DOCUMENT RESUME

ED 152 022 EC 104 076

TITLE	Teaching Gifted Children Music in Grades One Through Six.
INSTITUTION	California State Dept. of Education, Sacramento.
SPONS AGENCY	Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.
PUB DATE	77
NOTE	92p.
AVAILABLE FROM	Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, California 95802 ($0.65)
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	*Academically Gifted; Elementary Education; Gifted; *Music; *Music Education; Program Content; *Program Development; Program Planning; Teaching Guides; Teaching Methods

ABSTRACT

The booklet provides research information and criteria from which administrators and music educators may draw guidelines for developing music programs for mentally gifted children in grades 1 through 6. Seven chapters focus on the following topics: introduction to music education for gifted children (including the nature of music, literacy in music, and music programs for gifted children in the elementary school); directional, academic, functional, and behavioral values of music education for gifted children; identification and education of gifted children (including characteristics of musical talent, effective use of the rating scale for musical talent, and development of creative intelligence through music); contemporary methods of music education for gifted children (including the Kodaly Method, Suzuki Method, Orff-Schulwerk Method, and conceptual approach to music education); establishment of music education programs (including grouping, scheduling, and providing facilities; and qualifications for teachers); content of music education programs (including subject-matter content, formation of concepts, and principles underlying an art form); and scope and sequence in music education programs (including interpretation of scope and sequence charts). (SBH)

Teaching Gifted Children Music in Grades One Through Six

Prepared for the

Office of Curriculum Services
CALIFORNIA STATE DEPARTMENT OF EDUCATION

by

JEWEL MARY ELY
Education Consultant
Los Angeles

This publication, funded under the provisions of the Elementary and Secondary Education Act, Title V, was edited and prepared for photo-offset production by the Bureau of Publications, California State Department of Education, and was published by the Department, 721 Capitol Mall, Sacramento, CA 95814.

Printed by the Office of State Printing
and distributed under the provisions
of the Library Distribution Act

1978

Copies of this publication are available for 65 cents each, plus 6 percent sales tax for California residents, from Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802. A list of other publications that are available from the Department may be obtained by writing to the same address.

Foreword

Gifted children need a large share of the teacher's help. It is true that they comprise only a small part of the student population in California and can move successfully through an ordinary curriculum with ease. But the gifted will have an influence on our state and nation far beyond their numbers; many of them will, one day, be among the movers and shakers of our society. To ignore their special needs is to frustrate them. Frustration, in turn, can lead them away from constructive goals, and we will all be the losers for it.

The teacher, then, must pay attention to the gifted and must serve them by shaping the curriculum to their needs. By varying the manner in which a subject is taught and the rate at which it is taught, the teacher of the gifted can win their interest.

To assist the teacher of the gifted, the State Department of Education has directed and coordinated a project to develop appropriate curriculum materials. This publication, one in a series, contains important concepts and suggestion for the use of teachers of the gifted. It is our hope that these teachers will find the publication useful in the important work entrusted to them.

Superintendent of Public Instruction

Preface

This publication is one of the products of an educational project authorized and funded under the provisions of the Elementary and Secondary Education Act, Title V. It is intended for use by the teachers of pupils whose mental ability is such that the pupils are classified as mentally gifted. It is also recommended for use by administrators, consultants, and other professional personnel involved in helping gifted children.

Teaching Gifted Children Music in Grades One Through Six is one of a group of curriculum materials designed for use by teachers of the mentally gifted in grades one through twelve. These materials were prepared under the direction of Mary N. Meeker, Associate Professor of Education, and James Magary, Associate Professor of Educational Psychology, both of the University of Southern California.

Also developed as part of the education project is a series of curriculum guides for use in the teaching of mentally gifted minors in elementary and secondary schools. The guides, which contain practical suggestions that teachers can use to advantage in particular subject areas, were prepared under the direction of John C. Gowan, Professor of Education, and Joyce Sonntag, Assistant Professor of Education, both of California State University, Northridge.

DAVIS W. CAMPBELL
Deputy Superintendent for Programs

J. WILLIAM MAY
Assistant Superintendent; and Director, Office of Curriculum Services

REX C. FORTUNE
Associate Superintendent for Secondary Education Programs

SIEG F. EFKEN
Program Manager, Gifted and Talented Education Management Team

PAUL D. PLOWMAN
Consultant, Gifted and Talented Education Management Team

Acknowledgments

Grateful appreciation is extended to the music educators and others associated with this project who have enthusiastically participated as consultants and assistants in the preparation of this publication:[1]

Mrs. Lorraine Debnakoff, Los Angeles Unified School District
Kenneth Eaves, Beverly Hills Unified School District
Mrs. Flavis Evenson, Los Angeles Unified School District
Mrs. Virginia Haley, Graduate Student in Educational Psychology, University of Southern California
James Hanshumaker, Music Education Department, University of Southern California
Mrs Dorothy Jean Hartshorn, Music Education Department, University of Southern California
Edward Jurey, Los Angeles Unified School District
Mrs. Helen Lyon, Los Angeles Unified School District
Mary Meeker, Associate Professor of Education, University of Southern California
Mrs. Pat Pinkston, University Elementary School, University of California, Los Angeles
Mrs. Reva Quick, Los Angeles Unified School District
Mrs. Barbara Stevens, Beverly Hills Unified School District
William Stevens, Lowell Joint Elementary School District
Donald Taebel, Doctoral Candidate, University of Southern California
Mrs. Marguerite Tolson

[1]The titles and locations of persons acknowledged here are those that were in effect when this publication was written.

Contents

List of Charts

Chapter 1

Introduction to Music Education for Gifted Children

The purpose of this publication is to provide research information and criteria from which administrators and music educators may draw guidelines for developing music programs for gifted children in grades one through six. For centuries the nature of musical talent, its relationship to intelligence, and reliable methods of discovering this talent in young children have interested both scholars and musicians. Research on giftedness, especially during the last decade, has greatly expanded the knowledge and literature in this area. Evidence of a correlation between intelligence and some aspect of musical talent has led some educators to contend that music has a vital role to play in the full development of human potential. With new insight into the capabilities and learning patterns of gifted children, significant innovation in the teaching of music is possible.

While researchers continue to seek satisfactory ways to identify musical talent, some of the most significant findings on the identification and development of individual potential have not yet been put into general practice. Nevertheless, much of this research is pertinent to the critical issues involved in planning and implementing programs for children who are highly intelligent, creative, and musical. The specific purpose of this publication is to present these findings as a means of developing differentiated music programs for children in elementary school who score at least 130 on the *Stanford-Binet Intelligence Scale* or who demonstrate special talent in music.

This publication reflects a philosophy that the chief purpose of a music program of enrichment in the elementary school should be to awaken and to nurture innate potential—musical, academic, and creative—through the joyful study of music and, thereby, make a unique contribution to the child's developmental growth during the process of early education. The three groups of children that qualify for this kind of music program are the following:

1. The intellectually gifted who demonstrate talent in music or creative potential when given adequate opportunities

2. The intellectually gifted who indicate no special abilities or attitudes usually associated with musical talent or creative potential
3. The musically talented or potentially creative who may not score high on the *Stanford-Binet Intelligence Scale*[1]

Teaching Gifted Children Music in Grades One Through Six includes (1) a classified list of critical issues; (2) relevant research data; (3) suggestions for teaching and learning; (4) suggestions for sequencing and articulation of content; and (5) lists of teaching materials. Also included is material suitable for duplication as master guides for long-term and daily lesson planning.

Nature of Music

Music came into being as the first form of intratribal communication when primitive man beat out rhythm patterns and imitated the voices of nature. As it developed through the centuries, this native art form gradually became a universal "language" with a "vocabulary" capable of expressing the full range of human emotions and ideas.

Unlike other forms of communication that involve artistic principles, music exists primarily in the dimensions of auditory space, moving in time and in patterns of rhythm and tone. As in a primitive culture, a person may still express an original or a learned musical statement in its simplest form by singing or playing. But, when a composer creates a complex musical form, such as a symphony, many persons and processes are involved in its production. Other musicians are needed to copy individual parts and, sometimes, to write the orchestration; conductors and instrumentalists are needed to perform the composition; sound technicians are needed if the music is to be recorded or broadcast; and an audience whose level of response equals the demands of the artistic production is essential.

Literacy in Music

One of the major problems in music education arises not from the nature of music itself but from the desire of composers to record their own works or the works of their contemporaries and the desire of posterity to perform those works. For this purpose a system of visual symbols has been created to communicate accurately the language of music.

[1] *Principles, Objectives, and Curricula for Programs in the Education of Mentally Gifted Minors: Kindergarten Through Grade Twelve.* Sacramento: California State Department of Education, 1971, p. 72.

Numerous ways to notate rhythm and tone have been invented and discarded over the centuries. Today, a staff for notes and rests, clefs to locate pitch, and various other symbols to represent such properties as key and tonality, meter, duration of sound and silence, and dynamics constitute the system used to score most musical compositions. Whether or not the complexity of this means of notation is to blame for the general lack of ability to "hear" the music which the eye sees, a notable discrepancy exists between the verbal and musical literacy of most persons. This fact is especially interesting because the sounds of both forms of communication are represented by visual symbols. Although many persons are able to read a play or hear a narrative and visualize the action described, relatively few individuals can read the score of a symphony or even a simple song and "hear" the music that it represents.

One of the reasons for this situation is that, although a large portion of the regular school day (at least in the primary grades) is spent in teaching children how to read verbal language, little time is spent in teaching them how to read music notation. However, when gifted children begin school, they can already read or very quickly learn to read. There is, therefore, extra time in their day to explore more widely and deeply the exciting knowledge and skills to be gained in many subject-matter areas, including music.

Examples of questions that must be answered if musical literacy is to become one of the objectives for gifted children are the following:

1. Can children in public schools be trained in musical literacy?
2. To what extent is musical talent involved in learning to read music?
3. What are the implications of ear training and sight singing for challenging gifted children?

Music Programs for Gifted Children

An effective method of challenging the intellectual capacities of bright children is to provide many kinds of well-guided opportunities for them to explore the nature and meaning of music as well as its wealth of literature. *They need to read music!* With help they can learn to transfer symbol-reading skills to the medium of music, where pitch and sound duration are also represented by and are attached to visual symbols. When a wealth of aural experience with music exists together with some development of tonal memory and discrimination, the hearing of what is represented symbolically becomes a simple matter of association. This situation is similar to what is known as reading readiness. Music may then come to be considered a companion to language arts, where skills, comprehension, and

creative expression are already recognized as significant contributions to education.[2]

In music programs for gifted children, pupils should be encouraged to explore new dimensions of artistic expression, new instruments and tonal effects, new combinations of rhythm, music, art, words, dance, and drama—perhaps even new forms of music. New ways of learning will feature multimedia programming with individually determined pacing and will promote self-directed projects with such advanced equipment as synthesizers and computers. Pupils should be free to challenge traditional concepts, including the notation system, and to experiment with new ways to produce, organize, and record sounds that express fresh and original ideas.

In the planning of innovative music programs, three basic resources need to be recognized:

1. Individual children with their unique combination of gifts
2. The expanding field of knowledge about human behavior, higher intellectual processes, and characteristics of giftedness
3. The international language of music with its power to express human emotions and ideas

Music Education in the Elementary School

Certain issues are critical to the success of innovative music programs for gifted children in elementary school. The issues are stated in the form of questions to point out the research needed and the problems to be solved in planning, initiating, and implementing these programs:

Characteristics of Gifted Pupils in the Elementary School

1. What characteristics identify musical talent or giftedness in children at this age level?
2. How early and by what means can these aptitudes be discovered?
3. To what extent is musical talent related to intelligence and creative potential?
4. What is the gifted child's approach to learning? How can the curriculum best be organized to make constructive use of such an approach?

Criteria for Music Programs in the Elementary School

1. What are the criteria for nurturing musical talent and for challenging gifted children in the study of music?

[2] *Ibid.*

2. What kinds of behavioral objectives should be set up as guides for the instruction of gifted children?
3. How is instructional content to be determined concerning (a) facts, concepts, generalizations, principles, and understandings; and (b) the scope and sequence of conceptual learning as related to the elements of music?
4. How can instruction and involvement with music be individualized so that the abilities of each child are developed?
5. What generalizations may be drawn from research with respect to effective methods and a creative approach to teaching and learning?
6. What is the value to children of studying about musical instruments during their early years and of learning to play one or more instruments?
7. In what specific ways can music education contribute to the full development of individual potential?

Implementation of Music Programs in the Elementary School

1. What are the problems of logistics and related issues involved in setting up differentiated music curriculums?
2. What minimum requirements should be established for the selection, training, and itinerary of music teachers?
3. What special facilities, instructional materials, and musical instruments are needed for music programs for the gifted?
4. To what extent can community resources be used in the interests of the music program and the public's understanding and acceptance of it?

Chapter 2

Values of Music Education for Gifted Children

In this chapter are described the values to be gained through the study of music at the elementary school level. Also presented are the criteria and general teaching objectives to be incorporated into the teaching of music to gifted children. The opportunities for exploration suggested by each of the four groups of educational values (directional, academic, functional, and behavioral) will aid the teacher in developing creative teaching-learning activities that lead to (1) formation of musical concepts and skills; (2) sound attitudes that make learning joyful and exciting; and (3) realization of individual potential.

Directional Values of Music Education

The study of music can contribute directly to the fulfillment of the four general purposes of education, as set forth some years ago by the Educational Policies Commission. Administrators and music educators may wish to follow these broad guidelines in planning objectives and learning opportunities for gifted children. According to the commission the four general purposes of education and their application to music education are as follows:

1. Guiding self-realization
   a. Because of its very nature—its wide variety of moods, themes, and forms—music stirs the emotions and stimulates interest.
   b. Through a variety of rhythms and melodies, music evokes personal responses that are expressed through listening and participation.
   c. As an art form involving composition and interpretation, music helps satisfy the need to express ideas and feelings.
2. Promoting human relations
   a. The experience of singing in ensembles, playing instruments, and moving the body in accordance with percussion rhythms or selected music provides opportunities for constructive, noncompetitive group activities.

b. By exploring the nature of music and creating compositions together, children learn to attain common ideas and feelings.
c. Folk music and dances, orchestral music that tells a story, and sacred music provide unlimited resources for stimulating interest in and inquiry into other cultures.

3. Supporting the development of civic responsibility
   a. Words set to music have a subtle power to communicate values such as community pride and patriotic ideals; for example, respect, loyalty, duty, service, and integrity.
   b. Performance at school and community gatherings gives children a sense of belonging and of contributing something to society.

4. Building economic efficiency
   a. Scientists, engineers, and industrialists recognize that (1) the study and understanding of the arts contribute to the awareness of individual, social, and cultural values; (2) constructive school and leisure activities in early childhood help the individual develop constructive recreational patterns in later years; and (3) the kind of recreation experienced in musical activities can increase the efficiency and quality of production of the individual in any field of professional endeavor because musical training can influence the development of imagination, flexibility, responsiveness, and creative potential.
   b. Music offers a variety of vocational (professional) opportunities for gifted or musically talented individuals who have had adequate opportunities to develop their interests and abilities as children at school and through private instruction. It can be expected that there will always be a demand for composers; conductors; vocal and instrumental performers; talent agents; television, radio, and concert program directors; music critics; coaches; and teachers.[1]

Academic Values of Music Education

As taught in public elementary schools, music has not generally been considered an academic subject; instead, it has been included in the school program as an extracurricular activity. Some of the reasons why the higher intellectual processes involved in the study of music are not recognized are the following:

[1] *The Purpose of American Education.* Prepared by the Educational Policies Commission. Washington, D.C.: National Education Association, 1938, pp. 51–123.

1. Historically, the musician has been thought of as an artist rather than a scholar, even though his studies involve abstract patterns and the element of form. The distinction may have come about because the medium of communication used by the musician requires creativity (the affective) as well as critical analysis (the cognitive).

2. The rapid growth and industrialization of modern society, with its emphasis on competitive business and material values, have caused priority to be given to such curriculum subjects as language arts, mathematics, and the physical, social, and political sciences.

3. Not until recent years have music educators clearly defined the subject of music in the elementary schools as a study of the seven elements of music and their interrelationships. Nor have they described the study of music as a creative learning process beginning with elemental, perceptual experiences intended to evoke useful concepts about music and eventually leading to the development of skills in memory and recall, recognition and identification, analysis and synthesis, and evaluation and production.

Unfortunately, music is not yet adequately scheduled or supported as a regular academic subject in the elementary curriculum. Too often it is still "time for singing" or released time for a limited number of children to receive group instruction on orchestral instruments from a limited number of specialized teachers who must divide their time among several schools. This situation is one of the critical issues of music education.

Little research has been done to support the conclusion that the study of music helps a child do better in school generally. However, related studies indicate that musical training may help underachieving gifted children to improve in other subjects. For example, Mary Meeker writes: "It is apparent from the analysis of hundreds of children's responses in the Stanford-Binet that when their intelligence is good but their school achievement falls below their expected ability, there is deficient auditory memory."

In experimental follow-up tests administered by Dr. Meeker, many of these children were asked to "order sounds"; that is, to arrange as many as six controlled sources of similar sounds in a hierarchy of loudest to softest or softest to loudest. If the children did not at first succeed in the tests and no loss of hearing had occurred, the children

returned to the sound blocks to practice until they learned to do this task.[2]

The importance of auditory memory in learning, together with evidence that auditory memory can be trained, has significant implications for music education. Children deficient in auditory memory can be helped through experiences in auditory discrimination. Furthermore, because music is made up entirely of auditory variables in pitch, duration, volume, and timbre, it can be generalized that listening to find identical, similar, and contrasting patterns in music demands the same kind of attention that is required in all learning situations.

The study of music can, therefore, be an aid in developing basic learning skills:

1. Short-term memory, which is prerequisite to intellectual and academic achievement
2. Auditory memory, without which spoken and written language have little meaning[3]
3. Auditory discrimination, which develops and reinforces attention—the first of the sequential skills a child must master to be ready for learning[4]

These basic skills learned in the study of music are transferable to other subject areas in the curriculum. Furthermore, the right kind of music education can contribute to the development of the intellectual processes described by Guilford in his "Structure of Intellect Model."[5] For example:

1. Cognition is involved when children recognize the following:
   a. The pulse as the recurring beat in the flow of music, a phrase as a musical idea, or a specific note as the tonal center of a song
   b. The relationship that exists between the various elements of music, between the characteristics of folk music and its ethnic origins, and between rhythm and form in music and in poetry, dance, and art

[2]The information (including the quotation) contained in the last two paragraphs was supplied to the author by Mary N. Meeker. For further information, see the selected references in the back of this publication.

[3]Mary N. Meeker, *The Structure of Intellect Its Interpretation and Use.* Columbus, Ohio Charles E Merrill Publishing Company, 1969.

[4]Frank M. Hewett, *The Emotionally Disturbed Child in the Classroom.* Boston: Allyn & Bacon, Inc., 1968, pp. 48-49.

[5]J. P. Guilford, *Intelligence, Creativity, and Their Educational Implications* San Diego: Robert R. Knapp, 1968, p. 10

c. The principles of sound production and manipulation of the different musical instruments, of pitch relationship and chord resolution involving the physics of acoustics, and of the structure and logic underlying interior design and theme and variation

2. Memory and recall are reinforced when there is involvement of:
   a. Pitch or tonal imagery
   b. Melodic rhythm and word patterns in songs
   c. Characteristic tone color of each instrument
   d. Visual symbols of musical sounds
   e. Major and minor (harmonic, natural, and melodic) scale patterns and signatures
   f. Structure and characteristics of primary and secondary chords
   g. Rules of composition

3. Judgmental evaluation is activated when the teacher does the following:
   a. Prescribes tasks requiring the children to recognize, identify, differentiate, and discriminate between louder and softer, higher and lower, and longer and shorter sounds; between phrases or sections that are identical, similar, or different (contrasting); and among the tone colors produced by the various types and ranges of voices and musical instruments
   b. Asks the children to select appropriate recorded music for rest time, for expression of a certain mood or topic, or for individual listening enjoyment; to play (from tonal memory of triads) chords on the autoharp to accompany songs being sung in the classroom; or to compare the characteristics of the Gregorian style, for example, with those of contemporary musical styles
   c. Teaches children to listen critically to tape playbacks of songs recorded periodically for pupil evaluation; to identify problems in performing skills (vocal and instrumental); or to analyze and chart the composer's plans in the various musical works being studied

4. Convergent production occurs in these kinds of activities:
   a. Imitating the rhythmic movement of animals
   b. Echoing tonal patterns with or without words
   c. Singing by rote and by sight
   d. Playing various note values and rhythm patterns
   e. Building the pentatonic and diatonic (major and minor) scales on different pitches

f. Playing the autoharp and musical aids, such as melody bells and plastic flutes, from letters and from staff notation
g. Taking music dictation for practice in recognizing pitches and rhythmic and melodic idioms
h. Inverting and changing chords from major to minor as well as modulating to a related key
i. Hearing (with the "inner ear") the music on the printed page
j. Reading music and playing it on the piano and other instruments
k. Interpreting the notations for dynamics and tempo
l. Performing (solo and ensemble) in chorus and orchestra
m. Identifying various musical forms such as binary, ternary, rondo, sonata, and the like

5. Divergent production (creativity) is encouraged when children are given opportunities to express spontaneity, imagination, and originality in these kinds of activities:
   a. Improvising melodic phrases to fit the rhythms of their names or of verbal phrases or engaging in body movement that shows different moods and feelings aroused by the music
   b. Exploring different ways to harmonize a familiar song, to play an instrument for various effects, to represent pitch and time duration in visual symbols, or to vary a given theme
   c. Dramatizing the situation and characters found in selected musical works or the emotions aroused by various types of music
   d. Participating in Orff-Schulwerk group compositions, original dances, and rhythmic and tonal embellishments to familiar songs
   e. Writing melodic phrases for poetry, inventing compositions for percussion instruments, and composing original songs and instrumental music for school plays

Functional Values of Music Education

"Man must feel as well as think; he must create as well as discover."[6] If music education is to make a significant contribution to the full development of human potential, it must provide opportunities for children to think, dream, work, discover, and create. They need to encounter the problems involved in these processes and to discover from personal experience what the

[6]Charles H. Zweigler, as quoted in *Curriculum Guide to Music*. Evanston, Ill.: Evanston Public Schools, 1964, p. 4.

resources are "for breaking out of the finiteness of one's body to realize the expansiveness of being that comes from contact with great ideas, great art, great people, and great spirit."[7]

A good elementary music program, focused on the development of individual potential, has several distinct functions. Music in the classroom encourages the demonstration of innate ability, interest, and creativity. As children become interested in music, their imaginations are stimulated, and they begin to share ideas. These satisfying experiences help give sensitive gifted children a feeling of belonging, of being part of a group.

Among the means of activating the functional values of music education are the identification and nurture of musical talent, the provision of a therapeutic environment, and the encouragement of creative expression and communication skills.

Identification and Nurture of Musical Talent

Objective methods of measuring the extent of musical talent in a child are imprecise because observation over a long period of time is necessary for validity. The teacher's informal, subjective identification of musical giftedness in a pupil can be more reliable than an objective measurement.

A stimulating classroom environment in which children are free to explore music through many types of activities is an ideal place to discover special musical ability. Such a classroom makes it possible for teachers to observe their own pupils and to discover which children demonstrate characteristics of musical giftedness. Furthermore, the identification of each child's individual musical talents (such as tone memory, performance skills, the ability to compose melodies, and so forth) makes it possible for each teacher to provide the learning opportunities that will develop those talents.

If the classroom "climate" is truly conducive to creative exploration, the children have opportunities to discover their interests and abilities on their own. Thus motivated, the child will usually need little discipline and will learn to direct his or her own activities constructively.

Provision of a Therapeutic Environment

Gifted children are usually more sensitive and responsive to pressure and tension than are other children. Participation in listening and other musical activities is relaxing and provides emotional release for them. Pent-up emotions and frustrations can be

[7]Oleta A. Benn, "Objectives and Responsibilities in Teacher Education," *Music Educators Journal*, Vol. 53 (May, 1964), 44.

released or channeled into creative productivity in any of the fine arts.

Throughout the history of civilization, music has been used to strengthen morale and to create a spirit of group unity. Children need a feeling of belonging to the group and will, therefore, benefit from these kinds of experiences in music education.

Encouragement of Creative Expression and Communication Skills

Getzel and Jackson's study indicates that intellectual giftedness and creativity are separate attributes; the degree of correlation between them has not yet been established.[8] Mary Meeker suggests that "although potential giftedness can be identified by instruments measuring IQ, we have yet to find as practical a tool for the identification of creativity. Spontaneous response is antithetical to the conformity required by the traditional school method of learning. Yet it is undoubtedly a forerunner of creativity."[9]

Musical activities that encourage spontaneous response, fluency, flexibility, and originality nurture and develop creativity. (See Chapter 3 for teaching suggestions.) Recent experimental research findings show that "the study of music can be a greater stimulation to growth in general creative potential than any other subject in the general curriculum."[10] A creative approach to rhythms, singing and the use of instruments to accompany the singing, melodic improvisation and composition, and the building of harmony and analysis of form in music is innovative and provides many opportunities for the nurturing of creative potential in children.

It is important for children who are gifted in music or in general academic work to explore and acquire skills in a variety of communication media—verbal, graphic, numerical, and musical. Because the language of music is relatively free of the semantic problems of verbal language, music transcends the spoken word and opens a new dimension in communication, thus making a significant contribution to the development of the gifted child's potential.

Behavioral Values of Music Education

It has been stated in various ways that "the ultimate disease of our time is valuelessness."[11] Thus, the role of teaching values, influ-

[8]Jacob W. Getzels and Philip W. Jackson, *Creativity and Intelligence.* New York: John Wiley and Sons, Inc., 1962, pp. 1–76.

[9]See footnote 4 in this chapter.

[10]Donald J. Simpson, "The Effect of Selected Musical Studies on Growth in General Creative Potential." Los Angeles University of Southern California, 1969, p. 91 (unpublished doctoral dissertation).

[11]*New Knowledge in Human Values.* Edited by Abraham H. Maslow. New York: Harper & Row Publishers, Inc., 1959, p. vii.

encing attitudes, and establishing good work habits places great responsibility on the schools for promoting moral, spiritual, and aesthetic "values that give direction and meaning and purpose to life." Moral education cannot be separated from academic education: "It is sometimes argued that the school should be charged only with the intellectual development of its pupils. If such a school were not psychologically impossible, it would be morally irresponsible."[12]

Children learn the meaning of ideals in various subtle ways. Their attitudes and behavior as adults reflect personal values acquired during the long, slow process of growth. Whether they develop an understanding of and appreciation for justice, beauty, and honesty or drift into a state of valueless existence is determined to a great extent by the kinds of perceptual experiences and environmental influences they experience when young. Because music education involves children so deeply in the three domains of learning—the psychomotor, cognitive, and affective domains—good music programs can communicate values that contribute to the integration of emotional drive and intellectual power.

Teachers can use certain techniques designed to teach values, influence attitudes, and establish work habits through music education:

1. *Set an example.* Teachers who show respect and concern for their pupils and who thoroughly enjoy music serve as models that children can emulate.
2. *Support morale.* A child's sense of values is influenced by the self-concept. Happy experiences with music stimulate awareness of inner feelings and ideas and the need to express them. Such activities as responding kinesthetically to music, seeing one's melodic improvisation written on the chalkboard, or playing the autoharp accompaniment to a song furnish immediate reinforcement (reward) and build confidence.
3. *Inspire sensitivity and appreciation.*
   a. Young children love to sing songs about their games, friends, and pets. Dramatizing the meanings of the words they sing helps them "catch the spirit of the music."
   b. Auditory memory, discrimination, and evaluation of similarities and differences are fundamental to music appreciation. Children need many opportunities to discriminate between tones that are louder and softer, shorter and longer, higher and lower. They need to discover the identical, similar, and

[12] *The Teaching of Values* Los Angeles: Los Angeles Unified School District, Division of Instructional Services, 1966, pp. III, XI

contrasting rhythmic patterns and melodic phrases in songs they sing and to observe these kinds of variations in many other forms of music. Focusing attention in this manner encourages children to develop their tonal memories and feelings for the meaning in music.

c. Enjoyment, understanding, and appreciation are greatly enhanced when children discover how music reveals mood, characterization, or a story. Single auditory experiences that are well-directed encourage children to use their imagination in the solution of musical problems and to develop independent listening skills. The use of slides and other visual aids before the children have experienced this kind of listening can deprive them of the values of inquiry and auditory discrimination.

4. *Develop courage and patience.*
   a. Reluctance to expose personal feelings through musical activities is not uncommon, even among gifted children; nor is it unusual, on the other hand, to find some children impatiently waiting to perform.
   b. A permissive attitude on the part of the music teacher and an accepting classroom environment encourage the spirit of adventure, minimize fearfulness, and turn attention away from self-consciousness or impatience.
   c. Success in such activities as singing the descant of a song, performing on an instrument, or sharing even the simplest original ideas in movement to music encourages children to participate and explore rather than give up when difficulties arise.
5. *Encourage initiative and responsibility.*
   a. When children are allowed to choose or initiate their own activities and to deal with the consequences of their actions, they learn what it means to be responsible for their own decisions. Self-direction is reinforced because the children learn to be self-reliant.
   b. Engaging in creative activities, choosing songs and recordings, experimenting with instrumental sounds, solving problems in music, and becoming involved in various committee jobs that arise in classroom productions help stimulate children to respond to their environment in many different ways, setting the stage for voluntary commitment.
6. *Engender loyalty and respect.* When teachers are respectful and show genuine affection for their pupils, children respond in like manner. Children develop positive attitudes toward that which

is important to them. If music is taught in an enjoyable atmosphere, the teacher can stress accuracy and motivate the children to attend to details of singing and playing. These work habits will result in a respect for the pursuit of excellence in all areas of music. Given the right opportunities, gifted children will transfer this respect for quality to other subjects as well.

7. *Promote cheerful cooperation.*
   a. Gifted children show early development of moral and spiritual characteristics, but almost everything in the child's world today is competitive: relationships with siblings, games, sports, and the race for academic rank. Group participation in music activities is a different type of situation entirely. Everyone involved gives of himself to a common cause, and the only rewards are mutual enjoyment and learning. Success demands the cooperation of everyone.
   b. Gifted children are especially conscientious and appreciate teachers who treat each child fairly, as when every pupil is given an opportunity to play introductions and accompaniments on tonal instruments.
   c. When children are learning skills in music, they enjoy teaching one another. Some older children are quite capable of helping younger children with songs and rhythm games.

8. *Foster self-awareness and integrity.*
   a. Improvisation and composition offer musically talented children another medium of expression through which to discover and communicate their feelings and creative ideas.
   b. Once this level of communication has been experienced, even with the simplest original rhythms and melodic phrases, a significant prerequisite to honesty and integrity in human relations has been attained.

Chapter 3

Identification and Education of Gifted Children

Early studies identified gifted children on the basis of a single intelligence test score. Today, researchers recognize that there are many types and combinations of giftedness "that flourish with wise guidance and opportunities for development." Yet, without identification and adequate nurture, gifted children do not develop their full potential. Follow-up statistical studies show that only 50 percent of the nation's ablest youth finish elementary and high school and go on to college; of these, a bare 2 percent obtain doctoral degrees.[1] If music education programs are to make a significant contribution to individual development and so be a part of the statewide program on conservation of human potential, action to resolve the critical issues stated earlier in this publication should be based on studies of the following topics:

1. Identification of musical talent
2. Musical intelligence and its characteristics
3. Academic intelligence in the study of music
4. Creative intelligence and its development through music

Identification of Musical Talent

The *Seashore Measures of Musical Talent*, a standardized musical aptitude test, uses long-playing records to test perception of differences in pitch, loudness, rhythm, time (meter), timbre, and tonal memory. Unfortunately, such a test can deal only with isolated factors—those involving auditory memory and discrimination. The administration of this test is time-consuming and expensive, and the method of testing is not generally successful with or appropriate for young children.

Other tests designed to measure musical ability are (1) the *Musical Aptitude Test* by Whistler and Thorpe (California Test Bureau, 1960); (2) the *Kwalwasser Music Talent Test* (Mills Music, Inc., 1963); (3) the *Drake Musical Aptitude Tests* (Science Research Associates, 1957); (4) *Tests and Measurements in Music* by Lehman

[1] George D. Demo and John Curtis Gowan, *The Education and Guidance of the Ablest*. Springfield, Ill.: Charles C. Thomas, Publisher, 1964, pp. 92–99.

(Prentice-Hall, 1968); and (5) *Wing Standardized Tests of Musical Intelligence* (National Foundation for Educational Research, England and Wales, 1961). However, as in the case of *Seashore Measures of Musical Talent*, these tests also yield only part of the data needed. In addition, a certain degree of experience and maturity is required on the part of the child, even when such elementary school-oriented tests are used.

No test to measure total musical ability has yet been developed. This means that the identification of musically talented children must depend largely upon the astute observation and subjective judgment of qualified teachers. It is evident that there is an urgent need for elementary music teachers who, assisted by the classroom teacher, are able to guide young children in the kinds of activities that provide frequent opportunities for them to demonstrate musical ability.

Characteristics of Musical Talent

Alexander Capurso, Professor of Music at California Polytechnic State University, San Luis Obispo, incorporates these findings in his description of young talent: "The musically gifted child with a possible future in the arts must be endowed by nature with an unusually high motor-sensory capacity. He must have an accurate auditory sense to enable him to perceive fine differences in the various characteristics of musical tone."

Dr. Capurso also says that musical giftedness involves many capacities. According to the way in which the capacities are combined in a musically gifted child, that child will show either the creative talent of the composer or the interpretive talent of the performer. Both kinds of musicians are highly sensitive and usually have good musical memories and imaginations, especially the composer, who must store, retain, and recall a wealth of vital tonal imagery and be able to solve problems of a technical and cognitive nature. The composer must be able to interpret and integrate previously established musical associations to create new relationships for patterns of his own artistic expression.[2]

Occasionally, a musician excels in both types of musical talent, as has been demonstrated by the following composers:

1. J. S. Bach was a composer and a church and court keyboard virtuoso.
2. Handel was a composer and a well-known harpsichordist.
3. Mozart was first a famous child prodigy on the violin, harpsichord, and organ and later a composer.

[2]Alexander Capurso, "Music," in *Curriculum Planning for the Gifted*. Edited by Louis A. Fliegler New York Prentice-Hall, Inc., 1961, pp. 303–42.

4. Mendelssohn, Chopin, Saint-Saëns, Franck, and Rachmaninoff were recognized performers as well as composers.
5. Leonard Bernstein, Aaron Copland, and Pierre Boulez are contemporary figures who have combined both composing and performing talents in brilliant musical careers.

Demonstration of ability to perform on an instrument often precedes evidence of the creative talent essential to the art of composing. Playing an instrument seems to serve as a preliminary training stage when sensory experiences provide the percepts for the knowledge and skills the composer will need in his work. For this reason it is important that teachers be able to recognize the early characteristics of musical intelligence so that the right kind of opportunities can be provided for the talented child. Gifted children need to explore many kinds of rhythm, tonal, and orchestral instruments and to study one or more of their own choosing. Although the school is not responsible for training children for careers as performing musicians, it should be the aim of music educators to provide opportunities for latent musical abilities to emerge and to nuture that potential for the sake of developmental growth.

The following characteristics of musical talent or intelligence are based on the findings of many musicians, educators, and writers. They have been compiled especially for this publicati and set in the order in which they are most likely to occur. No pupil should be expected to demonstrate all of the characteristics listed, but a musically gifted child should manifest some of these traits and probably some of those associated with academic and creative intelligence.

The list of characteristics of musically talented children is presented in the form of a rating scale to be used in the process of identifying musical talent, grouping children according to ability, and recording individual growth in musical skills. A cumulative record of these ratings can provide a valuable talent profile for each child.

Effective Use of the Rating Scale for Musical Talent

Initial observations should be recorded over a period of a few weeks or months in order to assess the responses of children as the children are involved in various kinds of musical activity. It is neither necessary nor possible, however, to assess completely a child's aptitude for music on this basis. Whether a child should be enrolled in an enriched music program depends as well on other circumstances that vary from school district to school district.

The records should be continued from one year to the next so that individual growth and development in music during the elementary school years can be evaluated. The profiles thus compiled can be helpful in many ways, such as in selecting children for performing groups and in choosing the kind of music they can perform well. Older children can list their aptitudes and skills in order to develop self-direction and self-evaluation. The profiles can also be used by the teacher as a diagnostic guide to determine the musical characteristics of a particular group of pupils and to plan lessons accordingly.

Academically Gifted Children and the Study of Music

The teacher who understands the characteristics of academic intelligence and the various combinations of these characteristics that are found in gifted children will be better able to help these children develop their intellectual capacities, whether or not the children are talented in music.

The purpose of presenting a list of characteristics of academically gifted children is to show how their abilities may be challenged through the study of music. Each characteristic is accompanied by implications for teaching in enriched music programs. It is recommended, however, that the teacher select only a few ideas at a time with which to experiment and that adaptations and original ideas be shared with other teachers.

Development of Creative Intelligence Through Music

Creative intelligence defies valid measurement. As in the case of musical talent, the best way to recognize creative potential generally is by evaluating the products of creative persons. Children may not be creative even if they do things without being taught how to do them and display a great deal of sensitivity, imagination, and spontaneity. Mary Meeker, whose rating scale is used here as the basis for a list of characteristics that indicate creative potential, considers the characteristics listed to be signs of ability to create, invent, and produce original works. She emphasizes the importance of nurturing these characteristics in early childhood.[3] It is the responsibility of the teacher of the gifted child to sense creative potential and to create a learning environment in which freedom of expression is possible within the security of well-structured tasks.

Growing recognition of the value of creative potential to the individual and to society is placing an increasingly greater premium

(Text continues on page 25.)

[3]Mary N. Meeker, "Differential Syndromes of Giftedness and Curriculum Planning A Four-Year Follow-Up," *Journal of Special Education*, Vol. 2 (1968), 185-96

CHARACTERISTICS OF MUSICALLY TALENTED CHILDREN[4]

1. Spontaneous response to rhythm and music _____
2. Love for singing familiar and "made-up" songs _____
3. Relative or "absolute" pitch and a strong feeling for tonality _____
4. Highly developed ear and ability to associate pitch with visual symbols _____
5. Interest and skill in singing descants or other harmony parts _____
6. Remarkable memory and an ever-expanding repertoire _____
7. Ability to identify familiar melodies on tonal instruments _____
8. Marked aptitude for playing introductions, accompaniments, and the like _____
9. Choice of music as a means of expressing feelings and experiences _____
10. Creative flare for improvisation and signs of ability to compose _____
11. Special interest in musical instruments and a desire to play an instrument _____
12. Voluntary involvement with music and a high interest in learning about music _____
13. Notable skill in performing on one or more musical instruments _____
14. Great enjoyment in listening to both live and recorded music _____
15. Natural sense of aesthetic values (beauty, order, and form) _____
16. Keen power of attention, auditory discrimination, and evaluation _____
17. Quickness in discriminating among identical, similar, and contrasting phrases in songs and sections of longer musical compositions _____
18. Sensitivity to the communicative power of music, even to the slightest changes in tempo, dynamics, and tone color _____
19. Ability to hear, identify, and follow two or more rhythm patterns, metric groupings, or melodic themes played simultaneously _____
20. Perception and understanding of the subtle interrelationships within and among the constituent and expressive elements of music _____

[4]Developed by Mary N. Meeker, Associate Professor of Education, University of Southern California.

CHARACTERISTICS OF ACADEMICALLY GIFTED CHILDREN

(With Suggested Activities for Enriched Music Programs)

Characteristic	Appropriate activities
Insatiable curiosity; alertness; active response to stimuli	1. Exploration and problem solving in the study of music 2. Experiments in sound to develop resourcefulness and discrimination 3. Individual study or exploration of various kinds of musical instruments
Precocious reading and comprehension skills	1. Early encounters with musical symbols, ear training, sight singing, dictation 2. Teacher-programmed notation tasks and access to musical scores 3. Independent reading of such materials as composers' lives, stories of operas, music history, and the like
Effortless perception; facile memory; extensive vocabulary	1. Perceptual experiences leading to the discovery of facts and the formation of ideas 2. Research and discussion involving observations and generalizations concerning music 3. Study of musical terminology 4. Listening to recordings of folk music and opera in various languages
Wide range of interests and activities; initiative and adaptability	1. Listening to a variety of quality recordings 2. Self-selected listening with earphones, together with follow-up tasks at a learning center 3. Participation in choral and orchestral performing groups 4. Assumption of both leadership and subordinate roles in organized experiments and productions

Characteristics of Academically Gifted (Continued)

Characteristic	Appropriate activities
Rapid formation of concepts; insight into relationships and implications	1. Controlled perceptual experiences ranging from concrete to abstract 2. Composition of tonal patterns to fit rhythm patterns and vice versa 3. Prediction of melodic and harmonic resolutions and cadences in various forms 4. Discussions of the use of folk music in improving human relations
Ability to identify problems and "leap" to solutions	1. Melodic improvisations on given rhythm patterns, words, subjects, and the like 2. Analysis of the technical skills to be developed on instruments being studied 3. Planning of creative rhythms, either Orff-Schulwerk type or interpretive dance compositions 4. Development of ways to improve vocal interpretation and performance
Aptitude for skills; ability to acquire skills with relatively little practice	1. Study, enjoyment, and performance of challenging songs 2. Lessons and practice on classroom, folk, and orchestral instruments 3. Experience in school and district orchestras (for capable older children)
Good attention span; ability to concentrate; continuity of interest	1. Sequential articulation in a conceptual approach to the study of music 2. Listening lessons that include relatively long choral works, sonatas, symphonies, and ballets 3. Discovery of personalities, stories, and events in program music 4. Evaluation of the effects of background music in films and television programs
Capacity for challenge; seemingly limitless energy	1. Performance of relatively difficult choral and instrumental music with relatively high performing standards 2. Individual research assignments on such topics as the physics of sound (studied in acoustics labs); historical development of various instruments; ethnic music; and forms of music

Characteristics of Academically Gifted (Continued)

Characteristic	Appropriate activities
Superior intellectual skills, reasoning powers, and ability to think abstractly	1. Building of scales and chords in many modes; exploration of metric configurations 2. Analysis of form in music (internal structure) and forms of music (design in composition) 3. Evaluation of ethnic music to develop understanding of various cultures 4. Assignments involving transferable skills and concepts in subjects other than music
Inner urge to communicate and to realize individual potential	1. Development of knowledge and skills in music as the basis for productivity 2. Individual and group lessons on chosen instruments and in musical composition 3. Demonstration, to peers, of instruments and the principles of sound 4. Participation in solo and ensemble groups (vocal and instrumental) and composition of music for performance by such groups
Friends of similar abilities and interests	1. Work on music projects with peers from other classrooms 2. Work with a friend at the learning or listening center in the classroom 3. Participation in psychometric surveys before production committee work 4 Participation in small pupil-organized ensembles (vocal and instrumental)
Underachievement (identified in many cases)	1. Structured tasks in auditory memory and discrimination with controlled aids 2. Reinforcement of learning through prescription tasks involving sensory contacts 3. Programmed listening activities involving purposeful auditory attention 4. Exploration of many music activities to discover individual abilities and interests 5. Self-selected projects, preferably those correlated with other subjects
Tendency to build tension and anxiety	1. Enjoyable kinesthetic experiences with music 2. Use of earphones and selected recordings when individual need arises 3. Folk dancing at noon on the playground

on creativity. Recent evidence indicates that the study of music can increase the manifestations of creative potential. The elementary school should be in an even better position to set up innovative programs in music—programs in which the creative process of exploring the nature and meaning of music contributes to the development of aptitudes characteristic of creativity.

The study of music involves emotional responses, intellectual processes, and psychomotor skills. It provides opportunities for a wide range of experiences that stimulate fluency, flexibility, and originality as well as divergent thinking and production. The following sections delineate characteristics that indicate creative potential in children and offer suggestions for developing each of the aptitudes through the study of music.[5]

Unusual Sensitivity to Other Persons

To develop the gifted child's unusual sensitivity to other persons, the teacher should provide opportunities for the child to have experiences designed to develop understanding through correlating music with psychology, sociology, and anthropology. Examples of appropriate pupil activities include the following:

1. Pantomiming the behavior of characters in story songs and recordings
2. Interviewing individuals to determine the relationship of personality to musical taste
3. Relating the customs, work, and recreational activities of a group of persons to the music of the region in which they live
4. Tracing man's need for and development of music
5. Coaching young persons in the Kodály and Suzuki approaches to music

Emerging Sensitivity to Problems

To develop the gifted child's emerging sensitivity to problems, the teacher should set up experimental projects in elementary physics involving principles of sound production and manipulation of acoustical agents. Examples of pupil participation in these projects include the following:

1. Making, matching, and ordering shakers according to loudness and softness of sound
2. Collecting, tuning, and playing water glasses according to the pentatonic and diatonic scales
3. Constructing one-string box fiddles of various sizes for tuning and playing

[5]Developed by the author on the basis of Guilford's research and Meeker's rating scale.

4. Making experimental pipes or flutes of plastic tubes, bamboo, and the like
5. Exploring the principles involved in producing pitch, overtones, and harmonics

The teacher might also organize experimental extended-day workshops set up to offer directed exploration to gifted children in special areas of music. Examples of pupil participation in such workshops include the following:

1. Learning instrumental skills through diagnostic programmed instruction, including electropiano labs; small group instruction in stringed, woodwind, brass, and percussion instruments
2. Learning ear training and sight singing/and developing a song repertory
3. Singing in small vocal ensembles
4. Working out various solutions to stated problems in harmony
5. Composing variations on themes and writing free melodies
6. Learning to choreograph program music

Sensitivity to Perceptual Stimuli of All Kinds

To develop the gifted child's sensitivity to perceptual stimuli of all kinds, the teacher should create an environment that encourages imagination and productivity. Examples of pupil participation in such an environment include the following:

1. Finger painting; modeling with clay, paper, or string; and sculpting while music is being played
2. Composing melodic phrases in response to nature walks, poems, art prints, and the like
3. Listening to music primarily for enjoyment

The teacher might also introduce hand puppets, colored objects, and the like to develop responsiveness to stimuli. Examples of pupil activities involving such instructional materials include the following:

1. Discriminating between higher and lower, longer and shorter, and louder and softer tones
2. Identifying a, b, and c song phrases and sections of longer compositions
3. Identifying themes in story music that reveal characters and events

Another method the teacher can use to develop the gifted child's sensitivity to perceptual stimuli is to introduce classroom instruments as extensions of emotions. Examples of pupil participation in instrumental activities include (1) improvising introductions, accompaniments, and embellishments to songs; and (2) composing for various combinations of tonal and rhythm instruments.

Ease of Motor Response and Expression

To develop the gifted child's natural ease of motor response and self-expression, the teacher should provide opportunities for experiences that will develop dexterity, coordination, and a sense of rhythm. Examples of appropriate pupil activities include the following:

1. Skipping, leaping, swaying, or twirling to show the pulse in music
2. Experimenting with many classroom instruments
3. Participating in group "creative rhythms" and Orff-Schulwerk compositions
4. Taking part in many forms of dances—folk, interpretive, ballet, and the like
5. Scoring and improvising polyrhythms for various percussion instruments
6. Practicing and performing on folk, keyboard, and orchestral instruments
7. Experimenting with the Suzuki imitative method (for children who are inclined to learn through aural stimulation)

Natural Ease of Tonal Response and Expression

To develop the gifted child's natural ease of tonal response and expression, the teacher should provide opportunities for tonal skill experiences designed to nurture tone memory, discrimination, and relative or absolute pitch. Examples of appropriate pupil activities include the following:

1. Listening to true-toned instruments and voices in tune at A440
2. Playing echo games with tone patterns sounded by a true voice or instrument
3. Singing many songs written for the natural voice range
4. Building pentatonic, diatonic, and chromatic scale tones, using Montessori bells
5. Experimenting with and playing chords on the autoharp
6. Picking out familiar melodies on true-toned resonator bells
7. Identifying individual pitches produced by instruments with distinctive timbres
8. Following staff notation in song books while listening to recordings of the songs
9. Singing songs (from music books) with syllables, numbers, and letters
10. Writing simple melodic patterns, song phrases, and themes from dictation

11. Tuning mock and real instruments to accurate pitches
12. Studying the tone color of each instrument in each family of instruments
13. Listening to many high-fidelity vocal and instrumental recordings
14. Studying many master works of music by attending concerts and listening to recordings and broadcasts

Ease of Verbal Response and Expression

To develop the gifted child's natural ease of verbal response and expression, the teacher should provide opportunities for practice in verbal skills that will promote fluency in singing and in responding intellectually to music. Examples of appropriate pupil activities include the following:

1. Writing additional stanzas for favorite classroom songs
2. Writing new words for familiar songs
3. Translating song lyrics from one language to another
4. Writing and speaking original narrations for tone poems, square dances, and the like
5. Writing program notes for class or school music presentations on special occasions
6. Interviewing musicians in the community
7. Summarizing panel and group discussions concerning musicians and music

Spontaneous Response and Desire to Explore

To encourage the gifted child's spontaneous response and desire to explore, the teacher should provide opportunities for direct purposeful experiences that encourage individual response and develop a sense of responsibility for the results of exploration. Examples of appropriate pupil activities include the following:

1. Improvising body movements, dances, and acrobatic routines to express moods in music
2. Doing physical fitness exercises to selected musical themes and variations
3. Making up "fun songs" with various meters for jumping rope, playing rainy day games, and doing chores
4. Improvising "story songs" with or without simple autoharp chording
5. Harmonizing vocally and chording songs on accompaniment instruments
6. Exploring the versatility of instruments with respect to range, volume, and various tonal effects

7. Taping extemporaneously sung melodic ideas as material for future compositions

Divergent Thinking: Concrete Media and Abstractions

To foster the gifted child's capacity for divergent thinking involving concrete media and abstractions, the teacher should guide flexibly structured environmental exploration (the search for multiple solutions to problems) through the processes of inquiry, search, discovery, and creative production. Examples of appropriate pupil activities include the following:

1. Making sounds with instruments or common objects in various ways, such as striking, shaking, rubbing, and blowing
2. Figuring ways to make pitch higher or lower on experimental instruments
3. Testing ways to vary the tone color of a pitch or melody
4. Inventing new systems to represent musical sounds by means of visual symbols
5. Experimenting kinesthetically for rhythm possibilities by the use of the head, arms, and legs
6. Building various scale patterns with which to create tonality and melodies
7. Arranging into melodic patterns sounds that vary in duration and pitch
8. Creating various distinct melodic idioms by combining tone patterns
9. Creating many distinct harmonic idioms by combining chord progressions
10. Writing modifications of phrases and variations on themes
11. Building, altering, and resolving chords to achieve a variety of effects
12. Exploring many ways to harmonize, accompany, and embellish familiar songs
13. Researching the possible arrangements of identical, similar, and different phrases

Openness to Experiences Involving Values and Attitudes

To develop the gifted child's openness to experiences involving values and attitudes, the teacher should provide opportunities for direct structured involvement related to the understanding of emotions as guides to self-awareness and behavior in social situations. Examples of appropriate pupil activities include the following:

1. Acting out personal experiences through body movement to selected music; for example, participating in skits to reveal emotional responses such as joy, surprise, sadness, and fear

2. Singing vocal improvisations in role-playing scenes featuring human relations and problems involving specific emotions such as anger, jealousy, and rivalry
3. Dramatizing customs and learning the dances of various ethnic groups, using folk songs found in books and authentic recordings
4. Evaluating various kinds of music, each for its specific appeal

Originality of Ideas for Solution of Problems, Interpretation, and Production

To encourage originality of ideas for solution of problems, interpretation, and production, the teacher of gifted children should provide opportunities for the children to have experiences that stimulate the imagination in response to music and lead to the solution of music-related problems. Examples of appropriate pupil activities include the following:

1. Pretending to be animals, trees, clouds, butterflies, and the like, as suggested by various musical selections
2. Contributing to Orff-Schulwerk compositions through movement, speech, tone production, and the like
3. Creating characters for various pieces of music by means of dance pantomime or the use of marionettes
4. Describing, drawing, and dramatizing personalities revealed in story music
5. Pantomiming weightlessness to the accompaniment of selected pieces of music
6. Developing unusual methods to solve specific composition problems
7. Choreographing sections from selected pieces of program and abstract music
8. Combining familiar songs and appropriate instrumental selections into operettas and other works
9. Designing costumes, sets, and scenery for dramatic musical programs
10. Inventing new ways to notate the many variables in music
11. Programming practice ideas to develop certain skills on instruments
12. Designing methods to teach younger children new songs or music

Originality in Expression of Feelings and Ideas

To develop the gifted child's originality in expression of feelings and ideas, the teacher should supervise pupils' creative productions in

the medium of music. Examples of appropriate pupil activities include the following:

1. Making up songs to be sung while getting ready for reading, mathematics, and so on
2. Improvising musical signals to be given by a monitor and containing words that inform; for example: "It's clean-up time." "We're getting too noisy." "Time to get ready for recess."
3. Participating in spontaneous musical dialogues that are started by the teacher
4. Composing original songs, individually or in groups, about classroom experiences
5. Extemporaneously singing simple original songs on selected topics
6. Composing original melodies for the words of selected poems
7. Composing original melodies and words based on feelings or events
8. Writing original variations on familiar songs or given themes by changing the meter or mode, imitating, embellishing, ornamenting, and so on
9. Composing simple polyphonic music, such as descants, rounds, and canons
10. Composing free melodies and harmony for voices and instruments

Original Sense of Humor

To encourage the gifted child's original sense of humor, the teacher should present examples of the humor that occurs in music; for example, exaggeration. Examples of appropriate pupil activities include the following:

1. Discovering musical effects that evoke laughter through whimsical use of rhythm and tone patterns, harmony, and instrumental combinations
2. Producing humorous sounds by playing instruments in various ways; for example, imitating animal sounds, babies' cries, and the like
3. Producing hand puppet shows to the accompaniment of scored and original humorous music
4. Moving in slow motion to the accompaniment of 78 rpm recordings played at 33⅓ rpm while acting out the physical movements of various games and sports

Ability to Abstract from Examples

To develop the ability to abstract from relatively few concrete perceptual examples, the teacher should provide opportunities for the children to generalize from their experiences with music. Examples of appropriate pupil activities include the following:

1. Establishing a feeling for tonal center, metric units, and the like in songs studied
2. Memorizing the pattern of whole and half steps in the various scales
3. Discovering the rule for finding the key note in a piece from either a sharp or a flat key signature
4. Deducting the principle known as the "cycle of fifths" in studying keys
5. Observing the basis for classifying chords into primary and secondary
6. Recognizing the harmonic implications in polyphonic (contrapuntal) music
7. Questioning and testing statements made by peers about music to strengthen understandings
8. Discussing concepts about each of the constituent and expressive elements of music
9. Formulating rules for writing melodies by observing inherent melodic tendencies
10. Transferring knowledge of concepts and principles to academic situations

Ability to Organize Information, Plans, and Ideas

To develop the gifted child's ability to organize data, the teacher should provide opportunities for the child to manipulate what has been learned. Examples of activities designed to provide such opportunities include the following:

1. Arranging pitches (diatonic and chromatic) in ascending and descending order
2. Making rhythm charts that show the mathematical relation of note values
3. Illustrating rhythm patterns and examples of augmentation and diminution
4. Building pentatonic and diatonic scales (from basic patterns) on all 12 pitches
5. Building other scales—for example, those that had their origins in early church modes—on various pitches
6. Charting the relationship of keys (major and minor; relative and parallel)

7. Writing root position, first and second inversions, and resolutions of chords
8. Charting the forms of the various types of music to show the composer's plan

Ability to Synthesize Data

To develop the gifted child's ability to synthesize data into integrated classes and systems, the teacher should provide opportunities for the child to compile facts about music and cite their implications. Examples of appropriate pupil activities include the following:

1. Finding instances of the various types of rhythm patterns in class songs; e.g., even and uneven, syncopated, and polyrhythmic
2. Classifying percussion sound characteristics, such as pitch or tone, type, and quality
3. Grouping metric signatures according to sets (metric units) and schemes
4. Reorganizing the system of overtones into pitch order for the diatonic scale
5. Deciphering and formulating the patterns of the novel modes (scale systems)
6. Systematizing the possible combinations of pitches as basic tonal patterns
7. Classifying characteristics of melodic contour according to scale, chord, and so on
8. Participating in setting up criteria for writing original themes and variations
9. Observing the various types of harmonic progressions, sequences, and cadences
10. Explaining the principles of interrelationship involved in musical form
11. Extending application of concepts and principles to create inferences
12. Predicting experimental innovations in music, such as the development of synthesizers

Intense Physical and Mental Energy

To direct into constructive channels the gifted child's intense mental and physical energy, the teacher should encourage the wise use of pupil time, effort, and talents. Examples of appropriate pupil activities include the following:

1. Participating in a large variety of kinesthetic responses to all kinds of music
2. Dancing to appropriate music
3. Singing familiar songs to punctuate the class day
4. Working with clearly defined and understood purposes and procedures
5. Experimenting with the vigorous demands of the Kodály and Suzuki methods
6. Practicing daily on instruments (being supervised or using practice guides)
7. Taking private instrumental lessons (no voice training at this age)
8. Participating in community music organizations and special events
9. Observing the various kinds of musical background on television and the effectiveness of such backgrounds
10. Listening to musical productions on radio and television at home for class discussion and evaluation at school
11. Scheduling self-selected music activities for leisure time
12. Learning to value time and work through periodical self-evaluation

Perseverance in Solving Problems and Acquiring Skills

To encourage the gifted child's perseverance in solving problems and acquiring skills, the teacher should provide opportunities for experiences that challenge each pupil's latent or demonstrated potential. Examples of appropriate pupil activities include the following:

1. Exploring various materials to be used in creative expression in dance, art, and music
2. Setting group and individual goals with guidance from the teacher
3. Tackling the more challenging musical selections, experiments, and projects
4. Choosing instruments to be explored or studied privately
5. Using instrumental programmed guides designed for individual pacing
6. Playing and singing in small ensembles and in larger performing groups
7. Converting themes from classical music to "pop" forms and vice versa
8. Scheduling self-directed practice periods and small-group rehearsals

Impatience with Excessive Restrictions and Routine

To avoid imposing excessive restrictions and routine on the gifted child, the teacher should utilize the child's spontaneous integrity and self-motivation. Examples of appropriate pupil activities include the following:

1. Voluntarily participating in creation of rhythms and in singing and playing instruments
2. Expressing responses, ideas, and attitudes toward class procedures
3. Participating in the planning of experiments, projects, productions, and the like
4. Brainstorming (spoken or sung) for ideas of better ways to organize the study of music
5. Discovering and advancing according to ability and readiness
6. Experimenting with self-discipline, self-direction, and self-evaluation
7. Receiving intrinsic reward through earned recognition and the opportunity to share
8. Sharing and participating in a creative approach to "learning how to learn"
9. Working individually or in groups for extended periods of time

Chapter 4

Contemporary Methods of Music Education for Gifted Children

Planning for the teaching of gifted children demands broad, well-structured foundations on which to build differentiated curriculums and design programs that will challenge and nurture the high potential of these children. Curriculum directors, administrators, and music teachers need to be familiar not only with relevant research on giftedness but also with the creative ideas and empirical findings of contemporary musicians and educators.

Preparation for the establishment of programs should include thoughtful examination of various methods of music education in use in the United States and abroad. By not limiting the search for ideas to a particular geographic region, one can gain an interesting perspective. Such a perspective will provide the opportunity to look objectively at effective methods of teaching and discover the fundamental principles on which they are based.

In this chapter are contained reviews of three internationally recognized methods of music education and summaries of their principles of operation. Also reviewed and summarized is an approach to teaching music that has been evolving in the United States and is rapidly gaining nationwide recognition and the attention of educators in Europe and Asia. Together, these four effective methods contain a wealth of ideas about teaching gifted children to sing, sight-read, play instruments, and discover and create in the medium of music—all basic to the development of the outstanding potential of these children

Kodály Method

Zoltán Kodály, one of the twentieth century's most significant musicians and educators, developed his ideas of musical training for the Hungarian Ministry of Education during the period after World War I. It was during this time that he and Béla Bartók assembled and codified the vast musical resources of Hungarian culture. This work enabled Kodály to recognize the characteristics unique to Hungarian folk songs. As a means of perpetuating the heritage of his own culture, he invented a system for developing musical literacy in

Hungarian children through the use of the country's folk music. Through the use of Kodály's method today, Hungarian children are taught to sight-read two-part songs as early as the second grade.

The focus of the Kodály method is on ear training and sight singing. The singing is unaccompanied for the most part and uses "movable *do*." Because the syllables *sol*, *mi*, and *la* (5, 3, and 6) are used so frequently in preschool children's games, early studies begin with rhythmic chants that consist of these tones and the whole pentatonic scale. The hexachord, the diatonic scale, and various modes are gradually added. Training progresses sequentially from the familiar to the new and is based at first exclusively on national folk songs. Later it includes folk songs of other countries and finally culminates in the study of classical music literature.

Basic principles of the Kodály system that are adaptable to all cultures are as follows:

1. Introducing early songs about play that are pitched within the natural range of children's voices and consist of tones of a familiar scale
2. Training the child's ear and teaching note reading through aural-visual association
3. Progressing sequentially from the familiar to the new; from music indigenous to the native culture to the expansion of musical scope and horizons.

Suzuki Method

Shinichi Suzuki, the famous Japanese violin teacher, describes in his writings how he conceived "talent education" and reveals the fundamental principle on which he has built a new method of teaching:

> More than thirty years ago, I suddenly realized that all children throughout the world can speak their native languages with the utmost fluency. This linguistic ability is the result of a method which has been in continuous practice throughout human history. Why not teach music the same way?[1]

Suzuki's method of teaching very young children to play the violin involves having them listen to music and imitate it long before they are given scored music. This approach of playing music for the joy it brings has been widely adopted in Japan and other countries as an effective method of teaching children to play any musical instrument. The procedure involved in the Suzuki system is based on a few ideas relevant to the nurturing of talent and the development of healthy, happy children:

[1] Shinichi Suzuki, "Shinichi Suzuki's 1967 Talent Education Tour," 1967.

1. Exposing the child to frequently performed or recorded musical compositions that the child will eventually perform
2. Starting the child on the violin as early as three and one-half years of age and involving the mother in the child's lessons and practice sessions
3. Training the beginning performer to listen and remember through rote learning and the playing of carefully selected music
4. Introducing the reading of visual symbols after the learner has acquired basic technical skills and demonstrates sensitivity to tonal pitch and nuance
5. Scheduling recitals in which students of all stages of musical development are brought together for the pleasure of playing together some items in their solo repertoires

Orff-Schulwerk Method

Carl Orff, contemporary German composer and educator, initiated the Orff-Schulwerk method for the children of Munich, Germany, in 1930. His primary intention was to facilitate the creative process of learning. Observing that young children intuitively relate themselves to elemental speech, simple songs, and kinetic rhythms, he sought to find a way to use the power of this natural response to life. With the assistance of musicologists, he soon developed a special *instrumentarium* ("child-size adaptations of various instruments") with purity of tone and other factors important to teaching aesthetic values, thus opening the way for a child-oriented art form that he calls "Music for Children."[2] After four decades of enthusiastic response from children and teachers, Carl Orff's ideas have spread to every continent of the world and are being applied to instruction not only in music but in other subjects as well.

The Orff-Schulwerk method requires that the tools for the child's education be drawn from the child's inherent creativity. It changes the approach of the music teacher from one of imposing preconceived ideas to one of proposing specific problems in rhythm, tonal patterns, and form for which many divergent solutions are possible. The method also uses " 'Elemental Music,' which allows for the greatest freedom for improvisation through simple forms." The techniques employed in this method challenge the child's imagination and offer immediate rewards. As the child shares inventions and participates in group expression, the kinesthetic, auditory, and visual experiences are synthesized, the self-image is strengthened, and people, things, and ideas are related to.

[2] *Orff-Schulwerk. Design for Creativity.* Edited by Martha Wampler. Bellflower, Calif.: Creative Practices Council, Inc., 1968.

As to children just beginning to study music, rhythm is explored through speech. Very young children clap and move to the sounds created by their own names, onomatopoeic words, and favorite rhymes. Verbal expression springing from shared experiences is soon modified by rhythms and tonal patterns for original songs or accompaniments to interpretive gestures. Through the process of devising visual symbols to indicate duration, pitch, dynamics, and the like, children discover the relationship between notation and auditory variables before they encounter the traditional staff of lines and spaces.

The appeal of the Orff-Schulwerk method lies in its genuine simplicity and in the creative manner in which it holds the child's attention. For example, the descending minor third, sung spontaneously by young children at play in many cultures, is the first melodic germ to be used in this approach. Other notes are soon added until the pentatonic scale is completed. This serves for a while as the principal source of tonal material for ostinatos; i.e., repeated patterns of tone and rhythm played on instruments as accompaniments to body movement and chanting.

Because the five tones of the pentatonic scale include no half-steps or leading tone, they pose none of the complicated problems of resolving tensions created by harsh dissonances. The child is free to explore the vast resources of tone, the medium used to produce it, and the child's own potential creativity. Immediate reinforcement (reward) is provided for initiative. Satisfaction with accomplishments and a desire to learn more lead the child to the discovery of all the other tones and tonalities, such as the medieval modal scales and the modern major and minor diatonic scales with their many harmonic possibilities.

The great value of the Orff-Schulwerk instruments, with their beautiful but easy-to-play tones, lies in their power to motivate creative expression. Child-sized xylophones with resonator chambers and movable brazilwood tone bars, glockenspiels, and metallophones are the keyboard instruments, and straight percussion instruments include tunable dance drums, modified timpani, and items such as sleigh bells. Authentic copies of the ancient fiddle, which may be both plucked and bowed, furnish string sounds. Later, recorders provide the sounds of the wind instruments.

As pupils and teacher together explore time, space, sound, and the various elements of music, they put them together in an endless variety of "compositions." These productions, combining improvisation and invention, usually consist of alternating ensemble and solo parts which produce the musical form of the rondo. Expressive words and poetry, body movement and impressionistic dance, and

rhythm and melodic materials played on the instruments all combine to create the total pageantry of the mood.

This "laboratory-for-experiencing" approach to the creative process of learning is significant primarily because it relies on human experience as the primary factor in the development of individual potential. The principles involved in this approach are summarized as follows:

1. Using the elemental process, those natural forces or primal drives inherent in the nature of childhood, as an impetus for learning and growth
2. Emphasizing perceptual awareness, problem solving, and creative productivity, including the use of beautifully toned but simple instruments
3. Developing auditory memory and discrimination through tones of high quality and accurate intonation that the children can manipulate and use as building materials
4. Establishing a vocabulary of kinetic responses as well as tonal, rhythm, and verbal patterns as resources for communication through the medium of organized sound and motion
5. Encouraging individual and group discovery and expression, emphasizing simplicity
6. Promoting the sharing of ideas and the demonstration of creative initiative in group compositions

Conceptual Approach to Music Education

The emerging philosophy of music education in U.S. public schools is a direct outgrowth of research findings of educational psychologists that have been put into practice by leading music educators in this country. It represents a dynamic change from the old, haphazard didactic method to the more creative process of guiding the development of rational powers and competencies. This guidance is provided through experiences designed to exploit the natural laws of learning now known to us—experiences on the sensory, perceptual level that lead to meaningful abstractions in the form of concepts and generalizations; experiences involving emotional responses and intellectual processes vital to the understanding of music and to the development of related skills; and experiences that bring immediate, intrinsic rewards and eventually contribute directly to developmental growth and realization of individual potential.

The conceptual approach to music education, as it has come to be called, is based on certain assumptions:

1. One way to provide the right kind of educational experiences for children is through functional curriculum programs oriented toward realistic behavioral objectives. These objectives should be as specific as possible; for example, the ability to think in tones, rhythm patterns, and musical forms as well as in words, sentences, and ideas.
2. Concepts are the directive force within the individual that determines behavior and understanding. It is important in music education, therefore, for children to develop valid concepts about each of the elements of music and their interrelationships.
3. Facts and concepts built on firsthand experiences with music have a special vitality that supports the kind of abstract critical thinking essential to understanding and appreciating the nature, structure, and meaning of music.
4. This quality of understanding, based on knowledge of facts, concepts, and principles gained through personal exploration, produces healthy attitudes and a sense of values that enable the child to transcend himself and identify with great minds, great ideas, and the universal spirit of music.

Music textbooks, teachers' guides, and writings in the field of music education have reflected this trend toward the conceptual approach to music education for several years. Nevertheless, actual documentation was not released until the Music Educators National Conference published *The Study of Music in the Elementary School: A Conceptual Approach.*[3] (See the section entitled "Subject Matter Content" for names and classified lists of concepts.) Although the conference publication contains special suggestions for teaching the gifted, its main feature is a comprehensive list of conceptual statements about each of the seven elements of music (rhythm, melody, harmony, form, tempo, dynamics, and tone color). For each of these concepts, there are examples of related musical compositions and highly articulated suggestions for involving children in sequential learning experiences that will develop insight and lead to the formation of useful concepts about music.

The learning of concepts entails a spiraling sequential development that eventually involves complex operations and higher intellectual processes. Nevertheless, in this approach guided conceptualization of musical substance begins as early as preschool. Encounter with "organized sound" in the conceptual approach to music education is systematically planned. It places the focus of study on simple

[3] *The Study of Music in the Elementary School A Conceptual Approach.* Edited by Charles L. Gray. Washington, D.C. Music Educators National Conference, 1967.

analysis of what is perceived, beginning with nontechnical recognition (aural, kinesthetic, and visual) of various attributes of each element of music. It is a creative process in that it employs many divergent ways to utilize the child's natural curiosity and imagination as motivators in learning. The simple perceptual tasks assigned lead to ever-expanding concepts that are put to use as the child becomes involved in various types of production.

Certain activities are appropriate to the conceptual approach to music. Each activity involves an important behavioral objective, a prescription-type task, and an opportunity for an individual or group to produce certain results by the use of the newly acquired concepts and skills. Children learn to:

1. Feel pulse as recurring beat in rhythm when they imitate the royal lions marching in Saint-Saëns' "Carnival of the Animals."
2. Hear pitch as a variable in the contour of melody when they use hand signals to indicate the pitch of various tones and write blank or staff notation.
3. Recognize chords as multiple sounds in harmony when they build triads with tonal instruments on accented notes in familiar songs.
4. Understand phrases and sections as distinct musical ideas in design and structure when they use puppets (finger or hand puppets or marionettes) as a means of differentiating among identical, similar, and contrasting musical statements in songs or instrumental recordings.

As children discover the many attributes of rhythm, melody, harmony, form, tempo, dynamics, and tone color, they build their own cognitive foundation for skills, attitudes, and creative expression. Listening facilities and a wide range of simple classroom instruments provide the means of extending musical exploration beyond the capacities of the human voice. Such facilities and instruments also provide motivation for the study of folk, orchestral, and major keyboard instruments. Whether instruction occurs in classroom activities, choral groups, or instrumental classes and ensembles, emphasis should be placed on conceptual understanding and developmental growth through the study of music. Children who demonstrate special talent or interest should be encouraged to study the instrument of their choice under competent private teachers.

The conceptual approach to the study of music and the educational principles on which the approach is based are summarized as follows:

1. Aiming toward the full development of individual potential by involving children at their own level of ability and readiness in a

program of inquiry and discovery designed to help them explore the nature, structure, and meaning of music

2. Cultivating perceptual referents for specific concepts by providing certain environmental stimuli and sensory contacts with music in carefully structured aural, kinesthetic, and visual experiences
3. Guiding conceptual learning about each of the seven elements of music and their interrelationships through purposeful body movements, singing, listening, playing instruments (rhythm and tonal), and creating as well as through reading and writing musical notation
4. Supporting the natural relationship of the affective, cognitive, and psychomotor responses to music by assisting children in the simultaneous discovery of beauty, logic, and movement in a wealth of selected vocal and instrumental music
5. Directing the intellectual processes in sequential analysis and synthesis of rhythm, including metric patterns; of tone and melody, including themes and variations; of harmonic laws, including polyphonic textures; and of form, including internal structure and overall design
6. Fostering the development of skills, values, and attitudes as related to concepts about music by means of prescribed tasks that teach children to recognize, identify, differentiate, discriminate, relate, interpret, perform, evaluate, and create as they explore the many auditory phenomena in music
7. Nurturing the creative potential in children through the provision of frequent opportunities for improvisation and guided experiences in composition as applications of concepts and skills gained through firsthand contact with music.

Chapter 5

Establishment of Music Education Programs for Gifted Children

The very nature of the breakthrough in educational thinking and practice described in the reviews of leading contemporary systems of music education presented earlier in this publication opens the way to exciting new methods of teaching music. Paramount among the guidelines for setting up music education programs for gifted children should be the following:

1. Emphasis on the recognition and development of individual capabilities
2. Planning based on open-ended behavioral objectives
3. Involvement of children in life-oriented experiences in accordance with individual levels of readiness and pacing

The power of consensus of purpose, released through cooperative endeavor, is a dynamic force essential to the success of any innovative educational program. It is the creative product of knowledge, imagination, and implementation. Because enrichment through exploration has been recommended for both academically gifted and musically talented children, provisions must be made to meet their common, special, and individual needs.

Programming for maximum educational opportunities through differentiated elementary music curriculums demands functional solutions to certain critical issues. This section, therefore, presents organized information based on relevant research concerning (1) grouping, scheduling, and providing facilities essential to optimum conditions for learning; and (2) selecting well-qualified personnel capable of teaching music to gifted children

Grouping, Scheduling, and Providing of Facilities

The problems of grouping and scheduling and providing facilities for differentiated curriculums are very complex, partly because problems arise from circumstances that vary according to the school district, the school, and even the population for which a special program is to be planned. Charts 1 through 5 contain information on

some of the successful ways of settling issues involved in the administration of programs designed to promote the musical growth of children according to their individual abilities.

Qualifications for Teachers

Teachers involved in music education programs for the gifted must demonstrate qualities and abilities essential to (1) understanding, challenging, and guiding gifted elementary children; and (2) preserving the integrity of music during the teaching and learning process.

The success of a music program for gifted children is determined to a large extent by the teacher's personal attributes, understanding of and feeling for the gifted, and knowledge of subject matter. The teacher should be a well-integrated, resourceful, and warm person with enough forcefulness to lead pupils with confidence. The teacher should be extremely sensitive to children and aware of the gifted child's capacities, needs, and learning patterns; and he or she should be at home with the subject and able to make the study of music an exciting adventure for gifted children. In summary, the qualifications for teaching gifted children require not only broad knowledge and experience but great insight and creative skill as well.

Although some school districts in California provide music teachers with special training and assign them full time to one or more schools, most elementary school districts are set up on the basis of self-contained classrooms in which the regular teacher is responsible for all instruction, including music instruction. Therefore, an important aspect of a realistic approach to music education for the gifted is the establishment of minimal requirements for the teachers who will be involved.

Chart 1

Prevalent Class Grouping Practices

Type of class	Members of class
Heterogeneous (may be either graded or ungraded)	Children of average and above-average ability 1. Clusters of children who score above 130 IQ and who may also have musical talent 2. Clusters of children who score below 130 IQ but who demonstrate musical talent
Homogeneous (may be either graded or ungraded)	Children who are gifted academically or musically or both

Chart 2

Subject-Matter Scope in Music for Heterogeneous and Homogeneous Classes

Instructional program	Content
Rhythm a body movement	Wide range of kinesthetic experiences in exploring many kinds of rhythms
Singing	1. Ear training, sight singing, and analysis of many children's songs 2. Solo and ensemble singing 3. Introduction to various types of vocal literature 4. Participation in school and district choral performing groups
Instruments	1. Introduction to many k f classroom rhythm and tonal instruments 2. Exploration of orchestral, keyboard, and folk instruments 3. Private lessons on at least one chosen instrument 4. Active participation in school or district orchestras 5 Solo and ensemble experience to develop initiative, values, and skills 6. Opportunities to attend orchestral rehearsals and sit among the performers
Listening	1 Purposeful listening for individual discovery and appreciation 2. Study of musical scores of songs, oratorios, sonatas, and symphonies 3. Preparation for attendance at school music programs, youth concerts, and operas
. tive production (combining all ts of musical performance)	1. Improvisations in body movement and dance, singing, and playing 2. Creative approach to problem solving and study of musical composition 3. Performance of Orff-Schulwerk compositions and student productions

Chart 3

Flexible Scheduling in Music Education Programs for the Gifted

Type of program	Activities included	Location	Time
Classroom music for graded or ungraded classes	Class and individual participation in singing, listening, kinesthetic responses, performances on classroom instruments, music reading analysis, and composition. May be conducted by traveling or resident music teachers or classroom teachers.	Classroom or music room	Weekly or biweekly
Instrumental demonstrations	Demonstrations on various instruments provided by talented instrumentalists, including accomplished students of all ages, college music majors, and private teachers and performers	Classroom, music room, or auditorium	Periodically
Instrumental classes, school orchestra, and choral groups	Instruction in playing of various instruments and in singing given by regular or specialist teachers with the assistance of talented persons in the community	Classroom, music room, or auditorium	Weekly or biweekly
Extended-day program (voluntary enrollment)	Workshops in vocal and instrumental skills, supervised practice in playing an instrument or singing, performing of choral and orchestral music, folk dancing and study of folk music, listening, composition, and the like	"Home" schools, neighboring schools, or community learning centers	Before and after school, lunchtime, Saturdays

Music programs and recitals	Recitals featuring solos and ensembles; assembly "sings" and orchestra meets; culmination and special programs; and performances by professional musicians	Classroom, music room, or auditorium of "home" or neighboring schools	Periodically
Concerts and field trips	Visits to rehearsals of high school performing groups, youth concerts, musicals, operas, school district music meets, music clinics, and festivals	Neighboring schools and community centers	Periodically

Chart 4

Facilities Recommended and Their Functions in Music Education Programs for the Gifted

Facility	Description	Purpose	Control
Music center (in each classroom)	Contains a large variety of exciting participation materials and sources of information to challenge and guide gifted children in small-group activities or individual exploration	Available space, location, equipment, and materials should facilitate lesson follow-up activities; self-selection listening; song and score reading; research and related biographical-informational reading; experimentation; self-testing; exploration of and limited practice on classroom, folk, and orchestral instruments; creative ventures; correlation of music with other subjects; and display of pupil compositions and related artwork and poetry.	Under supervision of the teacher, children schedule themselves to work on group or individual activities and projects. This arrangement provides structure and encourages initiative.
Music room (in each school if possible)	Contains equipment and materials essential to enriched music programs; offers more flexible environmental opportunities than are possible in the average classroom.	Room, equipment, and materials should facilitate flexible grouping and scheduling of classroom-type lessons; instrumental demonstrations and recitals; supervised or programmed multimedia practice; small ensemble rehearsals and recitals; tape recording for pupil evaluation, progress records, and presentations; extended-day classes, such as 20- to 30-minute command performance listening programs at lunchtime.	Under supervision of the teacher in charge, other teachers schedule regular classes, individual rehearsals, and special events. This arrangement allows flexibility in the use of the facilities.

Auditorium (in each school, if possible)	Spatially and acoustically designed to accommodate large musical groups and large audiences; provides an appropriate place for public performing experience for children who are capable of demonstrating musical skills	Available space, equipment, and instruments should facilitate assembly singing; orchestral demonstrations; large choral and instrumental rehearsals; private instrumental or vocal practice; folk dancing; creative rhythm instruction and Orff-Schulwerk classes; programs for special occasions; pupil-created musical productions; and performances by professional musicians	Under supervision of the principal, teachers schedule activities, thus providing for orderly and efficient use of available space and facilities.

Chart 5

Equipment, Materials, and Instruments Recommended for Music Education Programs for the Gifted

Equipment	Materials	Classroom rhythm and tonal	Instruments			
			Keyboard	Orchestral	Folk	Ethnic
Record players and phonographs Amplifiers, earphones, and microphones Tape recorders and tapes Overhead projectors and music stands Filmstrip and slide projectors Motion picture projectors Stationary or portable screens Television sets and radios Portable soundproofed practice booths	Music textbooks, chart books, records Selected listening materials Musical scores Books on various aspects of music (professional and children's) Music transparencies, chart paper, and the like Flannelboard and notation symbols Simulated keyboards and charts Staff liners, metronomes, and pitch pipes Wall charts of instruments, chords and the like	Rhythm sticks and chopsticks Claves and flat stones Tone blocks Temple blocks Sandblocks Drums (large and small) Dance drum (tunable) Conga and bongo drums Indian tom-toms Talking drums Melody bells Resonator bells Montessori bells Orff xylophones Classroom organ Autoharps Duobass or bourdon Song flutes Recorders Madrigal pipes Finger cymbals Triangle and striker Sleigh bells	Grand piano Upright piano Electropiano labs	*Strings* Violins Violas Cellos String bass (½) *Woodwinds* Flutes Oboes Clarinets Saxophones *Brass* Trumpets French horns Trombones Baritones *Percussion* Timpani Snare drums Bass drums Cymbals	Guitar Banjo Ukulele Accordion Harmonica	Variety of rhythm and tonal instruments from other cultures

The following criteria for teacher selection are derived from references on the selection of teachers for music education programs for the gifted:

Criteria for Teacher Selection

Teachers of mentally gifted minors should be

1.1 Creative in
- 1.11 Thought
- 1.12 Production
- 1.13 Classroom organization
- 1.14 Teaching methods
- 1.15 Materials
- 1.16 Experiences planned

1.2 Well-organized

1.21 Deliberately advancing aspects of creativity and mental giftedness

1.22 Using teaching methods, developing experiences, and employing methods of evaluation that are (a) consistent with general and specific program goals and specific purposes, needs, and interests of individual children, and (b) based on a philosophy of education, principles of learning knowledge of social conditions, and awareness of relevant facets of personal, intellectual, and social development of each student

1.3 Enthusiastic—by example, able to instill a joy of learning, discovering, self-starting, and sense of mission for personal growth and for improving society

1.4 Endowed with a sense of humor, empathy, and personal warmth that encourages gifted pupils to talk about, think about, and reflect on the things that are most important to them

1.5 Knowledgeable—possessing broad knowledge, including superior knowledge in one field, an understanding of related fields, and insight into how knowledge from various fields may be applied in arriving at solutions to problems

1.6 Flexible

1.61 In recreating and restructuring the physical environment

1.62 In using materials and equipment

1.63 In structuring and restructuring groups and classroom experiences

1.64 In planning lessons and in modifying lessons to capitalize on a "moment of" or opportunity for learning

1.7 Aware of the capabilities and needs of gifted pupils

1.8 Resourceful in searching for and obtaining special materials, in becoming acquainted with and using resource persons, and in locating out-of-school places where children and youth may have worthwhile experiences

1.9 Providing special educational experiences for each gifted pupil[1]

Minimal Competencies for Teaching Music to Gifted Children

If children are to grow in their ability to sing correctly, their teacher must be able to look at the printed page while listening to the children singing, know whether they are singing accurately, and,

[1] Paul D. Plowman, "Guidelines for Establishing and Evaluating Programs for Mentally Gifted Minors," Sacramento: California State Department of Education, 1962

if they are not, recognize what is wrong and rect it in such matters as pitch, rhythm, and correct notes.

The teacher must be able to look . ' a song, know its key, find its starting tone, and be able to read and perform the intervals involved. Other necessary abilities are:

1. Ability to sing with accuracy of pitch and rhythm
2. Ability to play simple tonal rhythm instruments correctly
3. Sufficient sensitivity to harmony and knowledge of it to recognize whether the chords being played on an autoharp are right or wrong and be able to find the right chord
4. Sufficient knowledge of musical notation to be able to write on a staff the simple melodies that children create
5. Ability to set a proper tempo and indicate phrasing and dynamic contrasts
6. Sufficient knowledge of music literature for effective teaching of listening lessons
7. Sufficient knowledge of folk and orchestral instruments and ability to identify them by ear
8. Above all, a genuine interest in music, as well as in children, and a desire to grow step by step in the ability to bring children and music together in ways that are both enjoyable and educational[2]

[2] Adapted from "Minimum Standards of Teacher Competence," in *Music Framework for California Public Schools Kindergarten Through Grade Twelve* Sacramento California State Department of Education, 1971, pp. 60-61.

Chapter 6

Content of Music Education Programs for Gifted Children

The content of music education programs for the gifted and the sequential order of presentation are determined primarily by two seemingly unrelated criteria—one inherent in the study of music: the other, in the nature of the child:

1. Integrity of music with its seven distinct though interrelated elements, each of which involves concepts suitable to a logical order of sequencing
2. Integrity of the gifted child and the child's divergent and often unpredictable learning pattern, characterized by a psychological "reaching" for content, frequently resulting in "leaps" to insight and discovery

The well-qualified music teacher recognizes and uses both of these forces to the advantage of the child. In a very creative role, the teacher presents content sequentially as appropriate to each stage of developmental growth and sees that there are learning activities that range from the most concrete sensory experiences to the most abstract functions of the intellect. In this procedure the products of perception and conception become the facts, concepts, and generalizations of the child's musical knowledge. In this approach it is the inductive process of learning that establishes a foundation for understanding the principles that underlie the constituent and expressive elements of music and their interrelationships.

In its publication *The Study of Music in the Elementary School: A Conceptual Approach,* the Music Educators National Conference classifies the subject-matter content of music into (1) the four constituent elements of music: rhythm, melody, harmony, and form; and (2) the three expressive elements of music: tempo, dynamics, and tone color.[1] In the ideal classroom situation, children will grow in musical knowledge and skills and in their attitudes toward music as a result of well-integrated lessons that promote conceptual learnings about these elements.

[1] *The Study of Music in the Elementary School. A Conceptual Approach.* Edited by Charles L. Gray. Washington, D.C.: Music Educators National Conference, 1967.

Subject-Matter Content

Percepts (as facts) are the modules of subject-matter content in music. On their most concrete level, these modules are unsynthesized bits of perceptual data that are (1) gathered through firsthand experience with music; and (2) stored in the memory for recall and use in the formation of concepts and generalizations.

Even with exceptionally bright children, enrichment in music should begin on the elemental level of auditory, kinesthetic, and visual experiences. For it is the feel and sound of music (as the mind discovers the various elements and their interaction in the structure of the music) that give meaning to musical expression and life to its visual symbols.

The teacher encourages pupil involvement by initiating activities and projects to help children explore the exciting language of music and plans the kind of sensory experiences and tasks that will lead to the building and continuous growth of each concept essential to musical understanding.

The term *factual information* connotes a degree of abstraction. Nevertheless, this kind of information provides a "grammar" for the language of music and a system of rules, principles, and laws for reading, writing, and performing in that medium. Information needed for comprehension skills is best gained through inquiry and problem solving. In this approach information is easily organized by the child into rules for general application.

An example illustrates the gifted child's ability to organize. Miss Brown's pupils want to put into written form the melodies they compose, autoharp accompaniments, and embellishments designed for other rhythm and tonal instruments. Their interest and immediate need are the best motivation for learning such subject matter as the:

1. Identity of each pitch and its letter names on the staff
2. Tonal organization (scale) to which each melody belongs
3. Function of flats and sharps and the purpose of key signatures
4. Relative duration of the tones and the time values in notation
5. Structure of chords or tone clusters or both

Information acquired in the solution of a problem is quickly processed by the intellect without misconceptions or false generalizations. Such information can then be used in the solution of other similar problems.

During the exploration the teacher uses correct terminology, such as "recurring pulse," "metric signature," and "tonal center" or "home tone." Building children's musical vocabularies in this way

gives meaning to verbal abstractions because learning is based on firsthand, direct, and purposeful experiences.

The general categories of facts about music with which gifted children are likely to be concerned are the following:

1. Letter names of notes on the various lines and spaces of the staff
2. Mathematical relationship in time that exists among sounds and silences, represented respectively by note and rest values
3. Time-value names of notes and rests
4. Metric signatures and their meaning
5. Meaning of other staff notations, visual symbols, and signs, such as sharps, flats, naturals, bars, double bars, repeat signs, endings, ties, slurs, fermatas, d.c. al fine, and d.s. al fine
6. Patterns of scales: diatonic (major and minor); pentatonic; modal, whole tone; and chromatic
7. Key signatures
8. Order of the sharps and flats in key signatures (cycle of fifths)
9. Relationship of the tonal center to the key signature
10. Syllable or number names of notes as related to the tonal center (key note)
11. Name and symbol for the chord built on each degree of the scale
12. Intervals found in primary and secondary chords
13. Meanings of the visual symbols with respect to dynamics
14. Meanings of Italian and English tempo markings
15. Names, families, and registers of each orchestral instrument
16. Principles of tone production and of tuning various instruments
17. Methods of playing classroom, keyboard, folk, and orchestral instruments
18. Names of the principal types of voices
19. Names and structures of simple forms of music
20. Names and lives of composers and stories about their music
21. Nature of the seven elements of music and their interrelationships
22. Laws of composition as they arise from the art and science of music

Formation of Concepts

Concepts, the basic building blocks of subject-matter content, have long constituted a topic of discussion among scholars. According to the *Encyclopedia of Philosophy*, a *concept* is an idea that

exists in the mind—a mental summing up of knowledge based on all of the personal experiences related to a particular matter.[2]

Asahel D. Woodruff, Dean of the College of Education at the University of Utah, explains this intellectual phenomenon in simple terms:

> A concept is a relatively complete and meaningful idea in the mind of a person. It is an understanding of something. It is his own subjective product of his way of making meaning of things he has seen or otherwise perceived in his experience. At its most concrete level it is likely to a mental image.... At its most abstract and complex level, it is a synthesis of a number of conclusions he has drawn about his experience with a particular thing.[3]

The importance of concept building in young children and the experiences that encourage it are well described in *The Magic of Music:*

> Music concepts are musical meanings developed in the mind of the child as a result of his experience with the sound of music.... Tonal concepts are mental images of tones that remain in the mind ... when children hear, sing, or play a song, a phrase, or tonal pattern; when they differentiate between 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.[4]

These prerequisite tasks serve the child as sure stepping stones to valid concepts about these various elements that eventually lead to understandings of the integrity of music as an art form.

Use of Prepared Conceptual Statements

Because of the nature of the creative learning process, the concepts or generalizations formed by children will be unlike. Nevertheless, prepared conceptual statements can be of great value in the music education program when used by the teacher as guides to the inductive approach to learning content. If the teacher verbalizes the statements, especially after the child has appropriate elemental sensory experience and has had a chance to discover relationships and meanings, an important aspect of initiative and insight can be gained. Therefore, the reason for preparing these conceptual statements for curriculum purposes is to provide the teacher with

[2] *Encyclopedia of Philosophy.* Edited by Paul Edwards. New York: Free Press, 1967, pp. 177–80.

[3] Asahel D. Woodruff, *First Steps in Building a New Program.* Salt Lake City: University of Utah, 1967, p. 26. Used with permission.

[4] Lorrain E. Watters and others, *The Magic of Music Kindergarten.* Boston: Ginn & Company, 1965, p. vi. Used with permission of the publisher.

landmarks for planning perceptual experiences from which the children may derive their own concepts.

The conceptual statements about music presented in Chapter 7 clearly define and describe the properties, processes, and principles that characterize each of the elements of music. They serve as guides to planning the content of learning experiences and evaluating the children's musical growth.

A comprehensive list of conceptual statements about each of the seven elements of music is presented in Chapter 7 of this publication. Certain comments on these statements are important:

1. The logical sequential order in which the conceptual statements are listed under each element does not necessarily infer that they should be developed in that order. Gifted children may "leap" to related concepts at any time.
2. The complete list of interrelated concepts is designed for use by the music teacher in planning perceptual experiences from which generalizations may be drawn by the child. In this approach the inductive or discovery process becomes a means of learning on which gifted pupils can rely on throughout their lives to increase their understanding of music.
3. The content of the scope and sequence material in Chapter 7 is based on these conceptual statements.

Formation of General Conclusions

Generalizations are the general conclusions formed by means of the inductive mental process of synthesizing firsthand sensory experiences, factual information, and concrete conceptual ideas. Thus, the more intelligent the child, the more likely is the child to classify and systematize the information received. When opportunities permit, gifted children extend these operations by reorganizing information and ideas through the higher processes of transformation and drawing of implications. (See the teaching suggestions included in Chapter 3.) These processes in turn lead to broader exploration and insight into music and other subjects. Most important of all, however, this generalized learning is reflected in behavioral attitudes and values, which are prerequisites to both critical and creative thinking.

Principles Underlying an Art Form

The principles underlying any art form usually remain undiscovered by the ordinary person. Yet they are the essence of design and form, the ultimate answers to inquiry into content, and the logical basis from which spring beauty and meaning in that medium.

Therefore, it is important that gifted children who have the capacity for understanding these subtle and powerful forces have the opportunity to do so in their study of music.

According to Piaget, intelligent behavior in the elementary school child is limited to overt action, and thought at this stage is still linked with perceptual factors.[5] Young children are not concerned with causality but are busy observing the phenomena in their environment. However, during the process of developmental growth, the brighter the children, the more rapidly will their need to understand increase; they will want to comprehend the laws that they see operating all around them. When the school serves as a catalyst and guide to individual exploration in music, it is nurturing the gifted child's potential initiative, insight, and ability to deal with abstractions. Gifted children thrive on the inductive approach and, being resourceful by nature, will draw from their own personal experience as their capacity for more formal and creative thinking begins to emerge. Their higher intellectual powers will then enable them to see relationships, implications, and principles as well as to think inductively and deductively.

Understanding comes with integration of knowledge that is based on firsthand kinesthetic, auditory, and visual experiences. The process of understanding, involving the cognitive, affective, and psychomotor domains, establishes a need to put into action that which has been perceived and generalized. The attitudes, values, and skills that have resulted from an increasing involvement with music then become measurable evidence by which behavioral growth and the development of potential may be judged.

[5] Jean Piaget, *Science in Education and the Psychology of the Child* Translated from the French by Derek Colton. New York: Orion Press, 1970, p.

Chapter 7

Scope and Sequence in Music Education Programs for Gifted Children

In Chapter 7 are contained (1) conceptual statements about the seven elements of music as formulated by the Music Educators National Conference, and (2) an enriched version of "A Scope and Sequence Chart of Conceptual Learnings Related to the Elements of Music." The original large foldout chart was prepared by music educators in the Los Angeles Unified School District. For this publication the material in the chart has been adapted and expanded into a set of charts designed to meet the needs and capabilities of gifted children.

The purpose of the scope and sequence charts (pages 69 through 80) is to promote sequential, conceptual growth and the development of musical skills. The unique contribution of the material is the comprehensive coverage and articulation of content for the study of music in the elementary school. So that any teacher may use the original and the adapted charts together in planning for instruction in a heterogeneous class, the content is organized by level rather than by grade. However, the adapted charts differ from the original in the following ways:

1. Notation is introduced earlier along with additional keys, chords, and terminology that gifted children need and are capable of using.
2. Increasingly greater demands are made on the higher intellectual processes at every level described in the charts.
3. Intense exploration is recommended at the upper levels of content.

So that the misconceptions that usually occur in the reading of abridged material can be prevented, a guide to the interpretation and a list of suggestions for the effective use of the scope and sequence charts is presented.

Interpretation of Scope and Sequence Charts

The scope and sequence charts of program content in music that appear in this section are not intended to form a rigid outline of

procedure for a grade-by-grade coverage of factual information. Rather, they are meant to serve as practical materials to assist the teacher in long-term and single-lesson planning for sequential articulation in the exploration of music recommended for programs for gifted children.

The percepts, concepts, and implied skills listed for each level are those that gifted children in elementary school can be expected to learn through well-planned perceptual experiences with selected vocal and instrumental materials.

At each sequential level a general teaching-learning objective is suggested for the teaching of that content—an objective that involves the cognitive, affective, or psychomotor domains.[1] An attempt is made not to limit pupil exploration but to give direction to participation activities leading to the conceptual learnings appropriate to that level. For example, level I places the focus of learning on aural awareness and response, and level II is concerned with the development of kinesthetic feeling and aural recognition in the study of rhythm and aural and visual recognition and differentiation in the study of melody. As one objective after another is realized by the pupil, the knowledge and skills acquired reinforce the natural psychological order of learning processes in the pupil's developmental growth.

The child's interest in and need for the kind of experiences that guide learning toward attainment of behavioral objectives and academic achievement are expected to increase as new levels of concepts are formed. Thus, although basic aural awareness and response are introduced at level I, they should continue to operate as other objectives are introduced on the next levels, in keeping with the pupil's increasingly sophisticated attitudes. At the advanced levels of rhythm study, for example, aural awareness and response are still needed for meaningful participation in creative rhythms, Orff-Schulwerk compositions, original choreography, and the like. Learning, therefore, becomes a spiraling process.

The following suggestions may be used as guidelines to effective use of the scope and sequence materials included in this chapter:

1. Assess continually children's interest, readiness, and understanding as guides for pupil and teacher planning.
2. Allow children to progress through the levels of each element of music at the rate at which they learn best, maintaining a thread of continuity in the study of each of the elements.

[1] *Music Framework for California Public Schools Kindergarten Through Grade Twelve.* Sacramento California State Department of Education, 1971, pp. 9–31.

3. Guide the understanding of the interrelationships that exist among the various elements of music by stimulating inquiry and purposeful exploration.
4. Help children discover order and beauty through guided conceptual learning and teach them to apply related skills to problem solving, interpretation, and creative expression in music.
5. Develop the following learning processes and skills, which aid exploration, enjoyment, and conceptualization as children progress through the various levels of sequential learnings:

Imitating	Differentiating	Generalizing
Inquiring	Discriminating	Organizing
Discovering	Memorizing	Applying
Recognizing	Recalling	Interpreting
Identifying	Analyzing	Creating
Verbalizing	Evaluating	Producing

6. Involve talented and bright youngsters in a wide variety of learning experiences and thus exploit the opportunities for growth in the psychomotor, affective, and cognitive domains that can be provided by appropriate vocal and instrumental literature. This is best accomplished through (a) listening purposefully, (b) responding kinesthetically and verbally; (c) singing; (d) playing many kinds of classroom, folk, keyboard, and orchestral instruments; and (e) improvising and composing as forms of creative expression and communication.
7. Continue initial efforts for the purpose of reinforcement (intrinsic reward), integration of content; and the development of related skills. This kind of follow-up must be a cooperative endeavor that combines the creative vision of the classroom teacher and the talents of the special music teacher.

Scope and Sequence Charts

A discovery approach to the study of music is dynamic in that it offers many opportunities for children to become involved in cognitive, affective, and psychomotor learning at their own level of readiness. Direct, purposeful experiences that lead to valid concepts about music help gifted pupils sense the relationship between their emotional responses to music and their intellectual discoveries about its nature, structure, and meaning.

It is this kind of education and integration of heart and mind that helps children develop healthy attitudes and a sense of values upon which to build constructive lives. Thus, a music education program

based on sound behavioral objectives and purposeful experiences serves as a powerful force in the development of the child's intellectual and emotional potential. The scope and sequence charts, adapted specifically for gifted elementary school children, function together as a master plan for enriched music programs.

Rhythm: A Constituent Element of Music

Considered either as an independent medium of expression or as an integral part of music, rhythm is created by a recurring pulse in sound or movement. Whether regulating the time duration of tones and rests in melody or measuring out the percussion of a drum cadence, rhythmic groupings of longer and shorter sounds and silences produce an endless variety of patterns.

The creative teacher provides opportunities for children to dramatize the patterns of sound and movement that they have observed in animals, people, plants, and machinery. This direct sensory contact with reality serves as material and background for improvisation and exploration in the study of rhythm as one of the elements of music.

A list of concepts about rhythm is found in *The Study of Music in the Elementary School A Conceptual Approach*

1. Music always involves rhythm.
2. Music contains an endless variety of rhythm patterns, consisting of groupings of longer or shorter sounds or silences.
3. Rhythm usually has a recurring pulse or beat within it.
4. Meter provides an organization of time values within bar lines.
   4.1 Meter offers a means of measuring mathematically both pulse and rhythm patterns.
   4.2 Within a given metrical scheme, numerous rhythmic combinations are possible.
   4.3 Changes of meter may occur within a composition.
5. Polyrhythms are created when contrasting rhythmic groupings occur simultaneously.[2]

Melody: A Constituent Element of Music

Melody may be said to be any linear succession of single tones (various repeated pitches) existing within some scale system and usually related to a tone center or key note. Melodies may move scalewise, chordwise, or otherwise. This contour, plus the rhythmic pattern used, determines melodic characteristic. Yet no analysis can describe the expressive attribution of a melody or its power to arouse

[2] *The Study of Music in the Elementary School A Conceptual Approach* Edited by Charles L. Gray Washington, D.C. Music Educators National Conference, 1967. p. 11. All excerpts contained in this publication are used with permission of the publisher.

emotional response. As is true of the elements of any art, the whole is more than the sum of its parts.

A list of concepts about melody is found in *The Study of Music in the Elementary School. A Conceptual Approach.*

1. Melody is a linear arrangement of tones.

1.1 Melody is made up of a series of tones moving in a single (horizontal) line.

1.2 Tones in a melody may repeat or change.

1.3 When tones in a melody change, they may go up or down in a regular succession of half-steps, steps, or by leaps.

1.4 When a phrase or melodic pattern is repeated at a pitch higher or lower than that of its first appearance, it is identified as a melodic sequence.

2. Musical notation is a set of visual symbols that show the relationships that can exist among tones.

3. The movement of a melody is not only linear but rhythmic.

3.1 The rhythm of a melody is determined by the relatively longer and shorter time values of its tones

3.2 The character of a melody is changed when its rhythm is changed.

4. The structure of some melodies is harmonic.

5. Two or more lines of melody may move together simultaneously, thereby creating a polyphonic (contrapuntal) texture.

6. When tones are arranged in a particular scalewise fashion, distinctive melody and harmonic idioms may result.

7. When a melody includes all of the 12 tones of a chromatic scale, not in consecutive order and before any of the tones is repeated, the melody is unrelated to any tonal center.[3]

Harmony A Constituent Element of Music

Harmony refers to the vertical structure of music and involves the simultaneous sounding of three or more tones. It is made up of various harmonic and dissonant combinations that supply all of the color and much of the mode in a composition. Although rhythm has an interesting effect on this synthesis, it is the tones of the melody that usually determine the chords and harmonic passages. To this extent melody and harmony are said to be inseparable.

A list of concepts about harmony is found in *The Study of Music in the Elementary School A Conceptual Approach.*

1. Harmony is a vertical organization of three or more tones.
2. Harmony may be an accompaniment to melody
3. Harmony and melody are closely related.

3.1 When tones of a chord are heard in succession, they take on melodic structure.

[3] *The Study of Music*, p. 51

3.2 When a succession of chordal tones appears in a melody, that chord is a fitting accompaniment.

3.3 When the structure of a melody changes, the harmonic structure changes accordingly.

3.4 A given melody may be harmonized in several ways.

4. Melodies having the same harmonic structure may be combined.

4.1 When the nature of a melody is such that it can be performed in two or more parts starting at different points, it is a canon or round.

4.2 When several melodies of individual design are performed simultaneously, polyphonic or contrapuntal music results.

5. Chords are constructed and used according to plan.

6. Composers experiment with combinations of tones, producing different musical effects.

7. The harmonic nature of music is influenced by the ethnic group from which the music originates.[4]

Form: A Constituent Element of Music

Form refers to the structural design in and of music and the relationship and organization of its constituent parts. Each melodic phrase, rhythmic unit, and succession of chords in a song has its own internal structure that must be understood before the piece of music can be fully understood. The ability to hear, identify, and understand these relationships is the heart of music education and should be one of the prime behavioral objectives of music programs for the gifted.

In larger compositions, particularly instrumental compositions, it is the relationship of the various sections that determines the form of the music. Children who have good auditory memory learn to discriminate between identical, differing, and similar sections (ABA or ABA'B'), just as they learn to identify like, unlike, and similar phrases in songs (aba or aba'b'). They learn also to recognize compositions of similar internal structure, such as the rondo, the minuet, the art song, and the sonata.

A list of concepts about form is found in *The Study of Music in the Elementary School: A Conceptual Approach*:

CONCEPTS ABOUT FORM IN MUSIC

1. The organization of the constituent elements in a musical composition creates its own design or form.

1.1 The relationship of the parts to the whole is more evident among phrases than within phrases.

1.2 When one or more of the elements of music are repeated identically while at the same time one or more are altered, both unity and contrast are created within the composition.

[4] *The Study of Music*, p. 67.

1.3 When sets of melodic and/or rhythmic groupings are repeated within one or more phrases, they become identifiable patterns that give unity to a composition.

1.4 When a phrase or melodic pattern is repeated at a pitch higher or lower than that of its first appearance, it is identified as a melodic sequence.

CONCEPTS ABOUT FORMS OF MUSIC

1 Each musical composition has a unique structure of its own.

1.1 When a composition contains two basic ideas and the composition ends with the second idea, its form is identified as binary.

1.2 When a composition contains two basic ideas ending with a repetition of the first idea, its form is identified as ternary.

1.3 When a composition contains several different parts and when the first part repeats alternately with other parts, the form may be identified as rondo.

1.4 When a composition presents a given melody (theme) followed by repetitions of it with alterations, whether in the melody itself or in its accompaniment, the form may be identified as theme with variations.

1.5 Melodies having the same harmonic structure may be combined.

a. When melodies are heard or performed simultaneously, polyphonic or contrapuntal music results.

b. When a melodical melody is presented by several voices or instruments entering at different points in time, a canon is created.

c. When one voice or instrument states a theme, then continues with another melody while a second voice or instrument restates the first theme a fifth higher or a fourth lower, and when this procedure continues through two or more entrances of the original theme (subject), a fugue may be created.

1.6 When the first section of an extended composition in ternary form includes two themes having certain key relationships to each other, and when the second section consists of a development of the themes from the first section, and when the third section repeats the first with certain relationships of key, a sonata allegro form results.

1.7 When a composition contains various movements or parts, each of which may have an identifiable form, a compound form is created.

2. Other arts contain similar principles of design and structure.[5]

Tempo. An Expressive Element of Music

Tempo, the Italian word for time, is one of the expressive elements of music and refers to the rate of speed at which any composition is to be performed. Like melody and rhythm, tempo affects the harmony a composer may write. A very slow movement of a composition—one marked molto lento, for example—invites many chord changes. In a presto passage, however, there is not as much time for the listener to respond to changing chords: conse-

[5] *The Study of Music,* pp. 85, 99.

quently, the harmonic texture is not usually so rich. The designated tempo of a piece may be varied slightly without altering the nature of the music, but if the tempo of a selection is much too fast or slow, the whole character of the music is affected, and its message may even be lost.

A list of concepts about tempo is found in *The Study of Music in the Elementary School A Conceptual Approach*

1. Tempo is relative rather than absolute.
2. The choice of an appropriate tempo is a critical factor in the realization of the expressive intent of a musical composition.
3. Within a composition, the tempo may change for a variety of expressive purposes.[6]

Dynamics. An Expressive Element of Music

Dynamics, another of the expressive elements of music, refers to comparative loudness and softness. The degree of force or intensity with which a piece of music should be performed depends on the text or subject of the music and on the mood the composer wishes to communicate. The appropriate dynamic level in singing a song or playing instrumental music is as critical as tempo and tone color.

Listening for changes in dynamic level in live or recorded music is an important activity for children. It not only helps them discover the meaning of the song or piece; it also developes auditory memory and discrimination, both of which are essential to academic achievement. Kinesthetic response (for example, stamping, walking, or varying the choreographic pattern) is one effective way to study dynamics, a task with a specific purpose and immediate reward.

A list of concepts about dynamics is found in *The Study of Music in the Elementary School A Conceptual Approach*

1. Every musical sound possesses some degree of loudness and softness (dynamics).
2. Dynamic contrasts provide a source of variety and expressive meaning a composition.
3. Subtle relationships exist between changes of dynamics and changes of tempo and/or melodic direction.[7]

Tone Color. An Expressive Element of Music

Tone is the material from which music is made. The composer needs a great variety of this material to portray the wide range of human emotions and ideas and create the many moods that reflect

[6] *The Study of Music*, p 113

The Study of Music, p. 123

man's complex nature. If pitch, duration, and volume were the only variables of tone, music would lack a property comparable to the spectrum of color in the world of visual arts. Therefore, the expressive element of music which pertains to the quality or timbre of the sound is called tone color.

According to the laws of physics, the concepts of which interest academically gifted children especially, the characteristic tone color of each kind of musical instrument and each type of human voice is determined by the prominence of harmonics (overtones) it produces. A vibrating string, column of air, or vocal chord, amplified by a resonating chamber, produces its own specific combination of higher tones that faintly accompany the fundamental tone. Thus, there is an infinite variety of color in music to be discovered and enjoyed as children explore classroom and folk instruments, the four families of orchestral instruments, and the various types of vocal sounds.

A list of concepts about tone color is found in *The Study of Music in the Elementary School A Conceptual Approach*

1. Characteristic qualities of sounds are determined by the types of voices or instruments which produce them.
2. When instruments are played in different ways, they produce different sounds
3. When individual instruments are combined, new effects of tone color are created.
3. When individual instruments are combined, new effects of tone color are created.
4. When formal structures call for repetition of themes, variety may be achieved by use of contrasting tone colors.[8]

[8] *The Study of Music*, p 135

Chart 6

Scope and Sequence of Subject Matter in the Study of Rhythm

Level I—Aural Awareness and Response

- Broad rhythmic flow with recurring pulse in percussion sounds and music
- Longer and shorter duration of sounds and silences, otherwise known as the rhythm of the melody (use of terms *longer than* and *shorter than*)

Level II—Kinesthetic Feeling and Aural Recognition

- Pulse as the recurring beat and accent as it creates stronger and weaker beats in music
- Longer and shorter duration of tones as in chanted words of songs

Level III—Aural and Visual Identification and Differentiation

- Longer and shorter time values of tones and of song lyrics and words of poetry
- Melodic rhythm patterns (even and uneven)
- Groupings of metric units in sets of twos, threes, and fours
  (Examples from familiar songs and children's own original rhythm patterns should be used as illustrations.)
- The notation symbols for various meter signatures, notes, and rests

Level IV—Discrimination; Awareness of Interrelationships

- Whole, half, quarter, and eighth note values
- Melodic rhythm, metric units, and the meter signature
- Groupings of metric units and the meter signature
- Lyrics of songs as related to the melodic rhythm and to the words of poetry
- Interrelationship (through rhythm) of music, poetry, dance, art, and nature

Level V—Identification; Understanding of Interrelationships

- Unifying factors of pulse and patterns of rhythm within and among phrases
- Note and rest values that subdivide some pulses
- Note and rest values that span more than one pulse
- Ties as duration extensions; fermatas as pulse suspensions
- Augmentation and diminution as durational variables
- Accented weak beats; rests on strong beats; syncopation (2-1, 3-1)
- Characteristic rhythms in folk songs and folk dances of various ethnic groups
- Polyrhythms in accompaniments to songs and dances and in recorded music

Level VI—Analysis and Interpretation of Musical Composition

- Rhythm combinations within metric schemes and complex rhythm notation
- Rhythmic relationships among measures in a phrase and in phrases in sections
- Expressive effects created by various melodic rhythms and metric systems
- The nature of grace notes; that is, notes whose durational values are not measured

Chart 6 (Continued)

- Characteristics of measured and metric rhythm (Gregorian, classical, modern)
- Characteristic percussion patterns and melodic rhythms of aboriginal peoples
- Rhythms common to the music of various ethnic groups and regions
- Relationship of the various meters of poetry to those of music
- Principle of rhythm as realized in all kinesthetic, auditory, and visual art

Level VII–Evaluation and Utilization of Concepts and Principles

- Advantages of the two to one mathematical relationship among durational values
- Value of the relationship of underlying pulse to the endless variety of rhythms
- Effect of changes in meter, syncopation, and other variable factors on mood, form, and style
- Variations created by changes in meter and rhythm within a composition
- Characteristic metric grouping and patterns used in various dance forms
- Rhythm patterns found in poetry of various metric schemes
- Mathematical relationship and effect of groupings of three against four
- Appropriate use of meter and melodic rhythms in sacred music
- Effectiveness of polyrhythms in primitive and contemporary music
- Levels and kinds of emotions aroused by various types of "beat" or rhythm
- Inquiry and challenge of traditional concepts about rhythm in music

Level VIII–Extended Exploration, Discovery, and Application

- Metric system used in scoring recitatives in opera and oratorios
- Suspended pulse beats in recitatives, effectiveness of the "grand pause"
- Rhythm patterns found in themes and variations of various types of music
- Appropriate rhythm patterns for various types of song accompaniments
- Polyrhythms found in various forms of music (sacred and improvised)
- Technique of scoring two different meters for simultaneous playing
- Metric schemes as disciplines for creating percussion and melodic rhythm
- Use of augmentation and diminution in writing variations on themes
- Ways of communicating fun and humor through the element of rhythm
- Patterns and schemes that arouse emotions, feelings, and responses
- Techniques for setting poetry (of various types of meter) to original music
- Aerial patterns used by orchestra conductors for the various meters
- Significance of rhythm to all forms of life and all art forms

Chart 7

Scope and Sequence of Subject Matter in the Study of Melody

Level I–Aural Awareness and Response

- Phrase span, higher and lower pitches; tonal center of a melody
- Ascending and descending melodic direction (use of terms *higher than* and *lower than*)

Chart 7 (Continued)

Level II–Aural and Visual Recognition and Differentiation

- Various pitches, melodic contour (scale and chord), and repeated tones
- Relationship of the melody to its tonal center (one or *do*)
- Blank and staff notation using letter names of notes on charts and in songbooks

Level III–Recognition, Identification, and Discrimination

- Degree order of pitches, ascending and descending, higher or lower
- Scale and chord patterns built on the tonic chord in simple major keys (as found to occur in songs, on listening records, and in original melodies)
- Number and syllable names of notes in songs; notes of the pentatonic scale

Level IV–Identification; Awareness and Ability to Perceive Relationships

- Chord patterns built on the tonic (I) and the dominant seventh (V_7)
- Chord inversions related to chord root position in various keys
- Melody as related to tonal center and to key signatures in major keys
- Sequence as related to original phrase in scale or chord patterns
- Major scales and keys as related to minor (harmonic) scales and keys
- Descants and their relationship to the melody
- Melodic rhythm in relation to the text of familiar songs and to poetry set to music

Level V– Identification, Understanding of Relationships

- Key center as related to the signature in major and minor keys
- Chord patterns on the tonic, dominant seventh, and subdominant (IV)
- Inversions in many major and minor keys (harmonic, natural, and melodic)
- Combinations of chord and scale patterns and sequences
- Modification of patterns (neighboring, passing, and repeated tones)
- Augmentation and diminution as durational variables of melody
- Polyphony in descants, rounds, canons, and contemporary music
- Characters in opera and program music as revealed by their melodic roles

Level VI–Analysis and Interpretation of Musical Composition

- Basic patterns of pitch (without rhythm) as possible tonal combinations
- Melodic rhythm patterns (with definite rhythm) as possible tonal combinations
- Chord patterns, including inversions (harmonic, natural, and melodic minor)
- Resolutions of the dominant seventh and subdominant chord patterns
- Combinations, modifications, and sequences in melodic patterns
- Common melodic intervals; polyphony (descants, rounds, canons)
- Tonality (keys) and melodic structure of songs and other compositions
- Relationship of melody to form, meter, tempo, dynamics and tone color
- Idioms created by various arrangements of tones in a melody
- Story development in opera and program music achieved by melodic content

Chart 7 (Continued)

Level VII–Evaluation and Utilization of Concepts and Principles

- Modes, such as diatonic (major and minor), Aeolian, Dorian, Phrygian, and Lydian
- Types of scales–such as pentatonic, four tone, and whole tone–and their uses
- Tonal row of the 12-tone (chromatic) scale as the basis of atonal music
- Power of tone and melody to arouse various emotions and feelings
- Melodic characteristics determined by contour, modification, and sequence
- Melodic characteristics determined by harmonic structure, idioms, and polyphony
- Effects of chord changes on melodic structure and mood
- Gregorian style (chant) as compared with the contemporary idiom
- Poetry that inspires melodic expression and original songs

Level VIII–Extended Exploration, Discovery, and Application

- Melodic characteristics of the music of various aboriginal and ethnic groups
- Melodic characteristics of the music of various periods and regions
- Effects created by various modes, styles, and forms of music
- Great melodies of the masters as inspiration and as guides in composition
- Melodic rhythm patterns used by various composers (as character motifs)
- Melodic rhythm patterns that arouse specific emotions and feelings
- Melodic rhythm patterns that suggest comic situations
- Tonal organization of the 12-tone row, whole-tone scale, and electronic music
- Divergent possibilities for writing variations on a melodic theme (melody in bass, repeated tones, mode, meter, imitation, and canon)
- Ornamentation, embellishment, parallel motion, bitonality, and free melody

Chart 8

Scope and Sequence of Subject Matter in the Study of Harmony

Level I–Aural Awareness and Response

- Tones [illegible] in succession to make triads and then played as multiple sounds
- Tonic [illegible]rds; chord changes, major and minor modes

Level II–Aural Recognition and Differentiation

- Chord changes in accompaniment to songs, major and minor modes
- Relationship of one (do) to the tonic chord; the tonic chord at cadences

Level III–Aural and Visual Identification and Discrimination

- Chord changes in simple major and minor keys, staff notation
- Root position of tonic (I) and dominant seventh (V_7); inversions of these chords
- Resolution of the dominant seventh chord to the tonic in various keys
- Change of key within a song; transposition of familiar songs

Chart 8 (Continued)

Level IV–Identification; Awareness of Relationships

- Tonic chord as built on the key center, dominant seventh as built on the fifth degree
- Staff notation of various key signatures and the tonic and dominant seventh chords
- Root position and inversions of the tonic and dominant chords
- Active quality of dominant seventh chords as compared with restful quality of tonic chords
- Tonic and dominant chords compared to melodic chord patterns
- Harmonic structure of descants and songs written in parallel thirds
- Appropriate chord patterns for accompaniments to familiar songs

Level V–Identification; Understanding of Relationships

- Tonic chords related to key centers in many major and minor keys
- Dominant seventh chords as related to tonic chords in many keys; chords on accents
- Cadences: the subdominant to the dominant chord and the subdominant to the dominant seventh to the tonic chord
- Root position and inversions of tonic, subdominant, and dominant chords as exemplified in staff notation
- Intervals of the third (major and minor), fourth, fifth, and octave
- Tones common to the tonic, subdominant, and dominant seventh chords; modulation
- Harmonic progressions implied by the characteristics of a melody
- Harmonic sequences; harmony as related to melody, rhythm, and form
- Counterpoint in terms of its similarities and contrasts to harmony

Level VI–Analysis and Interpretation of Musical Compositions

- Commonly used chord progressions suitable for accompaniments
- Melodies that go together because of their harmonic structure
- The structure of the primary chords in major and minor keys (root position and first and second inversions)
- Inverted intervals. thirds to sixths and fourths to fifths; augmented intervals
- Major keys and their relative and parallel minor keys
- Modulation as suggested by accidentals in the melodic contour of songs
- Likenesses and differences between harmony and counterpoint
- Secondary chords (supertonic, supertonic seventh, mediant, submediant, and subtonic) and their resolutions
- The harmonic nature of the canon and the fugue (counterpoint)
- Harmonic idioms found in the music of various ethnic groups being studied

Level VII–Evaluation and Utilization of Concepts and Principles

- Effective use of chord structure in songs and other compositions
- Relationships between chords and tonality in major and minor keys
- Value of inversions and modulation to other keys for musical expression
- Combination of canonic and fugal melodies for contrapuntal effects

Chart 8 (Continued)

- Harmonic effects created by various chord progressions and modulations
- Effect of the tonic seventh chord in certain works
- Chords built on augmented intervals; consonances and dissonances
- Organization of polytonality and atonality
- Effectiveness of harmony and contrapuntal texture in arousing certain emotions
- Divergent ways of harmonizing the same melody

Level VIII—Expanded Exploration, Discovery, and Application

- Major, minor, and diminished chords built on every degree of the scale
- Melodies created from various chord progressions
- Harmonic possibilities of melodies written in various modes (pentatonic, diatonic, Dorian, Phrygian, Lydian, whole, and 12-tone)
- Rules of harmony as guides to writing two- and three-part songs
- Harmonic effects created by masters of classical and contemporary music
- Bitonality, exemplified by piano chords in the key of C against a melody played on the black keys
- Cadences and countermelodies as inspiration for original choreography
- Cycle of fifths as derived from successive intervals of fifths
- Tone clusters superimposed on triads and the effective use of such clusters
- Harmonic structure of polyphonic (contrapuntal) music and its texture
- Various emotions aroused by certain uses of harmony and counterpoint
- Musical jokes achieved through various harmonic progressions and effects

Chart 9

Scope and Sequence of Subject Matter in the Study of Form

Level I—Aural Awareness and Response

- Phrase span, identical phrases in songs with the same or differing lyrics
- Repetition of identical sections in larger compositions
- Phrases and sections which are completely different in music

Level II—Aural and Visual Recognition and Differentiation

- Tonal or rhythm patterns within and among phrases
- Phrases and sections that are identical or different (for example, aa, AA; ab, AB)
- Staff notation of phrases, codas, and cadences on charts and in books

Level III—Recognition, Identification, and Discrimination

- Identical, similar, and contrasting rhythm and tonal patterns in notation
- Phrases that are identical, different, or similar
- Sections that are identical, different, or similar
- Phrase structure as design for dances and original song accompaniments
- Signs or words that indicate repetition of certain portions of the music (‖ ‖; da capo al fine, da segno al fine)

Chart 9 (Continued)

Level IV–Identification; Awareness of Interrelationships

- Phrase as a musical idea that serves as a unit of expression
- Specific nature of alterations in phrases and sections of music
- Elements of rhythm, melody, and harmony in the structure of a phrase
- Sequences and their relationship to original phrases and themes
- Characteristics of design in two- and three-part songs (binary, AABB, ternary, ABA) and in the rondo (ABACADA)
- Functions of introductions, interludes, codas, and cadences in music

Level V–Identification; Understanding of Interrelationships

- Basic patterns of tone organized in melodic rhythm as a form in music
- Patterns of tone or rhythm from songs that are suitable for introductions and other parts of musical compositions
- Repetition of phrases to create unity, alteration, and contrast
- Influence of the various elements of music on form
- Musical form (for example, binary, ternary, rondo, theme and variations) as a special type of organization in musical composition
- Stories in opera and program music revealed by themes and variations

Level VI–Analysis and Interpretation of Musical Compositions

- Sonata allegro form as discovered in listening and in reading thematic notation
- Forms frequently found in movements of symphonies, such as trio, interlude, ballet, minuet, free form, and finale
- Forms frequently found in selections from opera, such as overture, recitative, aria, ballet, and choral and ensemble numbers
- Complex structures among the elements of vocal and instrumental music
- Contributions of the constituent elements of music to form
- Contributions of the expressive elements of music to form
- Theme and variations as developed in music and used in choreography

Level VII–Evaluation and Utilization of Concepts and Principles

- Elements of music as interior design of form in and of compositions
- Relationships of melody, harmony, and rhythm within compositions
- Effects created in altered form when some elements are repeated identically
- Subtle and complex phrase and section structure in compositions
- Characteristic forms and styles of traditional and contemporary music
- Criteria for evaluating form in and of vocal and instrumental musical literature
- Repetition and contrast as cues to interpretation and ways of creating
- Various musical forms as guides to original composition
- Emotional and intellectual responses to the element of form in and of music

Level VIII–Extended Exploration, Discovery, and Application

- Interrelationships and interaction among musical elements
- Analysis and charting of specific compositions to discover composer's plan

Chart 9 (Continued)

- Compound forms of vocal and instrumental composition (for example, cantata, oratorio, mass, opera, sonata, suite, concerto, and symphony)
- History and development of form in and of music and its significance
- Composers who originated various forms of composition
- Rules of composition as guides to writing original songs and other music
- Divergent ways of varying musical themes in creative composition
- Use of identity, similarity, and contrast in suggesting certain moods

Chart 10

Scope and Sequence of Subject Matter in the Study of Tempo

Level I–Aural Awareness and Response

- Relatively fast tempos; relatively slow tempos, moderate tempos (use of the terms "faster than" and "slower than")

Level II–Aural Recognition and Differentiation

- Faster and slower tempos (use of the terms tempo, moderato, and the like)
- Various tempos as found in songs and larger compositions
- Changing tempos within a single musical work

Level III–Aural and Visual Identification and Discrimination

- Sudden and gradual changes in tempo (ritardandos and accelerandos)
- Appropriate tempos for songs and rhythm activities as discovered
- Various body movements as kinesthetic and visual symbols of tempo

Level IV–Identification and Understanding

- The obvious reasons for the tempos (indicated or chosen) of familiar songs
- Terminology describing tempos often found in larger musical works (for example, allegro, andante, and the like)
- The fermata as a pulse suspender for tones and rests

Level V–Identification, Understanding of Relationships

- Influence of the text on the tempo set for various songs
- Moods created in music by certain tempos (for example, lento, largo, adagio, moderato, allegretto, vivace, and presto)
- The descriptive implications of various tempos in larger compositions
- Tempos common to certain forms of music (for example, marches, lullabies, and hymns)
- Comparison of faster and slower tempos
- Relationship of tempo to meter and to the mood and meaning of musical composition

Level VI–Analysis and Interpretation of Musical Composition

- Tempo markings and rates of speed in musical compositions
- Metronomic markings frequently used for certain forms of music (for example, marche, M.M.=80; valse, M.M.=68, polka, M.M.=96, and gallop, M.M.=126)

Chart 10 (Continued)

- The use of the metronome in establishing and maintaining tempo
- The independence of tempo in relation to note value and metric grouping

Level VII–Evaluation and Utilization of Concepts and Principles

- Expressive implications of various tempos indicated by composers
- Emphasis on form achieved through change in tempo
- Relationship of tempo to change in metric groupings and patterns
- Relationship of tempo to frequency of chord changes in harmony
- Relationship of tempo to melodic contour and dynamics
- Tempos appropriate to the music of various dance forms
- Influence of the text of a song on the tempo of the music
- Effect of holds (fermatas) as pulse suspenders

Level VIII–Extended Exploration, Discovery, and Application

- Ritardandos as predictors of cadences
- Excitement and the feeling of climax created by acceleration
- Meaning of and moods created by descriptive musical terminology (andante tranquillo, allegro non troppo, poco moderato, molto vivace)
- Tempo changes in tone poems, ballets, music for films, and the like
- Value of changing tempo with each movement of a symphony or concerto
- Role of tempo in program, contemporary, and classical suites
- Tempos characteristic of music of various ethnic groups
- Use of certain tempos to express various moods and feelings

Chart 11

Scope and Sequence of Subject Matter in the Study of Dynamics

Level I–Aural Awareness and Response

- Comparison of common sounds
- Listening to recordings of music that contains a variety of loud and soft sounds
- Use of the terms *louder than* and *softer than*

Level II–Aural Recognition and Differentiation

- Degrees of difference in volume of various tonal sounds in the environment
- Use of the term *dynamics* with different degrees of volume in music
- Appropriate terminology (loud, louder, loudest, soft, softer, softest)

Level III–Aural and Visual Identification and Discrimination

- Various degrees of volume, sudden and gradual changes in dynamics
- Terminology and symbols (forte [f], piano [p], crescendo [cresc.], diminuendo [dim.])

Level IV–Identification Discrimination and Understanding

- Additional terminology and symbols (fortissimo [ff] and pianissimo [pp])
- Appropriate dynamics for songs and their embellishments

Chart 11 (Continued)

- Crescendo (volume increase) without accelerando (tempo increase)
- Diminuendo (volume decrease) without ritardando (tempo decrease)
- Appropriate interpretive changes in intensity within a song
- Relationship of dynamics to the emotional feelings to be portrayed

Level V- Identificaion; Understanding of Relationships

- Dynamic levels and changes which suit the text and mood of songs
- Influence of melodic contour on the dynamics of songs being studied
- Dynamic gradation for songs within the limitations of voices
- Volume differences between solo parts and accompaniments
- Effect of intensity and volume on moods of larger compositions
- Additional terminology and symbols (mezzoforte [mf], mezzo piano [mp])
- Relativeness of louder and softer dynamics

Level VI–Analysis and Interpretation of Musical Compositions

- Expressive power of dynamics to communicate various emotions
- Effect of volume contrasts in choral and orchestral compositions
- Influence of melodic contour on loudness and softness
- Implications of distance, lightness, moods, and the like
- Influence of the historic period of a piece on its interpretation with respect to dynamics

Level VII–Evaluation and Utilization of Concepts and Principles

- Criteria for judging artists' sensitivity to dynamics
- Effect of extreme softness and of sudden silence in music
- Relationship between dynamics and form
- Changes in dynamic levels at cadences
- Dynamic levels appropriate to music for certain occasions

Level VIII–Extended Exploration, Discovery, and Application

- Effect of volume increase or decrease on tone color
- Volume range of various families of instruments
- Methods used by conductors in controlling dynamic expression
- Dynamic structures characteristic of various periods of music
- History and development of dynamic changes and control
- Intensity as an expressive element in communicating feeling and motion
- Independence of dynamics as an expressive element of music

Chart 12

Scope and Sequence of Subject Matter in the Study of Tone Color

Level I–Aural Awareness and Response

- Differences among the speaking and singing voices of individual children
- Characteristic sounds of simple classroom percussion instruments
- Characteristic sounds of tonal instruments (classroom, orchestral)

Chart 12 (Continued)

Level II—Aural Recognition and Differentiation

- Variety of sounds that can be made without the use of instruments (for example, clapping, stamping, clucking, whispering, singing, and imitating animal sounds)
- Classification of percussion sounds produced by rhythm instruments (for example, booming, clicking, popping, rattling shakers, scraping and ringing bells)
- Appropriate classroom instruments for accompaniments and embellishments

Level III—Recognition, Identification, and Discrimination

- Tone quality of voices
- Characteristic sounds of women's and men's singing voices
- Classification sounds and pitches produced by tonal instruments (strings, woodwinds, and brass)
- The capacity of an instrument to produce several different sounds in accordance with the manner in which it is played (muted, pizzicato, and so forth)

Level IV—Recognition, Identification, and Discrimination

- Similarities and differences between men's and women's voices
- Similarities and differences between percussion and tonal instruments
- Similarities and differences among the instruments of each family
- Similarities and differences between human voices and various instruments
- Changes in tone quality produced by changes in dynamics and pitch

Level V—Recognition, Identification, and Discrimination

- Characteristic quality of each voice range (soprano, alto, tenor, and bass)
- Tone color effects in choral music achieved by combining individual voices
- Influence of legato and staccato on vocal tone quality
- Characteristic timbre and color of each family of orchestral instruments
- Characteristics of the various stringed, woodwind, brass, and percussion instruments
- Instrumental combinations in small ensembles, bands, and orchestras

Level VI—Discrimination, Analysis, and Interpretation

- The difference in tone quality produced by various voice types (for example, coloratura, dramatic, lyric, mezzo soprano, tenor, baritone, and bass)
- Kinds of music and characters to which each type of voice is suited
- Voices of class members that are especially suited to certain types of songs
- Choral effects achieved through the blending of individual voices
- Instruments best suited to song accompaniments and embellishments
- Ways in which certain instruments and voices can be used to express ideas or stories

Level VII—Discrimination, Evaluation, and Utilization

- Tone color effects created by combining various instruments
- Effects achieved by changing instruments in each repetition of a theme

Chart 12 (Continued)

- Appropriate use of the various ways to play an instrument (strings: arco or bow, legato, staccato, pizzicato or plucked, muted; woodwinds: various techniques of tonguing, legato, staccato; brass: various techniques of tonguing, muted; percussion: striking with different materials)
- The value of variety of tone color to musical expression

Level VIII–Extended Exploration, Discovery, and Application

- Varieties of tone color produced by a combination of voices and instruments
- Keys favored by singers because of the effect on their voices
- Effect of tempo, rhythm, and pitch on timbre and tone quality
- Relationship of one color to dynamics, form, and melody
- Importance of tone color in achieving the composer's intent
- Laws of physics involved in timbre
- Principles of tone production in various instruments
- Tonal effects possible with experimental instruments
- Theoretical interrelationship existing between nature and various art forms (for example, the rainbow in nature and the color spectrum in the visual arts; sounds in nature and the range of tone color in musical instruments)

Selected References

Benn, Oleta A. "Objectives and Responsibilities in Teacher Education," *Music Educators Journal*, Vol. 53 (May, 1964), 44.

Capurso, Alexander. "Music," in *Curriculum Planning for the Gifted.* Edited by Louis A. Fliegler. New York: Prentice-Hall, Inc., 1961, pp 303--42.

Curriculum Guide to Music. Evanston, Ill.: Evanston Public Schools, 1964.

Demo, George D., and John Curtis Gowan. *The Education and Guidance of the Ablest.* Springfield, Ill.: Charles C. Thomas, Publisher, 1964.

Encyclopedia of Philosophy. Edited by Paul Edwards. New York: Free Press, 1967.

Getzels, Jacob W., and Philip W. Jackson. *Creativity and Intelligence.* New York: John Wiley and Sons, Inc., 1962.

Guilford, J. P. *Intelligence, Creativity, and Their Educational Implications.* San Diego: Robert R Knapp, 1968.

Guilford, J. P. *The Nature of Human Intelligence.* McGraw-Hill Book Company, 1967.

Hewett, Frank M. *The Emotionally Disturbed Child in the Classroom.* Boston: Allyn & Bacon, Inc., 1968.

McLuhan, H. M., and Q. Fiore. *The Medium Is the Massage.* New York: Random House, Inc., 1967.

Meeker, Mary N. "Differential Syndromes of Giftedness and Curriculum Planning A Four-Year Follow-up," *Journal of Special Education*, Vol. 2 (1968), 185–96.

Meeker, Mary N. *The Structure of Intellect. Its Interpretation and Use.* Columbus, Ohio: Charles E Merrill Publishing Company, 1969.

Music Framework for California Public Schools. Kindergarten Through Grade Twelve. Sacramento: California State Department of Education, 1971.

New Knowledge in Human Values. Edited by Abraham S. Maslow. New York Harper & Row Publishers, Inc., 1959.

Orff-Schulwerk: Design for Creativity Edited by Martha Wampler. Bellflower, Calif.. Creative Practices Council, Inc., 1968.

Piaget, Jean. *Science in Education and the Psychology of the Child.* Translated from the French by Derek Colton. New York Orion Press, 1970

Plowman, Paul D. "Guidelines for Establishing and Evaluating Programs for Mentally Gifted Minors." Sacramento California State Department of Education, 1962.

Principles, Objectives, and Curricula for Programs in the Education of Mentally Gifted Minors Kindergarten Through Grade Twelve. Sacramento California State Department of Education, 1971.

The Purpose of American Education. Prepared by the Educational Policies Commission. Washington, D.C : National Education Association, 1938.

"A Scope and Sequence Chart of Conceptual Learnings Related to the Elements of Music." Los Angeles Los Angeles Unified School District, n.d.

Simpson, Donald J. "The Effect of Selected Musical Studies on Growth in General Creative Potential." Los Angeles: University of Southern California, 1959 (unpublished doctoral dissertation).

The Study of Music in the Elementary School. A Conceptual Approach. Edited by Charles L. Gray. Washington, D.C.. Music Educators National Conference, 1967.

Suzuki, Shinichi. "Shinichi Suzuki's 1967 Talent Education Tour," 1967.

The Teaching of Values. Los Angeles Los Angeles Unified School District, Division of Instructional Services, 1966.

Watters, Lorrain E., and others. *The Magic of Music. Kindergarten.* Boston: Ginn & Company, 1965.

Woodruff, Asahel "First Steps in Building a New Program." Salt Lake City: University of Utah, 1967.

69-155 (03-1658, 03-1667, 03-1670 03-1671, 03-1672, 03-1682)
77307, 77315, 77313, 77319, 77320, 77330-300 1 78 1M

Gifted Education Publications Available from the California State Department of Education

The following publications in the gifted education series are available from the State Department of Education, each at a price of 65 cents per copy, plus sales tax.

*Curriculum Guide for Teaching Gifted Children Literature in Grades One Through Three (1978)**

Curriculum Guide for Teaching Gifted Children Science in Grades One Through Three (1977)†

Curriculum Guide for Teaching Gifted Children Science in Grades Four Through Six (1977)†

Curriculum Guide for Teaching Gifted Children Social Sciences in Grades One Through Three (1977)†

Curriculum Guide for Teaching Gifted Children Social Sciences in Grades Four Through Six (1977)†

Special Programs for Gifted Pupils (1962)

Teaching Gifted Children Art in Grades Four Through Six (1973)

Teaching Gifted Students Art in Grades Seven Through Nine (1973)

Teaching Gifted Students Art in Grades Ten Through Twelve (1973)

Teaching Gifted Students Foreign Language in Grades Ten Through Twelve (1973)

*Teaching Gifted Students Literature in Grades Seven Through Nine (1978)**

*Teaching Gifted Students Literature and Language in Grades Nine Through Twelve (1978)**

Teaching Gifted Students Social Sciences in Grades Seven Through Nine (1977)††

Payment should accompany order. Purchase orders without checks are accepted from governmental agencies in California.

Orders should be addressed to Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802.

*Scheduled for publication early in 1978

†Revision of publication originally issued in 1970

††Revision of publication originally issued in 1972