Education, XII No. 4 (Winter 1974), 251-268.
- Piaget, Jean. The Psychology of Intelligence. trans. by Malcolm Percy and D. E. Berlyne, M.A. London: Routledge and Kegan, 1959.
- _____. The Mechanisms of Perception. trans. by G. N. Seagram, London: Routledge and Kegan, 1969.
- Richards, Mary Helen. "The Kodaly System in the Elementary Schools," Council for Research in Music Education. Bul. No. 8 (Fall 1966), 44-48.
- Sandor, Frigues. Musical Education in Hungary. Rev. trans. by Cynthia Jolly. London, Paris, New York: Boosey and Hawks, 1969.
- Taylor, Elizabeth Medert. "Teach Music Concepts Through Body Movement," Music Educators Journal, LIX No. 8 (April 1973), 50-51.
- Zimmerman, Marilyn Pflederer. "Percept and Concept: Implications of Piaget," Music Educators Journal, LVI No. 6 (Feb. 1970), 49-50, 147-148.
- _____. From Research to the Music Classroom No. 1 Musical Characteristics of Children. Washington, D.C.: Music Educators National Conference, 1971.

METHODS FOR TEACHING CONCEPTS OF RHYTHM AND MELODY
TO CHILDREN BASED ON THE INTELLECTUAL GROWTH
THEORIES OF PIAGET AND BRUNER

by

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In recent years educators have come to realize that a child's early training in music is important in the development of basic skills and concepts. When music instruction is begun at an early age, the child is afforded more opportunities and time to create, experience, and absorb the many aspects of music.

The learning capabilities of young children, as described by psychologists Jean Piaget and Jerome Bruner, were discussed in the first part of this report by reviewing the available literature on the applicability of their theories in the areas of childhood education. Piaget described the child's learning process as developing in stages from perception, through concrete operations, to symbolic representation, and finally into formal thought. Bruner's three stages in a child's intellectual growth are the enactive, the ionic, and the symbolic.

In the second part, various books and articles were reviewed to compile a program of study in rhythm and melody based on the educational practices of Maria Montessori, Emile Jaques-Dalcroze, Zoltan Kodaly, and Carl Orff.

Montessori and Dalcroze approached rhythmic concepts through movement with music. Dalcroze called this process eurythmics. Although not new, their approach still seems to be one of the most effective means of introducing the concepts of beat, accent, meter, and duration. Orff used speech exercises to develop these concepts as well as the concepts of phrase, contour, and dynamics. Kodaly's system of rhythmic notation and the use of rhythm syllables are considered by many to be the best method for teaching rhythmic notation and reading.

Melodic concepts of high and low (up and down), same--different--similar, loud and soft, and skips--steps--repeated tones also are approached through movement and other concrete experiences before the children are asked to recognize them in notation. All of the methods presented for introducing rhythmic and melodic concepts progress from concrete experiences to more abstract levels. The method of teaching basic musical concepts, as described by Montessori, Dalcroze, Kodaly, Orff, and others, seems to be consistent with the intellectual growth theories of Piaget and Bruner.