

THE SPIRAL CURRICULUM: ITS COMPATIBILITY TO, AND
INFLUENCE ON MUSIC EDUCATION WITH PARTICULAR
REGARD TO CURRENT ELEMENTARY MUSIC TEXTS

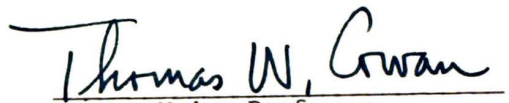
A Research Paper
Presented to
the Graduate Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in Education

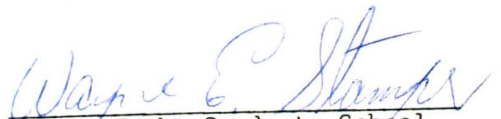
by
John Walter Pickrell
August 1968

To the Graduate Council:

I am submitting herewith a Research Paper written by John Walter Pickrell entitled "The Spiral Curriculum: Its Compatibility To, And Influence On Music Education With Particular Regard to Current Elementary Texts." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Education, with a major in music.


Major Professor

Accepted for the Council:


Dean of the Graduate School

ACKNOWLEDGEMENTS

The author wishes to express sincere appreciation to Dr. Thomas W. Cowan, Department of Music, Austin Peay State University, who aided and counseled him during the course of this study.

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

Jerome Bruner, in The Process of Education, stated that "the main objective of curriculum development projects has been to present subject matter effectively--that is, with due regard not only for coverage but also for structure."¹ In mathematics, for example, the prime objective of the various new programs has been to develop an awareness of the actual structure of mathematics--the concepts and the relationships among concepts which make mathematics a unified discipline. In physics there has been the same concern to teach the basic structure of the subject--the ideas and facts about physical reality which underline scientific inquiry about the world and how it works. In biology the various approaches have all attempted to illustrate the unifying concepts about the nature of living things. Similar attempts have been made in the chemistry project, the geography project, the anthropology project, and the various elementary school science projects. In the field of English several projects are underway which are attempting to get to the root of grammar and its structure, and to avoid the parroting of mechanical rules and regulations which give no insights into the

¹Jerome Bruner, The Process of Education (Cambridge: Harvard University Press, 1961), p. 2.

logical patterns of language.²

What does this mean? It means that music educators must decide just what it is about music that is of fundamental importance. Our colleagues are struggling to teach the most important aspects of the more difficult disciplines, under the hypothesis of Bruner that "any subject can be taught effectively in some intellectually honest form to any child at any state of development."³

William Thomson has reported that a definite indication that reappraisals of a broad scope are taking place in music education is provided by the Comprehensive Musicianship Seminar that met in Evanston, Illinois, in April 1965. Sponsored by the Contemporary Music Project of the Music Educators National Conference; this seminar gathered together some of the foremost music educators, composers, theorists, and musicologists in the United States. Its mission was to take a long hard look at the gamut of music training in this country and then to make concrete proposals for repairing its faulty structure. In the course of this seminar, it became clear that there are restless signs of change at all levels in the total fabric of our public instruction of music.⁴

²Bennett Reimar, "Curriculum Reform and the Junior High General Music Class," Music Educators Journal, LIII, Number 2, (October, 1966), p. 42.

³Bruner, op. cit., p. 33.

⁴William Thomson, "New Math, New Science, New Music," Music Educators Journal, LIII, Number 7, (March, 1967), p. 30.

I. THE PROBLEM

Statement of the problem. The purposes of this study were, (1) to examine the major points of Jerome Bruner's spiral curriculum in light of its effect on, and its compatibility with music education, and, (2) to determine what effect this line of thought has produced in music textbooks in the elementary grades.

Importance of the study. Music educators should realize that the curriculum cannot spiral upwards with success unless its base is well established. This realization is enhanced by the awareness of the spiral curriculum in which pupil and teacher build on previous knowledge, experience, and patterns.

In music education, particularly in the primary grades, this kind of structure has been endorsed and music educators have produced a considerable body of musical concepts to describe and classify musical elements. There are a **great** many music educators who have resisted change and are still dependent on patterns of teaching set many decades ago: patterns which are no longer holding up under the scrutiny of modern educators. A close examination of Bruner's theories has revealed, to this author, similarities between them and the theories already voiced in music education prior to the publishing of The Process of Education in 1961. An attempt has been made, in the form of this study, to expose these similarities and prove compatibility between the spiral curriculum and music education.

The success in applying any "new" philosophy of learning and in achieving its goals depends, to a great extent, on the music text being used in the classroom. A survey, made in 1955, of the then current texts for the general music program in the elementary school, found these collections to be inadequate.⁵

If the learning of music is to be first experiencing it and later explaining it as Bruner's philosophy has suggested; then music materials at the various levels of instruction should be progressively more complex and subtle, demanding ever finer perception and performance.

II. DEFINITIONS OF TERMS USED

Structure. The structure of a subject is interpreted to mean the fundamental or basic principles or ideas on which a discipline is based and includes the relationships of these principles to each other. To grasp the structure of a subject is to understand it in a way that permits many other things to be related to it meaningfully. To learn structure, in short, is to learn how things are related.

Concept. Throughout the study, the term concept is interpreted as meaning a mental image that remains in the mind after a perceptual experience. In its beginning stages a concept may be merely a

⁵Lloyd H. Slind, "A Proposed Program for the Extension of Music in the Elementary School," Council for Research in Music Education, Critique IV by Walter Duda, Bulletin No. 2, (Winter, 1964), pp. 50-51.

general notion. As it becomes more and more clarified, it will also become more specific. The term concept in this sense will apply to some basic or fundamental principle or idea of subject matter. For example: a musical concept will be a mental image or an awareness of some basic principle of music such as loud, soft, high, or low.

Spiral curriculum. The spiral curriculum is one in which the grasp and use of basic ideas are developed. As the curriculum develops it will repeatedly visit these ideas, increasing their scope and depth until the student has grasped the full formal apparatus that goes with them. A curriculum that turns back on itself at higher levels is a spiral curriculum.

Cyclical curricular sequence. The term is used to refer to a method of presentation of musical concepts. They are first introduced at a very early level, but only in a vague, indeterminate manner. Their full significance emerges over a period of time as a result of a variety of experiences and an increasing recognition of their interrelatedness.

CHAPTER II

REVIEW OF THE LITERATURE

There has been much discussion among music educators concerning the future of music in the public schools. A definite need for a critical reevaluation of goals and methods has been evidenced by the many projects currently being undertaken in the field of music education. Among these projects are the Contemporary Music Project, The Manhattanville Project, The Yale Curriculum Development Project, and the Tanglewood Symposium.

I. LITERATURE DEPICTING A NEED FOR THE RESTRUCTURING OF THE MUSIC CURRICULUM ALONG THE LINES OF THE SPIRAL CURRICULUM

"There is general agreement among music educators that a carefully planned program...should provide children the opportunity to develop an aural understanding of the melodic, rhythmic, and interpretive elements of music."¹ This statement by Robert Petzold was supported by a comparison of curriculum guides for: Indiana

¹Robert G. Petzold, "Development of Auditory Perception of Musical Sounds by Children in the First Six Grades," Journal of Research in Music Education XI, Number 1, (Spring, 1963), p. 21.

Public Schools;² Kalamazoo Public Schools;³ and Bethel School District, Number 52, Eugene, Oregon.⁴

Four specific objectives were found in the comparison of these guides. These were: (a) Developing an awareness of the melodic element of music; (b) Developing an awareness of the rhythmic element of music; (c) Developing an awareness of the harmonic element of music; and, (d) Developing an awareness of notation in the elementary child.

The ability to perceive and formulate concepts of the melodic, rhythmic, and interpretive elements of music is necessary early in the child's education as these elements should preclude any sequence of musical activities as the child will, as Petzold says:

be more able to proceed effectively to the visual perception of musical symbols...as they are already familiar with the sound vocabulary of music represented by these symbols.⁵

Due to the abstract quality of the art, music demands that the pupil be given a basis upon which to understand the music as it proceeds for "hitherto children have been introduced to musical notation in such a way that they have been unable to associate it

²Music in Education--A Curriculum Guide, (Indiana Music Educators Association and the Department of Public Instruction: State of Indiana, 1963).

³Kalamazoo Public Schools, (Kalamazoo: The Curriculum Department, September, 1963).

⁴Robert E. Nye, Music for Elementary School Children, (Washington: The Center for Applied Research in Education, Inc., 1963), pp. 17-33.

⁵Petzold, loc. cit.

with music itself; with actual living sounds."⁶

II. LIMITATIONS OF THE STUDY

In the discussion of the spiral curriculum and its compatibility with music education the study was limited to the major tenets of Bruner's theory. The study was not concerned with psychological principles as such but touched upon them only where necessary to show a distinct relation or specific application of the spiral curriculum to music education. Discovery learning was a basic part of the "creative" approach to teaching and in this sense the creative approach was implicit in much of Bruner's work. Creativity, however, was not basic to this study and was omitted.

The portion of the study devoted to determining the effect of the spiral curriculum was confined to a comparison of three current elementary music books and limited to the books for grades one and two.

⁶Maurice Martenot, "The Martenot Method," Music in Education, (Paris: Unesco, 1955), p. 239.

CHAPTER III

THE SPIRAL CURRICULUM: ITS COMPATIBILITY TO, AND INFLUENCE ON MUSIC EDUCATION

As has been previously stated, the spiral curriculum theory is based on the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any state of development.

"It is that the basic ideas that lie at the heart of all science and mathematics and the basic themes that give form to life and literature are as simple as they are powerful."¹ To have command of these basic ideas and to use them effectively requires a continual deepening of one's understanding them that comes from learning to use them in progressively more complex forms. It is only when these basic ideas are put into such formalized terms as equations or verbalized concepts that they are out of reach of the young child if he has not first understood them intuitively and had a chance to try them out on his own. A curriculum as it develops should revisit these basic ideas repeatedly; it should build upon them until the student has grasped the full formal apparatus that goes with them.²

This is the heart of the spiral curriculum. How may it apply

¹Bruner, op. cit., p. 12.

²Ibid., pp. 12-13.

to music education?

Music educators who are familiar with the Fifty-seventh Yearbook of the National Society for the Study of Education, Part I, Basic Concepts in Music Education, will see a great deal of similarity between Bruner's hypothesis and James Mursell's proposition that, "in introducing significant musical concepts, there is not any need to wait for a supposititious moment when children will be ready to deal with them. They can occur in immature form very early indeed."³

Thomson, in speaking of elementary music, has pointed out that although the ability of the young child at abstract conceptualizing is not the same as that of adolescents or adults, this truism of psychology emphatically does not preclude the formation of musical concepts in the young child provided that the concept is presented in a way that is consistent with the conceptual ability of the learner and with the structure of the discipline.⁴

The actual philosophy of the spiral curriculum is especially applicable to music education. Mursell's cyclical curricular sequence follows basically the same outline as the spiral curriculum by introducing musical concepts to the learner in an indeterminate

³James Mursell, "Growth Processes in Music Education," Basic Concepts in Music Education, Fifty-seventh Yearbook of the National Society for the Study of Education, Part I (Chicago: University of Chicago Press, 1958), pp. 158-159.

⁴Thomson, op. cit., p. 79.

and vague manner, allowing their full significance to emerge over an extended period of time under a variety of experiences thus creating an increased recognition of their interrelatedness.⁵

Bruner maintains that, "the first object of any act of learning, over and beyond the pleasure it may give, is that it should serve us in the future."⁶ Learning serves the future in two ways. One is the phenomenon of specifically applying this learning to tasks similar in nature to those originally learned to perform. A second way in which learning serves later performance is through nonspecific transfer. In essence it consists of learning first not a skill but an idea which serves as a basis for recognizing subsequent problems as special cases of the idea originally mastered. It is this form of transfer that is at the focal point of the educational process: the process of continually broadening and deepening ideas. Thus, the continuity of learning that is produced by nonspecific transfer is dependent upon the mastery of the subject matter. The more basic the idea or concept which the person has learned, the greater the scope of its application to new and more varied problems.⁷

The implication for music educators is quite clear. It is the experience of a particular phenomenon and the awareness of it as a musical property that are essential. The student can identify

⁵Mursell, op. cit., p. 158.

⁶Bruner, op. cit., p. 17.

⁷Ibid., pp. 17-18.

the property and he can learn the word that is used to classify it. This gives him one discriminative and descriptive basis for every subsequent piece of music he hears, helping him to compare this piece of music with another, and to correlate his variety of experiences.⁸

Music educators have been working for some time on the identification of the concepts which are fundamental to the study of music. The type of musical concept which conforms to Bruner's requirements for nonspecific transfer of learning has been identified by Thurber Madison as being not an experience, but, "an abstraction and a generalization of an idea which was developed out of and apart from the particulars noted by the senses."⁹ The continued use and effectiveness of this type of concept lies in the ability of the perceiver to note or abstract the common characteristics peculiar to this concept as they are found in other experiences.¹⁰

Mursell presented several examples of musical concepts as he pointed out that:

pattern and organization, in music as everywhere else, depend on concepts, abstractions, generalizations. High, low, up, down, loud, soft, chord, scale, beat, key, phrase--these are just a few of the very many concepts in terms of which we organize our world of sound.¹¹

⁸Thomson, loc. cit.

⁹Thurber H. Madison, "The Need for New Concepts in Music Education," Basic Concepts in Music Education, Fifty-seventh Yearbook of the National Society for the Study of Education, Part I; (Chicago: University of Chicago Press, 1958), p. 7.

¹⁰Ibid., pp. 7-8.

¹¹Mursell, op. cit., p. 152.

The question of structure is all important if the music educator is to successfully adapt the spiral curriculum to his field. Which concepts should be introduced first? When should each be introduced? When should each recur? How deeply and specifically should it be studied?

When it appears evident that any concept will occur repeatedly with increased meaning; whenever any such concept has an important and significant function in music with which the children are dealing; whenever an understanding of any such concept will lead directly to a more adequate appreciation of music that is being heard or performed then the way is open to the solution. Thus it becomes the musical content of the program that determines the presentation of musical concepts and therefore, to a large degree, the structure.¹²

Discovery has an important role in the spiral curriculum as it is through discovery that the teacher is most likely to be able to instill attitudes toward learning and inquiry, toward guessing and hunches, toward the possibility of solving problems on one's own. The type of discovery which Bruner refers to is the discovery of regularities of previously unrecognized relations and similarities between ideas, with a resulting sense of self-confidence in one's abilities. The Committee on School Mathematics and the Arithmetic Project of the University of Illinois have been active in devising

¹²Ibid., p. 159.

methods that permit a student to discover for himself the generalization that lies behind a particular mathematical operation, and they contrast this approach with the method of "assertion and proof" in which the generalization is first stated by the teacher and the class asked to proceed through the proof.¹³

Bruner maintains that in a learning sequence based on discovery the student becomes more involved and committed to a task, more interested in completing the task and achieving his reward as a direct result of his work. Under these conditions the student tends to sustain his curiosity and to independently solve additional problems that are similar to and different from those in which a particular concept was developed or deepened.¹⁴

Discovery learning is based on concepts, and teaches universals, patterns, plans, or designs and with these the character or genre of a thing is classified. From the very beginning the learner is given an opportunity to interpret, collate, verbalize, and make this new classification "fit" with his individual experience. Since the degree of understanding and sense of importance of a concept may differ widely among learners, a perceptual field is afforded in which each learner can determine, to a great extent, his own feelings regarding the concepts or principles he is exploring.

¹³Bruner, op. cit., pp. 20-21.

¹⁴Guy Duckworth, "Discovery Learning in Piano Instruction," Music Educators Journal, Vol. LIV, Number 6 (February, 1968), p. 54.

From the beginning, everything the student does is meaningful.¹⁵

In learning by discovery, the name is not presented first, and then the meaning, but the conception is first discovered and later the name for it is assigned. The distinction between idea (concept) and word remains clear. Words are vehicles for concepts, but not substitutes for them. They are merely labels. In the music classroom much of what the students come to understand is first understood on the nonverbal level.¹⁶

Language as a tool to learning is a currently accepted doctrine, but few look beneath the doctrine as Bruner does, to point out that it is not language itself that makes for learning, but the use of it to represent experience.¹⁷

In music it is altogether necessary that symbols be learned. Musical development, otherwise, is bound to remain at a low level and musical apprehension to be vague, crude, relatively incoherent. But how should they be learned? How should they be taught? How should a grasp of them be developed? They must be taught always in terms of their musical meanings and in application to musical situations and experiences, never in terms of verbal definitions

¹⁵Ibid.

¹⁶Charles B. Fowler, "Discovery Method--Its Relevance for Music Education," Journal of Research in Music Education, Vol. XIV, No. 2, (Summer, 1966), pp. 129-130.

¹⁷M. A. White, "The Predicament of Theory," Teachers College Record, Vol. LXVIII, No. 1, (October, 1966), p. 52.

and arithmetical designations.¹⁸

Eight steps have been identified by which discovery should unfold if it is to achieve its maximum effectiveness. The order in which these steps are listed is approximately the sequence in which they will occur. In actual practice, of course, the procedure is quite flexible, some of the steps being skipped or shifted to a different order. Occasionally, because it is not verbalized, one of the steps may occur without being observed. Steps one to five, unless they are intentionally deferred, occur immediately, during the original presentation of the lesson, and may be repeated many times as the exploration uncovers new problems. Steps seven and eight are not an actual part of the discovery process, but they are necessary to relate the concepts to each other and broaden the child's understanding of them.¹⁹

Step one: The problem is presented.

Step two: The children search for an answer.

Step three: The children express their answers.

Step four: The process by which the answers were found is described.

Step five: The answers are compared and tested for verification.

Step six: New questions which arise are explored or retained as future problems.

Step seven: Later lessons are planned as a reinforcement by the presentation of the same concept in other musical settings.

Step eight: Terms and symbols relating to concepts are recorded as they are discovered and organized for later systematic review.

¹⁸Mursell, op. cit., p. 153.

¹⁹Rees G. Olson, "Teaching Music Concepts by the Discovery Method," Music Educators Journal, Vol. LIV, No. 1, (September, 1967), p. 52.

The advantages of a discovery sequence are the same for an advanced student as for a beginner. He is (a) removed from passive posture and dependence, (b) better equipped to solve future problems independently, (c) more involved, (d) better able to see value in the task, (e) capable of transferring the concept to other situations similar to and different from those in which it was discovered and deepened, and (f) intellectually-stimulated.²⁰

Studies in group dynamics show that problem-solving and clarification are aided by a group setting. In contrast to private instruction, group instruction allows the teacher to evaluate each student's individual level as he grasps for new insights among his peers. With a broader and more diverse means of expression in a class, a student's interactions generally take on more purpose; there are other people with and against whom his thinking can be tested for its validity. A group of people interested in the same tasks can enliven individual participation, provide security and approval so that the individual performs at his maximum effectiveness, encourage more diverse discoveries through many pursuits into the unknown and, as a result, find more far-reaching applications for new information. It would be difficult without a group to manage conceptual structure with all its essential conditions: learning sequences based upon discovery, opportunities for intuitive thinking

²⁰Duckworth, op. cit., p. 144.

and indirect influences.²¹

The discovery approach is consistent with principles espoused as basic tenets of music education. McMurray describes an experimental approach to the study of music "in which the environmental situation is arranged and brought into existence as a deliberate pedagogic act and in which the novel or disturbing element is forced upon the attention of pupils" who respond "to enjoy the sense of discovery and of intellectual grasp."²²

Books on elementary music education advocate procedures which are closely related to the discovery method. These procedures are often described as "creative teaching" in which children are free to "suggest and experiment." The creative experience can enable students to discover many of the most basic concepts in music.²³

Regardless of its place in upper-level instruction, music-reading readiness is important in the first or second grade. The motion of rhythmic and melodic pattern or statement is experienced in sound and then related to symbol: is this not what music education in the early grades is about?

²¹Ibid., pp. 144-146.

²²Olson, op. cit., p. 51.

²³Ibid.

CHAPTER IV

THE INFLUENCE OF THE SPIRAL CURRICULUM ON ELEMENTARY MUSIC TEXTBOOKS

Are current textbooks for elementary music structured for developing in children an awareness of the melodic, rhythmic, and harmonic elements of music? Are the children being made aware of the interpretive elements of music? Are the children gaining a practical knowledge of musical notation and musical terms?

In attempting to answer these questions three of the current series for elementary music will be analyzed. The most important part of musical training is the formulation of basic concepts and experiences which are gained during the child's first formal exposure to music. Therefore the analysis will be confined to the texts for grades one and two. The books selected for analysis were:

Discovering Music Together (Books One and Two) Charles Leonhard, Beatrice P. Krone, Irving Wolfe, and Margaret Fullerton (Follett Publishing Company: Chicago, 1966)

The Magic of Music (Books One and Two) Lorrain E. Watters, Louis G. Wersen, William Hartshorn, L. Eileen McMillan, Alice Gallup, Grederick Beckman (Ginn and Company: Boston, 1965)

Making Music Your Own (Books One and Two) Beatrice Landeck, Elizabeth Crook, Harold C. Youngberg, Otto Luening--Special Consultant for Basic Music Concepts (Silver Burdett Company: Morristown, New Jersey; 1964)

Each book has a statement of the objectives which it is hoped that the use of the text will achieve. The objectives of each method are similar in terms of desired goals.

Book One of Discovering Music Together lists the objectives of music in the first grade as including three types of learning products. These are: (1) Appreciation, (2) Musical Competencies, and (3) Musical Concepts.

The objectives in the areas of appreciation and musical competencies are stated below in terms of desired behavior. Musical concepts are stated as generalizations about music.

- I. The objectives for appreciation state that throughout the first grade the child should:
 - A. Participate in musical activities with enthusiasm, pleasure and satisfaction.
 - B. Respond with feeling to the varied moods expressed by the music he hears, sings, and plays.
- II. The objectives for musical competencies at the end of the first grade include:
 - A. Achievement in listening.
 1. Be familiar with music of different types such as march, dance, and lullaby.
 2. Recognize the direction of melodic movement.
 3. Be able to tell whether the rhythm of the music moves in twos or threes.
 4. Be aware of the basic contrasts in music: high and low; loud and soft; even and uneven.
 5. Be aware of rhythmic and harmonic additions to the melody.
 6. Identify tone patterns or phrases as being the same or different.
 - B. Achievement in performance.
 1. Sing in tune within a limited range (D to D).

2. Sing many songs of different types.
 3. Sing with accurate pitch and rhythm the simple melodic patterns he hears.
 4. Clap or play on a rhythm instrument, with proper accent, the simple rhythm patterns he hears.
 5. Play on bells the simple tone patterns he hears.
 6. Play simple rhythm instrument accompaniments to songs.
- C. Achievement in rhythmic responsiveness.
1. Participate freely in action songs and singing games.
 2. Respond to the rhythm of the music he hears and performs with large bodily movement.
 3. Accompany songs by clapping simple rhythm patterns and beat patterns.
 4. Move to show basic contrasts in music: high and low; fast and slow; long and short; loud and soft; even and uneven.
- D. Achievement in creativity.
1. Express the mood of the music through bodily movement and dramatization.
 2. Select rhythm instruments for accompaniments which are appropriate to the mood of the songs.
 3. Sing spontaneously to express his feelings.
- E. Achievement with notation.
1. Associate line notation and melodic contour with melodic direction.
 2. Show melodic direction with hand levels.
 3. Associate the notation of familiar songs with melodic direction.

III. The objectives for musical concepts state that at the end of the first grade, the following concepts should have a

developing meaning and significance for the child:

- A. Melody.
 - 1. High and low.
 - 2. Melodic direction.
- B. Rhythm.
 - 1. Fast or slow.
 - 2. Even or uneven.
- C. Long and short sounds.
- D. Dynamics.
 - 1. Loud sounds.
 - 2. Soft sounds.
- E. Harmony and chord quality.
 - 1. Chords differ in sound.
 - 2. Chords differ in feeling.
- F. Form.
 - 1. Patterns.
 - a. Tone patterns.
 - b. Rhythm patterns.
 - c. Phrases.
 - 2. Repetition and contrast.
 - a. Tone patterns, rhythm patterns, and phrases may be like.
 - b. Tone patterns, rhythm patterns, and phrases may be unlike.

Book One of The Magic of Music states that musical concepts are musical meanings developed in the mind of the child as a result of his experiences with the sound of music.

Tonal concepts are mental images of tone that remain in the mind. The ability to think tone (to hear it in the mind when no sound is produced) is essential to the development of musical concepts.

When children hear, sing, or play a song, a phrase, or a tonal pattern; when they differentiate among the pitches and identify some as being higher or lower, longer or shorter, louder or softer, faster or slower, than others; and when they verbalize these differences, they are developing concepts of pitch and melody, rhythm, dynamics, and tempo. Processes of this type will contribute to the development of all musical concepts.¹

Making Music Your Own is designed to stimulate children's interest in music and to help them make discoveries about its basic concepts.

The material is presented in sequential order so that music learning is gradual and progressive. Repetition, however, is an essential part of the program. Children benefit from singing songs over and over again, with or without the activities originally associated with them. After responding in a natural way to what they hear, children are guided to an awareness of the music principles they

¹Lorraine E. Watters and others, The Magic of Music, Book One, (Boston: Ginn and Company, 1965), p. vi.

have experienced.

The book is based on the premise that children learn by doing. Movement plays an important role in a child's understanding of music. He forms concepts of rhythm, melody, tempo, and dynamics by participating in music through movement of his arms, feet, and body.

Four major concepts are developed in each book. These are: Rhythm, Melody, Form, and Expression. Knowledge of notation is developed gradually as an outgrowth of the children's activities in the four basic areas.

Melodic direction (or melodic contour) is first introduced in Discovering Music Together as the concept of high and low. The children are encouraged to show whether the melody moves up, down, or straight ahead through the use of hand levels--first while listening and then while singing. They should also begin to see that melodies move up and down by skip or by step.²

In The Magic of Music the concept of high and low is introduced in the form of the octave on the resonator bells (D to D).³ The idea of melodic contour is established through "picturing with their hands, the rise and fall of the melody."

Making Music Your Own develops the concept of melodic direction

²Charles Leonhard and others, Discovering Music Together, Book Two, (Chicago, 1966), pp. 28T-34T.

³Watters, op. cit., p. 11.

by having the children use hand levels.⁴ In the children's book (pp. 14-15) melodic contour is illustrated by having a segment of a melody notated on the staff as well as in line notation. After the children have pictured the sound in their own way, the teacher is instructed to tell them that the five lines, called a staff, are used to show exactly how far up or how far down a melody moves.⁵

Rhythmic activities are many and varied in each of these books.

In the "We Discover Rhythm" section of Discovering Music Together the children should begin to formulate several important concepts about rhythm. Among these are: (1) the concept of fast and slow; (2) the concept of even and uneven rhythm; and (3) the concept of long and short sounds. One of the musical discoveries that children should make in this section is that words themselves have rhythm patterns.⁶

The "We Move to Rhythm" section gives the children many opportunities to respond to music by moving freely in the way in which they feel the music. Recognition of three basic rhythm patterns

⁴Beatrice Landeck et. al. Making Music Your Own, (Morristown: Silver Burdett Company, 1964), pp. 17-18.

⁵Ibid., p. 28-29.

⁶Leonhard, op. cit., pp. 40T-50T.

should evolve from this section. These are shown in Figure 1 as follows:⁷



Figure 1

To illustrate the difference between meter and rhythm the children should clap the steady beat while chanting the words of the song ("Sally Go Round the Sun," Discovering Music Together; p. 39).

Book One of The Magic of Music encourages the children to listen for recurring tonal and rhythmical patterns.⁸

The use of rhythm instruments teaches the children to listen to the rhythm of the melody.

The most emphasis on the rhythmical element of music is found in Making Music Your Own. The children's first encounter with rhythm is captioned "Steady-beat" in which they find that all music has a beat--a beat that moves along steadily, "like the tick of a clock, a heart beat, or a pulse." Children should feel the steady

⁷Ibid., pp. 52T-61T.

⁸Watters, op. cit., p. 6.

beat in all their music experiences.⁹

The children's book pictures four kinds of clocks. The ticking sound of each clock is steady. Evenly spaced vertical lines are used to picture the steady beats.¹⁰

Meter is the focal point of "Sawing Firewood" (p. 68). The teacher is instructed to point out that one sawing movement--the downward or cutting movement--is stronger than the other. In music, too, one beat is stronger than the other, and is called the strong beat. The strong beat determines the meter of the music. It is explained to the children that a line, called a bar line, is placed before each strong beat. It measures the music by marking each group of beats.¹¹

The authors of Making Music Your Own feel that, in the first grade, it is enough for the children to discover that the strong beats measure the steady beats in groups of two or in groups of three or four.

The concept of speed or tempo is brought to the children's attention by having a song in two sections, A and B, with one section (B) being sung faster than the other (A).¹²

⁹Landeck, op. cit., p. 6.

¹⁰Ibid., pp. 24-25.

¹¹Ibid., p. 69.

¹²Ibid., p. 69.

Activities related to the concepts of form and expression are limited. The most extensive development of the concept of form is found in Making Music Your Own. The children's first step toward this concept is in helping them feel that music flows continuously from beginning to end. Many examples are given in which the teacher is directed to call the children's attention to the form of the song by such suggestions as "call the refrain A and the verse B. Can the children discover that the form of this song is A B A?"¹³

The Magic of Music treats form simply as phrases. The children are not urged to identify these as phrases as such but as musical patterns which may be the same or different. This elementary concept of form is further developed on page 23 when the students are encouraged to hear and recognize that the second phrase of "Autumn Rainbow" is like the first, but lower in pitch. In "Thank You" (Music by Franz Schubert, p. 54), the students should see and hear how Schubert created a melody by repeating the first phrase at successively lower pitches. This is an excellent example of sequence in music.

Form in Discovering Music Together is also presented as listening for phrases which are the same and which contrast.

Dynamics and the expressive qualities receive even less attention than form.

¹³Ibid., p. 69.

In The Magic of Music musical expression is presented in such a manner as to encourage the children to portray the meaning of the song with their voices.

Making Music Your Own utilizes dynamics in songs such as "Down the Mountainside We Go", p. 62, by using an echo effect in which the answer is sung softly.

Discovering Music Together presents dynamics as simply being the concept of loud and soft sounds.

A major part of each book is devoted to learning notation. Notation is presented as an outgrowth of the developing concepts of melody, rhythm, form and expression.

The second section of Discovering Music Together deals with moving the children from the concepts gained in the first section (Teacher's Edition) "to the specifics of music--the visual aspects of notation."¹⁴

The children should be made aware that music is sound and that we write music with notes. The one-line staff is used to show changes in pitch and stepwise movement in the simplest way possible. The one-line staff ("Hot Cross Buns") depicts G. The teacher is to help the children see and hear that there are only three different tones in the song: (1) above the line; (2) on the line; and (3) below the line. When they look at the five line staff, they should

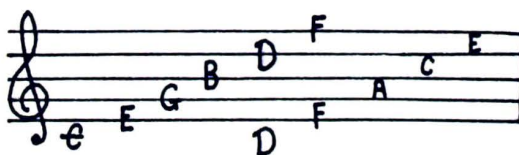
¹⁴Leonhard, op. cit., p. 6.

understand that the note that was above the line is now in a space and so forth. The G line is outlined in yellow to aid the children in seeing how the G line fits into the full staff. At this point the staff and the clef are defined.¹⁵

The children move next to a two-line staff, the G line and the B line above. The teacher should help the children to see that these lines are the second and third lines of the five line staff. After the staff has been gradually introduced, the full staff with the pitch names are presented. The children should be led to understand that pitches on the bells and piano do have names, and that these names are used to name the lines and spaces of the staff.¹⁶

The staff can also be helpful in developing the concepts of highness and lowness, skips, steps, and repeated tones. The staff is presented to the children as follows:¹⁷

The Staff



Each line has a letter name

Each space has a letter name

Sometimes there is a note on a short line below the staff

¹⁵Ibid., pp. 8-9.

¹⁶Ibid., pp. 10-13.

¹⁷Ibid., p. 14.



This line is called middle C

Figure 2

The Magic of Music presents notation in conjunction with a section on bells. The teacher's book states that "First grade children can learn to play many of their songs on little bar bells. These instruments, sometimes called xylos, have a range of one octave, using the diatonic scale of C. Any set of bells having a range of one octave or more may be used. Numbers may be printed on the metal bars if the manufacturer has not already done so. These are actually the numbers of the C major scale. With eight numerals for his musical score, a child's first contact with music reading can be marked with success."¹⁸

In presenting the staff the steps of the scale are shown in the following manner in Figure 3. (The notes are still thought of as being 1, 2, 3, etc.).¹⁹

¹⁸Watters, op. cit., p. 82.

¹⁹Ibid., p. 85.

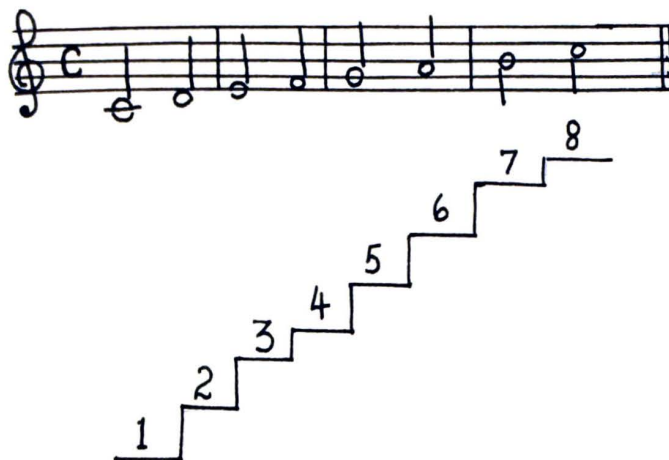


Figure 3

After the children have reached this point they should be ready to "see" in notation what they have heard in numbers. The teacher is instructed to write on the board the notes and numbers of the scale. Point out the association of numbers with notes and show the children that notation, like the words in their reading books move from left to right.²⁰

In both Discovering Music Together and The Magic of Music notation is developed only as a means of indicating pitch and no mention is made of duration.

Making Music Your Own does not present a separate section on notation but it is incorporated into the overall plan so that

²⁰Ibid., p. 85.

gradually, as they progress through the book the children will begin to realize that sound can also be pictured. As they make the transition from "reading" pictures to reading words, they will, at the same time, make the transition to reading notation.²¹

"Five Angels" (pp. 46-47) concentrates the children's attention to tonal patterns and, in particular, to step wise movement. The children should be allowed to play the pattern shown in Figure 4 on the bells to discover the association between notation and playing.



Figure 4

Throughout the book the children are shown examples of the notation for the different rhythmic patterns they encounter in conjunction with the exercises on strong beat and steady beat.

Figure 5 is an example: ("Mister Rabbit", Meter: $\frac{2}{4}$)²²



Figure 5

²¹Landeck, op. cit., p. 8.

²²Ibid., p. 69.

The children's knowledge of notation is increased in "Bling Blang" (pp. 112-113) in which the children are shown that the half note takes the place of two quarter notes. This, pictured in the pupil's book on page 51, is as follows:



Figure 8

In "In the Barnyard" (pp. 114-115) there are ducklings, chicken and geese. Eighth notes picture the movement of the ducklings, quarter notes represent the chickens, and half notes represent the geese. This is pictured in the children's book on page 53 as follows:

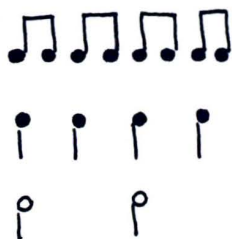


Figure 9

The second Book of each series being analyzed constitutes a review and extension of the four basic concepts of music begun in Book One of each series. The philosophy behind the planned program of continuing and related musical experiences is best set forth in a note to the classroom teacher in Book Two of Making Music Your Own.

Making Music Your Own is a structured learning program... a selection of materials arranged in recommended teaching sequence for the elementary grades. This program progresses page by page through each book, relating musical experiences that have a planned relationship to each other. Annotated teachers' editions include clearly defined suggestions and goals for day-to-day teaching and furnish ample opportunity for reteaching and review.

In this program, the child continually makes discoveries about music in a pattern that broadens and deepens as he advances from grade to grade. Through participation in a variety of musical activities and acquaintance with a unique selection of song and listening materials, he gains music skills and forms music concepts, becoming aware of both the expressiveness and the discipline of the musical art.²³

Book Two of Discovering Music Together also works from the foundation of musical knowledge begun in Book One. Whereas the objectives for Book One were in the nature of general knowledge, Book Two sets forth specific objectives which will be within the children's level of comprehension as they have already gained a general understanding of the basic concepts of music. The objectives set forth in Book Two of Discovering Music Together are outlined as follows:²⁴

- I. The objectives for appreciation state that throughout the second grade the child should:
 - A. Participate in musical activities with enthusiasm, pleasure and satisfaction.
 - B. Respond with feeling to the varied moods expressed by the music he hears, sings, and plays.
- II. The objectives for musical competencies at the end of the second grade include:

²³Ibid., Book Two, p. 159.

²⁴Leonhard, Book Two, op. cit., pp. ii-iv.

A. Achievement in listening.

1. Be familiar with an expanding range of music of different types, including march, dance, lullaby and descriptive music.
2. Recognize direction of melodic movement.
3. Recognize skips and steps in melodic movement.
4. Differentiate rhythm that moves in twos from rhythm that moves in threes.
5. Identify common musical instruments by sound.
6. Be aware of repetition and contrast in melodies he hears.

B. Achievement in performance.

1. Sing with pleasure a growing number of songs.
2. Sing accurately within an expanding range (C to E').
3. Sing with expressive phrasing.
4. Adapt his tone quality to the varying mood of the songs.
5. Sing simple tone patterns with syllables, numbers, and from pitch names.
6. Play simple tone patterns on bells by ear and from pitch names.
7. Play simple rhythm patterns on rhythm instruments for accompaniments to songs.
8. Play I and V⁷ chord accompaniment on the autoharp by ear and by chord names.

C. Achievement in rhythmic activity.

1. Have a growing repertory of singing games and action songs.
2. Move with the beat in singing games and action songs.
3. Walk and clap the beat with proper accent.

D. Achievement in creativity.

1. Create introductions, codas, and rhythmic accompaniments to songs.
2. Demonstrate awareness of the mood for songs in his choice of instruments for rhythmic accompaniments.

E. Achievement in notation.

1. Recognize the direction and skips and steps in melodic movement from the notation.
2. Recognize like and unlike tone patterns from the notation.
3. Recognize repetition of melodic fragments and phrases from the notation.

III. The objectives for musical concepts state that at the end of the second grade, the following concepts should have meaning and significance for the child:

A. Melody.

1. High and low.
2. Skip and step.

B. Rhythm.

1. Fast and slow.
2. Even and uneven.
3. Rhythmic pattern.
4. Beat pattern.

C. Form.

1. Phrase--music is organized in phrases.
2. Patterns--tone and rhythm patterns combine to form a musical phrase.
3. Repetition and contrast.

D. Harmony.

1. Pattern in harmony--harmony is organized in chord patterns.

The Magic of Music, Book Two, offers children the opportunity to develop concepts of particular elements of music and their inter-relationships through certain activities specified in the following outline:²⁵

I. Rhythm.

A. Pulse or Beat.

1. Listen to a musical composition to discover its pulses or beats.
2. Identify the pulses and beats by clapping.

B. Accent.

1. Listen to discover which beats are the strongest.
2. Identify which beats are the strongest.

C. Meter.

1. Identify the accents.
2. Identify the number of weaker beats between them.

D. Duration.

II. Melody.

A. High and Low.

1. Respond to melodic direction with bodily movement.
2. Indicate melodic contour with hand levels.

III. Harmony.

A. Chord patterns.

1. I, V, I.

2. I, IV, I.

IV. Form.

A. Like phrases.

B. Unlike phrases.

V. Dynamics.

A. Loud.

B. Soft.

VI. Tempo.

Book Two of each series continues to work basically with the four basic musical concepts set forth in Book One of these series. Learning notation continues to be an outgrowth of the knowledge gained as part of the learning process involved with these basic concepts but is primarily limited to melody and rhythm. Certain specific musical terms such as hold or fermata, D. C. al Fine and repeat are treated as incidental knowledge rather than primary.

Activities involved with continuing the development of the concept of melody begin with outlining the contour of the melody in Making Music Your Own.²⁶

An example of a melody moving by step is given on page 12. It is explained that a major scale is an ascending or descending series of eight notes arranged in a specific pattern of steps and

²⁶Landeck, op. cit., p. 4.

half steps.²⁷

There is a section on the "Sounds of Music" included in Making Music Your Own which is concerned with the shaping of musical sound into a melody. The children find that when a composer writes music, he has to decide what musical sounds or tones he will use.²⁸ An exercise in developing a melody then follows:

We would soon get tired of a musical tone that did not change. How can we change it? We can start with our musical tone and add some higher and lower notes to it. We begin to hear something that sounds like a melody. But it still does not sound quite right. We need to change it even more. Let's make some of the notes longer and some of them shorter. Then let's add some silences to make the music breathe.

The Magic of Music concentrates on developing the feeling for the home tone in conjunction with its melodic activities. The song "Moonlight" on page 20 provides a good example of this emphasis. The song has only three different tones. The home tone is C. A diagram at the bottom of the page locates the notes on a piano keyboard (C-D-E), shows the syllables (Do-Re-Mi) and indicates where the numbers (1, 2, 3) are located on the bells.

It is suggested that the song should be sung first with the words and then with the numerals. It is felt that using the numerals will help the children to discover pertinent facts of the melody, namely; that it is composed of three different tones; it begins

²⁷Ibid., p. 12.

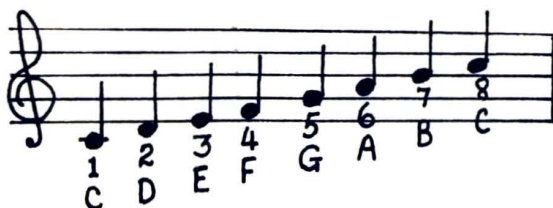
²⁸Ibid., pp. 26-27.

and ends on the home tone, C; it has some repeated tones; it moves up and down.

In helping the students to further understand the structure of songs and their melodic direction, the children should hear the melody, sing it, design it in the air and play it.²⁹

The major scale is presented in "The Escalator" on page 24. The scale is illustrated in Figure 10 as follows:

This is a scale going up:



This is a scale going down:



Figure 10

The manner in which composers employ the scale or portions of scales in their melodies is explained on page 24.

In Discovering Music Together very little new or different is done in the concept of melody as such. There is some review



²⁹Watters, op. cit., p. 22.

of the activities carried out in Book One but by and large melody is not a primary concern of Book Two.

Developing the musical concept of rhythm is continued in Book Two of The Magic of Music with such exercises as those found on page 31. The teacher is encouraged to have the class discover the identical rhythmical structure of each of the four phrases. This rhythmical structure is diagrammed as shown in Figure 11:



Figure 11

It is important to point out that eighth notes may have beams () as in this song, or they may have flags ().

Another exercise in rhythm (and in reading rhythmic notation) may be found in the form of a special instrumental accompaniment to the singing of "After School" on page 38. The accompaniment is written as follows (Figure 12):

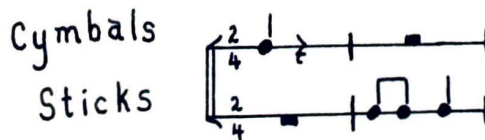


Figure 12

It is pointed out in Discovering Music Together that notes not only indicate pitch but also indicate rhythm patterns.³⁰

³⁰Leonhard, op. cit., p. 25.

In the "Music About People" section of Discovering Music Together emphasis is placed on meter and rhythm. Children gain rhythmic understanding by discovering rhythm patterns, clapping the beat, moving to music, and playing classroom instruments.

Through clapping the steady beat or pulse of music, children discover that music moves in twos, threes, or fours (meter), and through clapping or playing the rhythm of the melody they discover long and short notes or even and uneven rhythm.³¹

While attention is focused on the element of rhythm in this section, children should be made aware of melodic movement by step, skip, and repeated tones, and sing expressively for enjoyment.

In developing the feeling for the strong beat of music the students are instructed to clap their hands on the strong beat and touch them together on the weak beat.³²

On page 38 of Discovering Music Together attention is called to the different notation for even and uneven rhythms.



Figure 13

³¹Ibid., p. 26.

³²Ibid., p. 34.

Book Two of Making Music Your Own places most of the emphasis concerning the rhythmic concept of music on meter and on recognizing the various types of notes; the eighth note, the quarter note, the half note, and the whole note.

The lower number of the meter sign is first used in the children's book of Making Music Your Own on page 31. The meter sign is $\frac{2}{4}$ and is explained as follows: The four indicates that a quarter note is the symbol for a beat (the two eighth notes are equal to one beat). When there are two beats in a measure the meter sign is $\frac{2}{4}$.

The meter sign $\frac{6}{8}$ indicates that there are six beats in a measure. Each beat is symbolized by an eighth note. At faster tempos, $\frac{6}{8}$ meter is felt in two large beats (as in $\frac{2}{4}$ meter), with a group of three eighth notes or their equivalent to each beat.³³

The teacher has the responsibility of guiding the children so that they become aware of the steady beat, the strong beat, and the melodic rhythm, each one relating to the others.

The Magic of Music takes the concept of form beyond merely recognizing like or contrasting patterns although this remains a basic part of the approach.³⁴

The teacher should help the children discover that there are

³³Landeck, op. cit., p. 64.

³⁴Watters, op. cit., p. 25.

three parts to "Twinkle, Twinkle Little Star" and that the first and third are the same and the second is different. The form should be identified as A B A as is diagrammed for the children as follows:

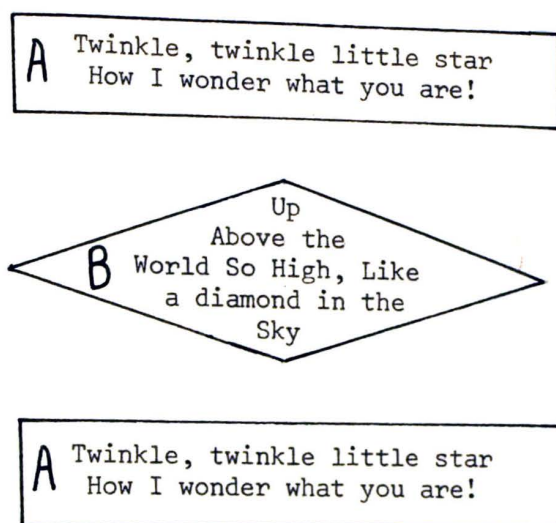


Figure 14

A musical phrase is defined as giving a musical idea or thought.³⁵

Making Music Your Own also continues the development of the concept of form through discovering like and unlike phrases.

Dynamics and expressive singing receive little mention in Discovering Music Together and Making Music Your Own other than to develop the concept of loud and soft sounds. Perhaps the most emphasis on these aspects of music are found in The Magic of Music which begins by developing the concept of loud and soft and identifies the signs for loud (f) and soft (p).

³⁵Ibid., p. 38.

At the completion of Book Two of each series the children should have command of such terms as repeat, fermata (hold), D. C., Fine, chord, octave, tie, sharp, flat, and rest.

They should know eighth notes and rests, quarter notes and rests, half notes and whole notes. They should be able to hear like and unlike phrases and tonal and rhythmical patterns.

Opportunities for experiences with the harmonic element of music are confined to accompaniments for the autoharp and piano.

CHAPTER V

SUMMARY AND CONCLUSIONS

I. SUMMARY

The study has shown that the actual concept of the spiral curriculum was basically the same concept that James Mursell espoused in the cyclical curricular sequence. Both emphasized that children, regardless of their age, were able to comprehend any information as long as it was put to them in terms of ideas or concepts that were on their level of understanding. This theory thus formed the basis for both the spiral curriculum of Jerome Bruner and the cyclical curricular sequence.

The spiral curriculum required seeking the most basic and fundamental ideas on which any discipline was based and presenting these ideas to children simply as ideas which did not specifically (or necessarily) require a label or name. These ideas were expanded and deepened by having regularly reviewed them in a variety of situations. Future learning experiences were built on these ideas in order to indicate their relationship to one another.

This, it would seem, is exactly what Mursell had in mind when he described the cyclical curricular sequence as one which introduced concepts in an immature form at an early age and, as the name implied, returned to them when necessary for an increased awareness of their meaning, use, and interrelatedness.

A fundamental belief of each curriculum was that the awareness of these ideas or concepts should be presented to the child in such a manner that he would be able to use them in the future; that is, to apply them to future situations, both similar and dissimilar. This would allow the child, under controlled circumstances, to discover for himself the relationships, implications, and importance of the various concepts to which he had been exposed.

The influence of Bruner's efforts in the field of mathematics and the sciences were seen in the analysis of the three textbooks for elementary music. All were based on an orderly presentation of concepts and had the objective of building those concepts into a broad and useful knowledge of music.

Each book presented basically four areas of musical elements of which it was hoped that the children would be made aware. These areas were: melody, rhythm, harmony, and notation. Each area was broken down into its component parts and each part was presented as a musical concept, all relating to the whole. Melody, for example, was presented as an accumulation of the basic concepts of high, low, skip, step, loud, soft, even, uneven, long, short, and more advanced concepts such as tone patterns, rhythm patterns, like and unlike phrases. The more advanced concepts also led the children to an awareness of form in music. Rhythm was presented as an accumulation of the concepts of chords and chord quality (chords may differ in sound and feeling) and that harmony is organized in

chord patterns. Little development of the harmonic aspect of music was seen in these books, however, as harmony is not as easily broken down into the simple form of concept required for first and second grade children. Harmony was presented, instead, as a concept in itself simply in order to make children aware that it does exist in music.

The books were structured to present each concept as an integral part of the entire fabric of music but not as an isolated piece of information to be memorized, labeled, and forgotten. Each book developed each concept; revisited and built on these concepts to show their relatedness. Finally, as an outgrowth of these concepts, notation was presented.

It was hoped that musical terms and symbols would be learned as children grew so familiar with the various concepts that these terms and symbols became necessary (to the child) for the purpose of identifying the concept.

II. CONCLUSIONS

The study has shown that the spiral curriculum is compatible with music education and that in some aspects music education has actually preceded the spiral curriculum in terms of theory if not in application and practice.

The influence of the spiral curriculum has definitely been felt in music education as was evidenced by the analysis of the elementary music books. Their effort to present a structured music

curriculum has, for all purposes, basically followed the outline suggested by Bruner's spiral curriculum.

It would seem likely that influence of the spiral curriculum on music education may be felt in the future, not only by the professional musician, but also by the average consumer of music. He should gain a background of musical understanding and awareness that will allow him to make more valid aesthetic judgements concerning music, and to be better able to have an appreciation of the workings of music of all types.

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