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THE UNIVERSITY OF ALBERTA

A COMPARATIVE STUDY OF AFFECTIVE RESPONSES
TO MUSIC IN MILDLY RETARDED
AND NORMAL CHILDREN

by

YVETTE MARIE BROWN

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF ELEMENTARY EDUCATION

EDMONTON, ALBERTA

SPRING, 1986

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "A Comparative Study of Affective Responses to Music in Mildly Retarded and Normal Children," submitted by Yvette Marie Brown in partial fulfilment of the requirements for the degree of Master of Education.

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ABSTRACT

This study explores the place of music in the lives of three groups of children: eleven-year-old mildly retarded students, eleven-year-old grade 6 students, and eight-year-old grade 3 students. The eight-year-old students were approximately the same mental age as were the retarded students. Each group was comprised of ten students.

The primary purpose of the study was to examine affective responsiveness to music in the retarded children and then to compare it with that of their chronological age peers and their mental age peers. Secondary purposes were to study the effect of the presence of peer group members on students' musical responses and preferences, and to compare auditory discrimination skills among the three groups.

Since it is generally acknowledged that the ability to perceive similarities and differences in sounds is a basic prerequisite for musical appreciation, the students were first administered a test of musical auditory discrimination. They were then interviewed in individual sessions, in which they discussed their favorite music, their music listening habits, and musical activities in which they were participating at school or at home. They also listened and responded to seven musical selections. All these activities were later repeated in a group situation.

Data were gathered through auditory discrimination test scores, audio-tapes of individual and group interviews, response sheets completed by students, and anecdotal notes taken during interviews and classroom visits. It was found that the retarded students' expressed attitudes

toward music were very similar to those expressed by their chronological age peers. Both groups demonstrated a very strong preference for rock music, and little knowledge or interest in other types of music. The mental age peers showed broader, less well-defined preferences.

However, in listening to the musical selections, the retarded students' responses were closer to those of their mental age peers. Both of these groups showed stronger feelings toward the music than did the grade 6 students, who frequently expressed indifference. No differing patterns of images for the music emerged from the different groups.

From the findings, it was concluded that mildly retarded children's affective responsiveness to music is similar to that of normal children, and that their musical auditory perception is similar to that of normal children. As to peer group influence, retarded children in this study showed more evidence of being influenced by the peer group than did the other two groups. However, more research is needed in this area before concrete conclusions can be drawn.

In general, the study indicates that mildly retarded children possess much the same auditory skills as normal children, but that they may develop them at a slower rate. They should be exposed to a wide variety of music and encouraged to respond freely, both emotionally and physically. The music curriculum for mildly retarded children should emphasize aesthetic awareness and affective responsiveness..

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TABLE OF CONTENTS

Chapter	Page
I. NATURE OF THE STUDY	1
Introduction to and Need for the Study	1
Purposes of the Study and Research Questions	5
Definitions of Terms	6
The Research Methodology	8
Limitations of the Study	9
Organization of the Report	10
II. REVIEW OF THE LITERATURE	12
Musicality and Affective Response	13
Musical Ability and Intelligence	17
Studies of Musical Attitudes and Preferences	18
Musical Attitudes	19
Musical Preferences	20
Musical Attitudes and Preferences of Children	21
Music and the Retarded	24
Music Education for the Retarded	25
Music Therapy	33
III. DESIGN OF THE STUDY	36
The Pilot Study	36
The Research Setting	39
Description of Subjects for the Study	41

Chapter	Page
Design and Administration of the Auditory	
Discrimination Test	42
Individual Interviews and Listening Sessions	43
Group Interviews	46
The Musical Selections	46
Treatment of the Data	48
Interpretation of the Data	50
IV. FINDINGS OF THE STUDY	53
Tests of Auditory Discrimination	53
Individual Interviews and Listening Sessions	60
Individual Interviews	60
1. EMH Group	60
2. Grade 6	62
3. Grade 3	64
Summary	65
Individual Listening Sessions	66
1. Describing the Feeling of the Music	68
2. Describing the Images Evoked by the Music	74
3. Rating the Selections	82
Group Interviews and Listening Sessions	89
Group Interviews	89
1. EMH Group	89
2. Grade 6	91
3. Grade 3	93
Summary	94

Chapter	Page
Group Listening Sessions	95
1. EMH Group	98
2. Grade 6	102
3. Grade 3	105
Summary	107
 V. SUMMARY, CONCLUSIONS, AND IMPLICATIONS	 111
Summary	111
Findings	112
Research Question 1	112
Research Question 2	113
Research Question 3	114
Implications for Music Education	114
Recommendations for Further Research	116
 REFERENCES	 119
 APPENDICES	 130
APPENDIX A: List of Questions Used in Pilot Study	130
APPENDIX B: List of Music Used in Pilot Study	132
APPENDIX C: Letter to Parents	134
APPENDIX D: Music Items for Auditory Discrimination Test	136
APPENDIX E: Sample Student Answer Sheet for Auditory Discrimination Test	139
APPENDIX F: Answer Key to Auditory Discrimination Test	142

Chapter

Page

APPENDIX G: Sample of Student Response Form Used in Individual Interviews	145
APPENDIX H: Summaries of Students' Reactions to the Musical Selections	148.

LIST OF TABLES

Table	Page
1. Auditory Discrimination Test Scores	55
2. Auditory Discrimination Test: Mean Raw Scores	56
3. Auditory Discrimination Test: Number of Students Scoring Correctly on Each Pair	57
4. Responses to Describing the Feeling of the Music	69
5. "What Feeling Does the Music Have?" (Individual)	70
6. Distribution of Like, Indifferent and Dislike Responses: Individual Interviews	83
7. Ratings of Selections by Each Group: Individual Interviews	86
8. Distribution of Like, Indifferent and Dislike Responses: Group Interviews	96
9. Ratings of Selections by Each Group: Group Interviews	97
10. "What Feeling Does the Music Have?": EMH Students' Responses in Individual and Group Sessions	99
11. Comparison of Distribution of Responses of EMH Students in Individual and Group Sessions	101
12. "What Feeling Does the Music Have?": Grade 6 Students' Responses in Individual and Group Sessions	104
13. Comparison of Distribution of Responses of Grade 6 Students in Individual and Group Sessions	106
14. "What Feeling Does the Music Have?": Grade 3 Students' Responses to Individual and Group Sessions	108
15. Comparison of Distribution of Responses of Grade 3 Students in Individual and Group Sessions	109

LIST OF FIGURES

Figure	Page
1. Distribution of Like, Indifferent and Dislike Responses: Individual Interviews	85

CHAPTER I

NATURE OF THE STUDY

Introduction to and Need for the Study

Music for every child: every child for music.

- Motto of the Music Educators'
National Conference

This study explores and compares the place of music in the lives of three groups of students from special and regular classes in Edmonton Catholic Schools.

Mildly retarded students, "the educable mentally handicapped," are usually accommodated in special classes in public and separate schools. The primary educational goals for these students are related to teaching life skills, so that they may become independent adults. Learning to read and to do basic arithmetic, to handle money and to interact with others in socially acceptable ways: these are the main objectives of an EMH program.

Music education does not figure prominently in the EMH curriculum. A survey conducted by the researcher of twenty-five classes in an Edmonton school system revealed seventeen classes which had no scheduled music periods, and eight classes in which the children received music instruction once or twice weekly. According to Appell, only 12% of all handicapped children enrolled in public education in America in 1978 were receiving any fine arts instruction (Smith and Perks, 1978, p. 4).

When music is taught to special students, the objectives tend to be functional rather than aesthetic, with the music and activities being selected for their usefulness in basic skill development, not musical or affective development. Grant, who wrote a music curriculum for mildly retarded students, states:

By necessity, it [the curriculum] will include developing those musical behaviors essential for participation in music activities, while having as its main purpose those non-musical behaviors essential to functioning within a society. (Grant, 1977, p. 32)

This utilitarian philosophy of music education is reflected in the statement of objectives of another curriculum guide:

Through music study special children will learn to become contributing members of society. They will learn to follow directions, to work within a group, increase self-discipline . . . (Peotter, p. 1)

Yet research indicates that aesthetic education is necessary for personal growth. Broudy states:

Aesthetic experience is basic because it is a primary form of experience on which all cognition, judgement and action depend. It is the fundamental and distinctive power of image-making by the imagination. It furnishes the raw material for concepts: ideas for creating a world of possibility. (Broudy, 1977, p. 636)

Bennett Reimer writes:

Music educators have a dual obligation to society. The first is to develop the talents of those who are gifted musically. . . . The second is to develop the aesthetic sensitivity to music of all people regardless of their individual levels of musical talent, for their own benefit, and for the benefit of a society which needs an active cultural life, for the benefit of the art of music which depends on a continuing supply of sympathetic, sensitive consumers. (Reimer, 1970, p. 112)

Music education is important for all students, but perhaps even

more so for special children who, by the nature of the disability, are excluded from many avenues of social interaction and emotional fulfillment. They tend to become socially isolated as they grow older, having few close relationships other than with the immediate family. Thus, it is important for these students to develop interests which they can pursue on their own, and through which they can engage in social activities.

The ability to enjoy music is not necessarily related to intelligence. While there is a cognitive, intellectual aspect to understanding music, it can also be understood and appreciated intuitively and emotionally. Emotion, too, is a "way of knowing" (Dabrowski, Langer, Eisner). According to Maslow (1968):

One thing that has been demonstrated beyond any doubt is that the aesthetic faculty is present in any child as a birthright. . . . The appreciation of good form, the perception of rhythm and harmony, the instinct to make things shapely and efficient: these are human characteristics, innate rather than acquired. (p. 12)

In 1975 the United States Congress passed public law 94-142, the Education for All Handicapped Children Act. This law ensures that handicapped children, like all others, have a right to a free appropriate public education with full educational opportunities. Each child must have an individually planned program in every subject area, including music, containing skill and concept goals appropriate to his needs and abilities. Furthermore, this education must be conducted in the "least restrictive environment," which means that the child is to be integrated into regular classes as much as is possible and appropriate. However, if his educational needs are best met in special classes, that is where he is placed.

While Alberta does not yet have such specific legislation, the

spirit of PL 94-142 is influencing administration of special education here, resulting in a trend toward integration of retarded children within the regular class where feasible. Because they are not required by law to have specific individual programs in the arts, retarded students in Alberta seldom receive systematic music instruction in school.

The passage of PL 94-142 in the U.S. has resulted in a growth of interest in music in special education in all North America. Several studies have been conducted on how musical experiences affect reading and language development, motor skills and behavior of retarded students. Guidebooks on music in special education have been published, and many universities offer courses in special music education. There is a wealth of information on how to teach the retarded child specific musical skills such as keeping a beat or singing in tune, and on how to integrate mildly retarded children into the regular class. However, there is little information on how retarded children experience music, or how they respond affectively. Quantitative studies exist which examine retarded children's musical capabilities, but there do not appear to be descriptive studies in which the students are asked what music means to them. Nor have many comparisons of musical preferences been done between retarded and non-retarded children.

If a meaningful music curriculum is to be designed for EMH students, it would be helpful to learn from the students themselves how they respond to music and what their needs are.

Through an examination and comparison of retarded and non-retarded students' affective responses to music, this study should assist in furthering knowledge needed to design and implement an effective music curriculum in EMH classrooms. It is hoped that focusing attention on the

musical needs and interests of these students will encourage educators to explore ways of making music education, with aesthetic goals, an integral part of the EMH curriculum.

Purposes of the Study and Research Questions

The primary purpose of this study is to gain knowledge about how mildly retarded students respond to music. This is done through individual interviews, listening sessions and questionnaires, both with retarded and non-retarded students, so that comparisons can be made.

Research indicates that the ability to perceive similarities and differences in music is a prerequisite for meaningful listening (Gardner, 1971; Taylor, 1969). Therefore, in this study students are tested for musical auditory discrimination, and their results are examined and compared to their affective responses for possible relationships.

A secondary purpose is to determine to what extent peer pressure from classmates influences responses when students are in a group situation.

Specifically, the purpose of the study is to answer the following research questions:

1. How does affective response to music of mildly retarded children compare with: (a) children of the same chronological age? (b) children of the same mental age?
2. How does musical auditory perception of mildly retarded children compare with that of: (a) children of the same chronological age? (b) children of the same mental age?

3. Research clearly states that peer group pressure is a factor in musical preference of children. How do retarded children's responses to group pressure compare to those of:
(a) children of the same chronological age? (b) children of the same mental age?

Definitions of Terms

1. Aesthetic education: According to Reimer (1970, p. 39), it is "the education of feeling; the systematic attempt to help the student explore and understand human feeling by becoming more sensitive to conditions which present forms of feeling." It is an approach to the arts (to music, for purposes of this paper) which involves the student in musical activities such as singing, playing, listening, dancing, for the purpose of developing aesthetic sensitivity.
2. Aesthetic experience: An aesthetic experience is one in which the individual attends to the qualitative as opposed to the practical aspect of an object. It adds a dimension of quality and is complete and fulfilling in itself.
3. Aesthetic sensitivity: This is the ability to have aesthetic experiences: the ability to perceive and react aesthetically.
4. Affective response: Affective response includes responses or behaviors which have a significant feeling component. According to Knieter (1971, pp. 3-20), the affective response is one of the five characteristics of an aesthetic experience, the others being focus; perception, cognitive and cultural matrix. Psychologists do not use

the term in a consistent way. Young (1973) has summarized eight classes of affective process, including simple feelings, organic feelings such as hunger, activity feelings, moral and aesthetic feelings, moods, emotions and temperaments. This study is concerned primarily with the aesthetic and mood aspects of affective response. The term is discussed more fully in Chapter II, under the heading "Musicality and affective response".

- 5. Educable mentally handicapped (EMH): According to the American Association of Mental Deficiency, those persons whose IQ falls within the range of 52-68 on the Stanford Binet and Cattell standardized tests, or within 55-67 on the Wechsler test are considered to be educable mentally handicapped, which is synonymous with "mildly mentally retarded."
- 6. Least restrictive environment: This is a learning environment which places the student in a situation as close to "normal" as possible. It generally means that students be placed in school programs with non-handicapped students unless they cannot successfully be educated in such programs with the use of supplementary aids and services.
- 7. Mental retardation: As defined by the American Association of Mental Deficiency in 1973: General subaverage intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period. In most school systems, retarded children are still traditionally divided into two groups: educable (mildly retarded) and trainable (moderately mentally retarded). A child is generally assigned to one of these groups based on an IQ score that, at best, gives a quantitative evaluation of the child's functioning level at the time of testing.

8. Music education: As used in this study, the term means education in musical skills, concepts and attitudes, taught within the school system, as part of the curriculum. According to the Alberta Education Curriculum guide of 1977, music education should help children develop an awareness and sensitivity to the aesthetic aspects of music. It teaches children skills and concepts and provides opportunities to use them, and it helps children to develop their own creative powers through music.
9. Music therapy: Music therapy includes activities in which music is used to change behavior and/or mood. It differs from music education in that its goals are primarily functional rather than musical, even though the activities performed in each may be similar. Music therapy is usually done in a clinical setting, by persons specially trained in its methods.

The Research Methodology

Selecting a research method for a study of affective response to music poses many problems. Music appreciation is extremely difficult to measure, because emotional content and potential of music cannot be evaluated by objective means (Lehman, 1968). For this reason, according to Morrison (1963), most of what makes life worthwhile, the "feelingful" aspects, have been omitted from scientific investigation. Eisner is referring to this problem when he writes: ". . . all too often, what is educationally significant but difficult to measure or observe is replaced with what is insignificant but comparatively easy to measure" (1983).

When a study such as this is conducted with children, and particularly with retarded children, there are additional challenges, because of the children's scant musical background, and because of their limited vocabulary skills.

Because of the factors cited above, it was decided that a variety of techniques would be used to collect information. There are written tests, taped interviews, anecdotal notes from researcher and teacher observations, written and verbal responses to musical selections. Although there are some statistics, the bulk of the data is interpreted in a descriptive manner, which best suits the subjective nature of the study. Adherence to traditional research methodology in this study would impose such restrictions on the data collection, that much valuable anecdotal information would be lost. Thus, the research method is qualitative and subjective, rather than quantitative.

Limitations of the Study

1. None of the students included in the study have had previous musical training, other than school music. Therefore, the effects of training and experience on affective response to music are not examined.
2. The study does not attempt to describe what can or should be done to develop and enhance affective response to music: it only attempts to describe student responses as observed by the researcher.
3. Some variation in student responses may be due to different school music experiences. Although only one school is used for the actual sample, not all the subjects have always been at that school, and not

all have had the same teachers.

4. The study examines only one age group of retarded students. Results cannot be generalized to include much younger or older students.
5. The study does not examine the effects of music on students' learning in other areas.
6. Student response in the individual interviews may have been influenced in some cases by wanting to please (or displease) the researcher, although every effort is made to avoid pressure to respond in any certain way.
7. The effects of familiarity, or repetition of music, are not considered. In the group interviews, the students hear the selections for the second time, which may influence their responses. In the individual sessions, some of the students could have heard some of the selections before, which, again, may affect their perception of the music.

Organization of the Report

The remainder of this thesis is presented according to the following plan;

Chapter II presents a review of literature and research related to three areas relevant to the study: musicality and intelligence, studies of musical preferences, and music education for retarded students.

Chapter III describes the sample, the design of the study, the interviewing techniques used, and the music used in listening sessions. The methods for analyzing the data are also discussed.

Chapter IV presents the results of the study and the researcher's

interpretation of the data.

Chapter V, the final chapter, includes a summary of the findings of the study, as well as conclusions, implications and recommendations for further research.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter begins with a discussion of literature related to musicality and the affective response to music. Of particular interest to this study is research on the relationship between musicality and intelligence. This is followed by a summary of studies relating to musical ability and intelligence. The next section focuses on studies of factors influencing developments of musical preference. The chapter concludes with a review of literature on music education and music therapy for the mildly mentally retarded.

Since references are made in this chapter to both musicality and musical ability, it is important to define the two terms as used in this study.

Musical ability is defined by Radocy and Boyle as "what a person is able to do musically as a result of capacity, environmental influence and formal instruction. . . . A person with musical ability is able to perform, create or perhaps analyze music if given the opportunity" (p. 263).

Musicality, which can be broadly defined as "the capacity for musical responsiveness" (Platt, 1982), refers to the ability to enjoy and to respond to music, rather than the ability to create or perform music.

Musicality and Affective Response

Both Schoen (1945) and Lundin (1967) write of musicality in the broad sense described above, with Schoen defining it as "the capacity for musical reception" (p. 151). As Lundin states; "one may be very musical, having considerable sensitivity toward, feeling for, and appreciation of music, without any performance ability" (p. 204).

Mursell (1937) expressed a similar view of musicality:

One does not need to be able to perform well or to compose well for music to be a valuable cultural possession. The art of music, as we have seen, depends upon some of the most foundational and universal characteristics of human nature. (p. 330)

This broad concept of musicality would include affective behaviors such as mood responses, musical preferences and the capacity for aesthetic experience, as defined in Chapter I, which many psychologists such as Maslow feel is innate. Maslow (1970, p. 51) contends that aesthetic experience is a basic human need, which involves the individual after basic physiological and psychological needs have been met.

Bennett Reimer, prominent music educator and proponent of aesthetic education, writes: "human beings create and respond aesthetically not as an adjunct to their lives . . . a pleasant activity for spare moments . . . but as an essential component of their nature" (1970, p. 74).

Dabrowski also expresses a concept of the aesthetic sense as being common to all people: "One may say that the aesthetic component is, to a greater or lesser extent, one of the fundamental elements in the structure of every personality" (1967, p. 34).

The broad concept of musicality described above has significant implications for those concerned with the total education of retarded children. Traditionally, music and the other arts have been considered to be peripheral to the basic educational and emotional needs of the students. When music is used, it is often with non-musical goals in mind. Yet Reimer states (1965):

The value of the arts and of aesthetic sensitivity are their unique service to that which is most human about human beings: the capacity for understanding and the need for significance. Thus if art can serve any human beings, it can serve all human beings. (p. 164)

If the views held by Reimer, Maslow and Dabrowski are valid, mentally retarded children who are not being exposed to a music curriculum with aesthetic goals are being deprived of an essential means of emotional growth and personal development. Low intelligence does not mean the absence of musicality. Wing (1955) states that both musical ability and musical appreciation are qualities of the whole mind, but his tests do not reveal any direct correlation between all-round capacity and education or intelligence. He has also noted that people with considerable ability and understanding of music do not always like music.

Payne (1973) reports that the part played by attention to formal elements in the appreciation of music, even among experienced music students, seems to be small. In his experiments, he had students with musical training listen to selections and rate their enjoyment of the pieces according to six factors, two related to aesthetics and four to formal musical elements. The two aesthetic ones were concerned with "musical emotion": the first, a recognition of the emotional subject matter of the music, and the second, an emotional response to its

aesthetic character and value. The students gave far more attention to the aesthetic elements than to the formal ones, which seems to indicate that deep understanding of musical concepts is not, in itself, essential for enjoyment.

Results of studies by Hevner (1934), Edmunston (1966) and Eagle (1971) would support Payne's data. Their findings, discussed in more detail later in this chapter, indicate that musical training and intelligence do not affect musical response.

Perhaps one might argue at this point that if training does not affect response, then there is no need for aesthetic education in music. However, much of the research cited here refers to mood response and preferences. It does not refer to level of enjoyment, or intensity of the aesthetic experience.

Most musicians and educators who feel that the capacity for musical response is present in everyone also maintain that appreciation is enhanced and the nature of affective response deepened, when there is understanding of musical concepts. Schoen in his early book The Meaning of Music (1927) states: "The determinant of reaction to music is native capacity plus experience and training. Training has a strong effect on reactions to music . . . training increases our enjoyment" (p. 32).

Broudy (1977) also feels that an understanding of musical elements, especially form, is necessary for higher levels of appreciation. Knieter (1971) states that some knowledge and learning regarding the stylistic attributes of a musical work are essential for aesthetic response.

To date, there is little scientific evidence to indicate whether intelligence is related to capacity for affective response.

Copland's statement, "There is no reliable way of measuring the gift for listening," made in 1959, remains true today. Lehman (1968) agrees that music appreciation, which refers to the aesthetic values of music, is extremely difficult to measure, for several reasons:

1. There are no absolute standards of beauty in music.
2. Music exists in time, not space: we hear one sound after another. If the listener misses something, it is gone.
3. Students often recognize what the researcher is seeking and respond accordingly.
4. Emotional content and potential of music cannot be evaluated by objective means.

However, several researchers have attempted to construct tests of affective response. William Bullocks (1973) reviewed and categorized 45 musico-aesthetic attitude tests, and grouped them into three types: measures of perceptive ability, verbal measures of attitudinal disposition, and tonal measures of attitudinal response. All the tests reflect a bias toward measurement of two kinds of response to a musical stimulus: evaluation or valuation, based on perception of specific musical elements. Many of the tests are achievement tests rather than interest or preference tests. They require recognition and evaluation of certain musical elements, so that appreciation is measured in terms of knowledge instead of affective reaction. Other tests involve comparison or choice between two or more musical items. Music appreciation is defined in these tests as the ability to distinguish between what is generally accepted by experts as good and bad music, so that the tests are actually measuring musical perception or ability, rather than affective response.

Since some literature supports the theory that musicality,

musical ability and intelligence are all related, a summary of some studies on musical ability and intelligence is presented below.

Musical Ability and Intelligence

Intelligence has frequently been examined as an influence on musical ability. Phillips (1976) suggests a close relationship between musical ability and intelligence, which he believes results from a common environmental cause: a home promoting musical ability is also likely to promote intelligence.

Edmonds (1960) found that low intelligence and low musical ability appear to be closely related, but when a certain level of general ability is reached--around IQ 90 for children aged 12-13--intelligence no longer plays a significant part in ability.

Zenotti (1975) reported that the acuity of perceptive discrimination and tonal acculturation of some 400 retarded children were related to their mental, rather than their chronological, age, which suggests that perception is indeed affected by low intelligence.

According to Grant (1970), in general, American studies have found correlations ranging from zero to less than .60 between scores on the individual tests of the Seashore Battery and intelligence scores, while European studies have presented evidence that music ability (referring to performance) and intelligence are closely related.

Studies of Musical Attitudes and Preferences

Most studies on affective response to music relate to attitudes, moods and musical preferences. The methodology most commonly used in these studies is that of self-report measures, using a semantic differential, or adjective check-lists. Boyle, Hosterman and Ramsay (1981) raised the question of the validity of such self-report measures, since the relationship between what an individual says in a self-report and what a behavioral measure might show has not been clearly established. Kuhn (1970) also had previously noted the need for research to establish this relationship.

Kuhn (1979) states that an assumption of research on attitudes is that "attitudes reflected by people in non-threatening experimental situations accurately show their underlying predispositions" (p. 7). He feels that if a researcher is concerned with measuring the opinion or preference of a group of subjects, "a self-report rating measure is the most efficient, and in all likelihood, quite adequate" (p. 21).

Leblanc (1981, 1982), who has conducted extensive research into measurements of musical tastes and preferences among children, observed overt behavioral responses throughout his studies and compared them to his subjects' written responses. He found the observed behaviors to be consistently congruent with the written responses. His observations would support Kuhn's conclusions about the validity of self-reporting.

Musical Attitudes

According to Bullock, Kate Hevner constructed the first useful and reliable tests of attitudinal disposition toward music (1935). Because of their success, Farnsworth later revised them (1954) and Hevner herself added new versions. Hevner (1939) developed an adjective checklist which has served as the basis for much subsequent research on mood response to music. Her results revealed a general consistency among subjects in adjectives they associated with different types of music. She also found that responses were generally the same for listeners of all kinds, intelligent and less intelligent, trained and untrained.

Edmunston (1966) and Eagle (1971) both used the semantic differential technique to study mood response. Edmunston, in his study, concluded that rhythm is the primary factor affecting response and that neither sex nor musical training influence the affective response.

Eagle sought to discover answers to these questions:

1. Does existing mood affect mood response to music?
2. Does presentation order of music affect mood responses?
3. Do similarly rated mood responses hold true for both vocal and instrumental music?

He found that existing mood does influence mood response, but order of presentation does not, and that listeners respond differently to vocal music than to instrumental music.

Eagle also analyzed literature on mood response and found that rhythm seems to be the primary element in evaluating mood responses to music. "Happiness" is the term used most often to describe fast tempo, major modes, and tunes pitched in high registers. Excitement, or agitation, describe dissonant harmonies (p. 79). His review also reveals

no relationship between mood response and age, sex, intelligence, or musical training.

In a study by Gerren (1953), an attempt was made to determine the relationship between intelligence, musicality and attitude toward music. Instruments used for his data collection included a standardized test of mental ability, the Gaston test of musicality, and an attitudinal inventory designed by Gerren. He found the co-efficient of correlation between intelligence and musicality to be .43, and between ability and attitude, .18.

Musical Preferences

Wapnick (1976) also wrote a comprehensive review of research which had been conducted on affective response over a fifty-year period from about 1927 to 1976. He described variables which affect musical preferences, and grouped them into three categories: musical, situational, and subject. The musical variable includes effect of the actual musical elements. Situational variables include such factors as community attitudes, peer influence and musical training, while subject variables would include intelligence, age, and personality.

Radocy and Boyle (1979) discovered in their research that, as well as individual preferences governed by musical characteristics, extra-musical association and societal pressures, there are also group preference tendencies.

Musical Attitudes and Preferences of Children

There is little empirical data on affective response to music in children. One very commonly observed phenomenon is that children's musical preferences narrow as they approach adolescence. Radocy and Boyle report:

In visiting music classrooms, the writers have noticed that overt group musical preferences narrow with advancing grade level. . . First, second and third graders generally will listen to brief excerpts of a variety of musical styles without protest. . . . In fourth grade and beyond, students will cover their ears, cringe, and look around to ascertain that sufficient numbers of peers are doing the same thing. The preferred music becomes rock. (p. 230)

Greer, Dorow and Randall (1974) also discovered increasing preference for rock music with advancing grade level. Two other studies done by Greer et al. in 1973, as well as the assessment of music attitudes in The National Assessment of Educational Progress (1971-72) support these findings.

Johnstone and Katz (1957) found that teenaged girls' musical preferences were influenced by their peers.

A study by Boyle, Hosterman and Ramsay (1981) examined self-reported reasons by students at grades 5, 7, 9, 11 and college levels for their pop music preferences. Results revealed that melody, mood, rhythm, and lyrics were most important reasons for preferences. There was an inverse relationship between the amount of music experience of the subjects and the extent to which they viewed the importance of their friends' view of the selection. The younger students tended to agree more on their choices.

McMullen (1974) conducted a study with students from grades 4, 8, and 12, in an attempt to determine whether melodic complexity

influences the musical preferences of school-age children. He concluded that complexity affects preferences only when highly controlled melodies are employed. Students appear to prefer simple melodies and a moderate amount of repetition.

Attitudes of elementary students toward school music have been studied by Broquist (1961), Nolin (1973) and Crawford (1972).

Crawford's study explored the relationship between socioeconomic status and attitude toward music, of intermediate-grade children. He found no relationship between socioeconomic status and attitudes, but he did find that grade 6 students were much less positive about music than were grade 5 students, and grade 5s were less positive than grade 4s. Also, all the students had significantly more positive attitudes to out-of-school music than to school music. Girls displayed more positive attitudes than boys, in all three grades.

In 1961, Oliver Broquist found in his research study of Wisconsin Elementary School students that there was a steady decline in the measured attitudes of students toward their school music experiences as they progressed from grades 2 to 6. In a study in 1967, involving 2,264 students, Nolin found a similar decline in attitude from grade 5 to grade 6. His subjects named performance activities on instruments as their favorite school music task, and their favorite singing task was preparing songs especially well for special performances. Music-reading activities and passive listening sessions were the most unpopular tasks.

LeBlanc has conducted extensive research into measurement of musical taste, and variables which affect preference. In 1979 he developed a listening test which he administered to 278 grade 5 students. He found this test more reliable as a group measure than as a

measure of individual response, but it yielded interesting conclusions. He used several varieties of musical styles in his test, and found that the easy-listening pop music example scored higher than the rock music example.

In other studies (1980, 1981, 1982, 1983), LeBlanc has assessed the effects of different styles, tempi and performing media on children's preference. Some of his findings which are relevant to this study were:

1. Rock/pop music is preferred to art music at the grade five level.
2. Style is the strongest variable in terms of preference, followed by tempo.
3. Grade five show higher preference ratings than grade six students.
4. Students consistently prefer fast over slow tempi, and they prefer the instrumental over the vocal medium.

While style, tempo and performing medium all influence music preference, LeBlanc's observations have led him to believe that non-musical variables, such as peer influence, may well be the most important influences on music preference.

Several studies show that musical taste can be developed, and preferences changed, through training. Zimmerman (1971, p. 22) writes that musical taste develops through conditioning and education, as do other social phenomena. Affective development, like perceptual and cognitive, follows a developmental sequence, but environment and education can speed the process. Hadden (1981) suggests that using examples of classical music emphasizing an element that is liked by the students, such as fast tempo, can help to alter preferences. A study by

Greer, Dorow, Wachaus and White (1973) and further research done by Dorow (1977) show that students will alter preferences under conditions of high teacher approval and positive reinforcement.

Music and the Retarded

There are not many studies which assess the actual musical capabilities or preferences of the mildly retarded, although there are several which examine the influence of music on various behaviors of the profoundly retarded, in institutional settings. Ross (1937) studied the relationship of IQ to musical achievement and musical talent in the general population, and reported a low correlation. In a study dealing specifically with musical achievement for the mentally retarded, Carey (1958) found that retarded students appeared to progress in music in much the same way as normal children, but at a slower rate. Buker (1967) studied the ability of EMH children to learn basic music rhythm reading along with normal children, using Mary Helen Richards' "Threshold to Music." The retarded students were able to read the charts and to participate successfully in the music classes. Zenatti (1975) studied normal and retarded subjects with respect to music discrimination ability. The discrimination of the retarded subjects was inferior to that of the normal subjects, but was equal to their mental, rather than their chronological, age.

In a study of musical characteristics of mildly and moderately retarded children, Bruscia (1981) found some deficiencies in auditory perception, which he attributed to attentional problems. Because the ability to discriminate between foreground and background is lacking, any

minimal, extraneous stimuli in the environment easily distract children from attending to the musical stimuli provided.

Cypret (1975) maintains that the mildly retarded can respond normally to music, and cautions that extra care must be taken to provide activities which are geared to their ability level and at the same time relevant to their chronological age, since their interests are similar to those of their normal peers.

A study conducted by Graham in 1968 concluded:

early deprivation of musical stimulation could lead to relatively poor general functioning on the part of certain handicapped children. To the extent that musical and general abilities are causally related, poor functioning on the part of the handicapped children would be enhanced by early music deprivation.

Music Education for the Retarded

The literature concerning music and the mentally retarded reveals differences of opinion as to how music should be used, and as to how the teaching of musical skills should be incorporated into the special education curriculum.

There is considerable literature documenting the functional use of music in special education as early as mid-nineteenth century. One who was interested in the possibilities of music in the socialization of the retarded was Edouard Seguin. He stressed the non-musical uses of listening, such as speech improvement and behavior modification, and described in detail the kinds of music that are suited to different occasions. It was Seguin's opinion that education in music for the retarded has as its primary object bringing the child to the threshold of

speech in those cases where speech is very defective (Kraft, 1972, p. 120).

In schools for the "feeble-minded" in nineteenth-century America, marching and exercising to music were daily activities. At least one educator, Samuel Howe, believed that "the feeble aesthetic sense is improved by lessons in vocal music" (Kraft, 1972, p. 121), and several special schools had bands. According to Kraft, all these schools used pianos extensively, and at least one institution possessed a fine pipe organ.

As the nineteenth century came to an end, institutional music programs featuring bands and choral groups continued to grow, and with the development of psychiatry, many music programs began to be justified in terms of their corrective or rehabilitative possibilities. As special classes began to develop in the public schools, music programs continued to be justified in terms of how certain music activities could benefit the child by ameliorating the handicap. By the middle 1920's, according to Graham and Beer (1980), almost all curricula for the retarded included music as an essential component. The arguments for musical experiences were almost always based on practical, rather than aesthetic, values, although at least one educator mentioned happiness as being an outcome:

. . . Probably the best means of developing this faculty [hearing] is by music. Singing, musical drills and the concerts of the entertaining hall . . . not only develop the child's power of attention and the range and accuracy of his hearing, but are a source of greatest happiness. (Tredgold, p. 479)

The emphasis on drill, and development of social and language skills, continued to be the basis for music in special classrooms throughout the thirties, when it was necessary to promote music as a unique aid to learning, in order to get funding. Several reports were published

documenting success in various kinds of learnings through music experiences. Exaggerated claims were made about positive effects of music, often without scientific data to support them. Walsh (1947) cautioned against making invalid, generalized claims about what music can do for the handicapped child:

For, as big a contribution as it makes, it is not music alone . . . but rather the predetermined goals set with it: the use of it by qualified persons, and the follow-up and support of its effect on the total child. (p. 30)

In 1964, in an article outlining the status of music education programs for the mentally retarded, Kirk wrote: "Some forms of art and music activities are usually standard practice in programs for the retarded . . . but research and evaluation of the effects of such activities are meager" (p. 90).

However, in the 1960's and 1970's much research of this type was being done, and results began to appear regularly in music education and special education literature. One such study was by Williams (1972), who included both normal and retarded children in his study. Students in the experimental group were permitted the use of music and art rooms, while the control students were not. According to Williams, "students receiving treatment had a positive attitude toward themselves and the classroom, while in the control group boredom and negative attitudes were present."

Isern (1961) reported that music motivated the mentally retarded child toward achievement in other school subjects. In addition, music was found to improve the memory of the subjects. Research by Steel (1971) and Einstein (1974) indicates that music strengthens reading, and a study by Miller, Dorow and Greer (1974) states that music can reinforce

mathematics learning. Levin and Levin (1972) found music to be an important tool in conveying the primary skills of early learning, such as fine and gross motor abilities, sequencing, number concept, and language development.

The awareness of the U.S. Congress of the value of music in special education is reflected in the wording of Section 121a: 3 and 4 of the Final Regulations of Public Law 94-142:

. . . (The use of the arts as a teaching tool for the handicapped has long been recognized as a viable effective way, not only of teaching special skills, but also of reaching youngsters who had otherwise been unteachable. The committee envisions that programs under this bill could well include an arts component. . . . Such a program could cover both appreciation of the arts by the handicapped youngsters and the utilization of the arts as a teaching tool per se.

The passage of Public Law 94-142 also brought with it a commitment to integration of the handicapped into regular classes whenever possible, so that music educators were now faced with the challenge of developing programs suited to individual needs of retarded children, in mainstreaming situations and in special classes.

As more retarded children entered the public school systems, guidebooks for music in special education began to appear, in an effort to meet the needs of classroom teachers and music educators who had no training in special education music. One such book is by Peotter (1979), who states in her introduction:

The arts have been called the hub of all learning: other subjects are its spokes. Music is one of the most personal and yet most social of all the arts. It can help any person become more aware of his emotions. This development is important in the normal student, but is perhaps more vital for the handicapped. (p. 1)

Yet the list of objectives which follow the above statement

appears to ignore emotional or affective development. These objectives refer to becoming contributing members of society, increasing physical abilities, learning to follow directions, to increase vocabulary, and other non-musical goals.

This curious dichotomy between stated philosophy in the introductions and the actual contents of the programs, found in almost all guidebooks reviewed by this writer, was also noted by Thompson, writing in the Music Educators Journal of April, 1982:

Although the development of aesthetic responsiveness is identified as the primary goal of music education for handicapped learners in a growing body of theoretical literature, the "how-to-do-it" books and classroom practises of many music educators reveal considerable emphasis on the development of motor skills, perceptual skills, social skills and other non-musical behaviors. (p. 26)

Graham and Beer (1980) express concern that the Education for all Handicapped Children Act of 1975 fails to emphasize the importance of effective aesthetic education of the handicapped child, yet their own program appears to be built around behavioral objectives which do not relate to aesthetic response. Goals for the singing component, for example, include producing vocal sounds when asked, imitating short phrases when asked. Although there are detailed directions for singing, movement and instrumental activities, there is no section on listening to music.

Dickinson (1976) states in her introduction:

. . . we have viewed music not in a purely functional role . . . but rather with due regard for music's integrity as an art form and area of content. Indeed we have presupposed that music is of value to the ESN child, and have concentrated on the subject material of music itself.

Despite the above statement, again, there is no reference in

the book to any listening activities or to the use of any serious classical or art music with these children.

Dobbs (1966), who wrote a handbook primarily for the non-specialist, commented that in doing music with slow learners he was not primarily concerned with training them as musicians but with educating them as people ready to participate in community life as happier, more mature personalities.

Grant's (1970) developmental Music Curriculum contains a sequentially-ordered set of musical tasks and activities to aid the client in achieving development milestones. He states:

By necessity it will include developing those musical behaviors essential for successful participation in music activities, while having as its main purpose those non-musical behaviors essential to functioning within a society. . . . One might expect minimal progress in the musical skills, since major emphasis is placed on progress in non-musical skills.

The Paintsville, Kentucky, Board of Education Curriculum Guide (1970) states in its opening section that music is not to be used for purely aesthetic values, but as a tool for teaching speech, social and physical growth, and basic skills such as colors and numbers, body parts and clothing (p. 36). Hoshizaki's handbook (1983) also advocates the use of music as a tool in reinforcing muscular control, speech and language development and social skills. She states at the outset that her concern is not with music education or music as recreation, but with "incorporating the fun of music into learning activities, in order to make them more interesting and entertaining" (p. 3). The book describes several activities designed to enhance motor skills, attention span and rhythmic awareness.

A study by Linford and Jeanrenaud (1972) features the teaching

of the concepts of loud/soft, and fast/slow. The authors designed several activities to teach these concepts to mentally retarded students, stating their objectives were to prepare the students for more advanced work and enjoyment of music by learning these concepts first. Their rationale was that if retarded children are to be guided through musical activities, there are certain basic skills which will be necessary for this participation.

Hardesty's "Music for Special Education" (1979) prepared for Silver Burdett, reflects the spirit of P.L. 94-142 in the introduction, by stating that aesthetic experiences are integral to the education of "normal" and handicapped children alike, but that music, again, is a powerful means of helping these students develop healthy emotional attitudes, and cognitive, physical and social skills. Again, although over 100 children's songs and games are listed in the index, and there are sections on movement, playing instruments and singing, there are no listening activities, other than having children listen for directions or certain words in a song, nor are any serious musical works mentioned.

Much more comprehensive is another guide from Silver Burdett, written by Sona Nocera (1979). This book lists several selections from eminent composers from the Renaissance to the Modern period, and describes activities to be used in conjunction with listening to the music. As well, there are comprehensive sections on movement, singing and instrumental work. Nocera points out that beginning activities for retarded children often focus on having the children respond to a physical cue such as a gesture, but the music educator must persist toward a goal of independent response if the child is to grow musically as well as developmentally. She states:

The difference between responding on cue and independent response is the essence of musical understanding, and hence, music education. . . . The child who responds accurately without cues is demonstrating musicianship: an understanding of one's part as it relates to the musical whole. Even though a youngster may not be able to verbalize specifically about the elements of music or how they are combined in composition, carefully designed activities provide the opportunities to demonstrate understanding of them through performance. (p. 235)

Nocera appears to be referring here to genuine aesthetic education and to developing aesthetic sensitivity in the retarded child. She goes on to argue that attention is frequently given over to non-music skills, with the result that the child's musical potential is never challenged at all. Although cognitive limitations prevent complete development of musicianship, Nocera maintains that the child's talents can be nurtured in a number of ways, to provide both enjoyment and a sense of achievement.

Another program which appears to concentrate on aesthetic goals is that described by Scoggins (1975). Writing about music at the Coastal Center of the South Carolina Department of Mental Retardation, he lists four general and six specific music goals which guide the approach to music activities. At least three of the broad objectives reflect aesthetic values:

1. To help each child express himself creatively through satisfying musical experiences.
2. To help each child participate in many enjoyable and successful experiences which involve music.
3. To help each child develop his individual capacities through music: the more music is used to accompany activity, mirror emotions . . . and provide a means of

expressing deep feelings, the more the child senses himself as a whole person. (p. 99)

This article is the only one found by the writer which describes specific listening activities designed to heighten awareness of moods in music, hearing contrasts, and associating musical sounds with known concepts.

Music Therapy

Much of the literature on music with the retarded falls into the category of music therapy rather than music education. Nocera (1979) states that when music programs derive goals and objectives from basic skills rather than from music, they cease to be music education, and become therapy. Unlike music education, music therapy is the functional use of music to develop non-music goals; a means, rather than an end in itself. It does not concern itself with music as a content area of the curriculum. Thayer Gaston, one of the founders of music therapy as a discipline, distinguishes between the two as follows:

Perhaps music therapy and music education can best be distinguished by the fact that the music therapist is chiefly concerned with eliciting change in non-music behavior, not with perfecting musical endeavour. The opposite is true of the music educator . . . even so, music therapy and music education have much in common. (Gaston, 1968, p. 292)

If one examines the content of guidebooks reviewed in the foregoing section on music education, according to Nocera's and Gaston's criteria, the books would not constitute guides for music education, but for therapy.

A basic premise of the discipline is that music used as a therapeutic tool has the power to change a person's manner of functioning.

Because music is inherently enjoyable for most people, the very enjoyment of the musical experience stimulates one to participate.

Most literature on music therapy with retarded children concerns treatment in institutional settings, with severely retarded or multiple-handicapped clients, so is not relevant to this study. A few pioneers in the field are cited here, however, because, while their work focuses on the remedial aspect of music with their clients, they also recognize the need for aesthetic experience for the children.

Gaston, who is both a music educator and a music therapist, maintains that music can provide a rich sensory environment, and that it is an essential ingredient to the normal development of children. He values the significance of the aesthetic experience, and claims that children of all abilities and cultures need music for their healthy and normal development: "The significance of the aesthetic experience of music for the individual is that, without it, he would be less complete as a human being" (Gaston, 1964, p. 5). He further states: "The richer the sensory environment, the greater development of the brain. Therefore, we understand why the sensory environment of the child must be rich" (p. 4).

Howery (1968) concludes that if music is a need of the average child, it is a necessity for the retarded child, and that the aesthetic experience is perhaps the most important of all the values of music for the mentally retarded.

Juliette Alvin (1965) describes her mode of treatment with individuals and small groups, using her cello as a unique medicine in establishing rapport with her clients. In writing of the importance of music as a treatment tool, she states:

There is agreement that music is good for these children and that they respond well to music. . . . If this is so, could we not use music at a deeper and more effective level in order to help specifically toward the mental, emotional and social maturation of handicapped children in need of integrating and enriching experiences at their level? Furthermore, can we not find a relationship between their response to certain musical experiences and their mental, physical or emotional state?
(p. 2)

Nordoff and Robbins (1965, 1971, 1977) have written extensively of their methods, which also feature both individual therapy and small-group work. Chapters in their books detail singing, instrumental and play activities, which use music especially composed by the authors. Their statement on music perhaps constitutes a fitting conclusion for this chapter, for one would hope that all educators and therapists whose works are cited in this literature review would concur:

That the cultural inheritance of music is endowed with countless gifts for every human being is common knowledge, but for these children . . . the "gifts" that music holds are so important that they demand special consideration. (Nordoff and Robbins, 1971, p. 15)

CHAPTER III

DESIGN OF THE STUDY

This chapter begins by describing the piloting procedures used in preparation for the actual study. This is followed by a description of the research setting, subjects, the design and administration of the auditory discrimination test, the individual and group interviews, the musical selections used, and, to conclude, the methods of collection and analysis.

The Pilot Study

The subjects for the pilot study were thirty-three mentally handicapped students, ages eight to fifteen, from a school which was not involved in the actual study. These students formed three EMH classes. Informal group and individual interviews were conducted, and twenty-four different selections of music were played for the students, in a total of five group sessions and fourteen individual sessions, over a period of four weeks. Several different questions and interviewing techniques, ranging from structured to unstructured, were employed in order to arrive at a format which would elicit maximum response from students without being too rigid. Specific questions used are listed in Appendix A.

Informal group discussions about music were conducted in each of the three classrooms. During these sessions, the students were asked

about their preferences in music, how much time they spent listening to music at home, alone and with others, and about their feelings toward singing, playing instruments, and dancing. They were also encouraged to bring their favorite tapes and records to school to play for the researcher.

Each of the three groups had unique characteristics. Classroom 1 had nine students, aged seven to ten, who would have been Division I students (K-3) had they been in regular classes. This group had little music background on which to draw, and the students had limited vocabulary, which hampered them in their attempts to describe their reactions to music. They responded enthusiastically to a listening activity done with them by the researcher, using Saint-Saen's "Carnival of the Animals." However, they were not able to answer questions about their own preferences, and they had short attention spans.

Classroom 2 had eleven students, aged approximately ten to fourteen years, corresponding roughly in mental ability to Division II (grades 4-6) levels, although some were still reading at primary level. These students were responsive to questions and enjoyed talking about "their" music. They looked forward to their individual interviews and appeared open to listening to music played for them. Several of them had a wealth of information about their favorite groups, and brought posters and magazines to show, as well as tapes to play. The students from this class enjoyed groups such as Michael Jackson, Boy George, Iron Maiden, the Police and Twisted Sister.

Classroom 3 was considered to be the "Junior High" class, with students aged twelve to sixteen. These students were also very co-operative, and especially looked forward to playing their music. They

were almost exclusively devoted to Twisted Sister and other "heavy metal" rock groups, and were contemptuous of Michael Jackson and "soft rock" music. They all stated that they enjoy watching rock videos. In a group situation, they appeared to be completely closed to responding to any other types of music, and laughed and groaned at all the musical examples played for them. In individual sessions, the girls, especially, were more open. The teacher of the class observed that adolescent EMH students identify very strongly with their counterparts in regular junior high classes, and that more than anything, they desire to be "typical teenagers." Therefore, at least with this group, there is a strong conformity to current teenage fads.

Tapes and records of music in Renaissance, baroque, classical, oriental, rock, reggae and folk styles were played for the students during the individual and group sessions, bringing forth a great variety of reactions. A list of the twenty-four selections is included in Appendix B. Pieces which drew a very similar response from the majority of students were discarded because it was felt that they would not be useful in differentiating affective responses among the subjects. Pieces which were already familiar were also discarded. From the initial set of twenty-four, seven items were finally retained for use in the actual study. These items are described more fully later in this chapter under the heading "Musical Selections."

Since one of the research questions in Chapter I focused on the ability of children to perceive similarities and differences in music, a test to assess this skill was devised. From an initial set of thirty-five test items, those which were answered either correctly by all students, or incorrectly by all students, were eliminated. The final

test resulting from this process contained eleven items. This test is described in detail in the section on "Administration of the Auditory Discrimination Test" on page 42 of this chapter.

The children involved in the pilot study contributed, in an informal way, much valuable information on the musical preferences and listening habits of mentally retarded children. Their input is considered, along with that of the actual study group, in Chapter V in the section on listening preferences.

Through working with the students in the pilot group, it was decided that children with a chronological age of about eleven years and a mental age of approximately eight/nine years would be the best subjects for the study under consideration. Students in this range have enough background experience to draw upon, and have sufficient vocabulary with which to express themselves. They had also not reached the "teenage" phase with its strong pressure to conform. To have included students older than twelve would also have necessitated going into the junior high schools for their chronological age peers from regular classes. Since the study was to be concerned with the experiences of elementary school children, this would not have been practical.

The Research Setting

The subjects for this study were students from one Edmonton elementary school, which houses two EMH classes, a learning center for children with learning disabilities, a resource room, and regular classes from kindergarten to grade 6. There are 15 classes altogether, with

18 teachers, including the principal, and a student population of 280. The school serves a mixed socio-economic area, with the majority of students coming from lower-middle or working class families. There are many new Canadians in the school, representing several ethnic groups.

Music in the school is taught by the classroom teachers, in their own classroom setting and at times in the music room. Although the school does not have a music specialist, at least three of the classroom teachers have considerable music background, so that the students are receiving competent instruction. There is strong emphasis on singing, and the regular students compete in music festivals and produce school operettas. This is the first year that this school has housed EMH classes. The EMH students are receiving regular music periods this year, from their teachers, who feel that music has an important part to play in their students' development. They sing songs, use rhythm instruments, and sometimes listen to records. However, this is the first year that most of these children have had such experiences.

The purposes and design of the proposed study were explained to the principal, who expressed interest in the study and granted permission to conduct the research, provided the classroom teachers were in agreement. The grades 3, 5/6, and special education teachers were then approached, and all were willing to have their students take part.

Individual interviews and listening sessions took place in a small counsellor's office, and group sessions and the auditory discrimination test were done in the three classrooms of the children involved in the study.

Description of Subjects for the Study

The design of the study was explained to all members of the grade 5/6 class, the grade 3 class and the senior EMH class--sixty-seven students in all. The majority of students expressed interest in being part of the study. From this group, thirty students were chosen, who met the following criteria:

1. They had no formal music training other than regular school music.
2. Other than the retardation of the EMH students, the students had no apparent emotional or physical disabilities.
3. The "regular" students from grade 3 and grade 5/6 were judged to have "average" academic ability, according to their reading and intelligence test scores and their teachers' observations.
4. All subjects had written consent of a parent to participate in the study. A copy of the consent form appears in Appendix C.
5. All subjects had been speaking English for at least two years.

From the suitable candidates chosen for the study, three groups were formed, with ten students in each group, as follows:

Group 1: EMH group. The senior EMH class had ten pupils, only one of whom did not meet the criteria. A suitable candidate, aged eleven, was found in the junior EMH room. He was happy to become part of the study, so it was arranged that he would join the senior group for all the discussions and the test. The one student who was not part of the

official sample was also included in all the activities associated with the research, and was not aware that he was not really one of the subjects.

This group, then, was composed of the EMH students aged eleven to twelve years. They were reading at a grade 2-3 level, displayed language ability roughly comparable to that of an average nine-year-old, and were assessed through previous testing and teacher observation as having mental ages of eight to nine years. The students chosen did not have disabilities other than their mild retardation.

Group 2: Group 2 consisted of ten students, aged eleven to twelve, from a grade 5/6 class. They were the same chronological ages as the EMH group, and were all performing at an average level in their school subjects.

Group 3: In this group were ten grade 3 students, aged eight to nine years, all of whom were considered to be "average" students by their teacher. These students were comparable in mental age to the EMH students of Group 1.

Each group contained five boys and five girls.

Design and Administration of the Auditory Discrimination Test

The auditory discrimination test was designed by the researcher to test the subjects' ability to distinguish between pairs of identical and different musical phrases. It consisted of eleven items, each containing two short phrases, played on a piano and onto a cassette tape recorder, which was used in the actual test. The test was administered to each of the three groups, in their own classrooms.

Before beginning the test, the researcher discussed with the students ways in which musical excerpts could differ, and some examples were played and sung. Vocabulary which emerged from the discussion and which would be useful in the written responses was listed on the chalkboard. The list included the following words: loud/soft, high/low, fast/slow, happy/sad, speed, beat, melody, rhythm, tune, mood.

The students were then provided with pencils and worksheets designed for the test, which was then administered via a cassette on a high-quality cassette recorder. Each test item consisted of two phrases. The students were asked to listen to each item, decide if the two phrases were the same or different, and mark their worksheets accordingly. If their answer to an item was "different," they were to try to describe how the two phrases were different. The tape was stopped after each item in order to give students time to write. The EMH students sometimes required assistance to write down what they wanted to say.

Copies of the student worksheet, the answer sheet and the musical examples themselves appear in Appendices D, E and F.

Individual Interviews and Listening Sessions

Each of the thirty subjects was interviewed by the researcher in a small, comfortable counsellor's office in the school, away from the classroom setting. The structure of the interview was informal, but the following questions were asked at some point during all the interviews:

1. What kind of music do you like? What do you like about it?

2. Do you like any other kinds? What other kinds do you like?
3. Do you ever buy records/tapes yourself?
4. What are your favorite groups?
5. What kind of music do your parents like? Do you sometimes listen to music with them?
6. Have you ever been to a concert, besides a school concert? Do your parents ever go to concerts?
7. When do you best like to listen to music? Do you like to listen alone or with others?
8. Do you ever sing or dance to the music when you are alone? With your friends?
9. Do you like school music? If so, what do you like best in school music? What don't you like about it?
10. Is music important in your life? Why?

This portion of the interview lasted twenty to thirty minutes. All sessions were taped, with the exception of subject number two of the EMH group, who did not wish to have his voice on tape. However, he did not object to the researcher taking notes.

At this point the students were given a break, either for recess or lunch. The second portion of the individual sessions consisted of playing the tape of the musical selections, and the subsequent discussion and writing, related to the subjects' responses to the music. Before beginning this task, each subject was told, "Now I'm going to play seven different pieces of music for you. While you are listening to each one, I would like you to think about what kind of feeling the music has for you, and what it makes you think about, or if it reminds you of anything. If it doesn't make you think about anything, or if it has no

special feeling for you, that's fine too. When each piece is over, we'll stop the tape and talk about it, and I'll also ask you to answer some questions on a worksheet."

There was concern on the part of the researcher at this time that students would invent responses when they did not experience any reactions, thinking that they were expected to come up with creative answers. They were told that they were the most important part of a study in which music teachers hoped to learn useful information about music in people's lives, and that for the study to be of any value, the responses had to be absolutely true. They were also told that knowing that listeners sometimes experience no reaction to certain music was just as important as knowing about various images and feelings which do occur. It is hoped that these instructions had the desired effect. While it is impossible to be certain that no "inventing" took place, the subjects' responses appeared to the researcher to be genuine and spontaneous.

During the actual listening to each selection, students were encouraged to lean back and relax, and close their eyes if they wished. Some of the students commented on the music as it played, and some hummed, tapped or clapped, or "conducted" the music.

After the playing of each selection, the students were asked:

1. If you wanted to paint while this music was playing, what would you paint?
2. What kinds of colors would you use?
3. What kind of a movie or TV show do you think this might be good background music for?
4. What kind of feeling does the music have?
5. Do you like it?

After answering the above questions orally, and discussing each selection informally, the students were also asked to express their reactions in written form. A copy of the form used for this purpose appears in Appendix G.

Group Interviews

One week after the completion of the individual interviews, a group listening session was held with each of the three groups. At these sessions, the seven selections used in the individual interviews were played again, and the students were each asked to complete another copy of the worksheet. Group interaction was allowed, and students were encouraged to discuss the music, exchange opinions, and share their thoughts with the group. These sessions were also taped, and notes were taken by the researcher.

The Musical Selections

During the pilot study, many types of music were played for the students, in an effort to find music which incorporated a wide variety of styles, tempi, timbre and moods in a small number of selections. Because of the ages and relatively short attention spans of some students, it was considered important to keep the listening sessions reasonably short.

In making a final selections, the research studied the responses of the pilot students to music played for them, and also considered the opinions and advice of these students. Two other music specialists were

also consulted. The following pieces were chosen for use in the study:

1. "The Swan" from "Carnival of the Animals" by Camille Saint-Saens, written about 1897, 2 min., 50 sec. This piece features piano and cello, and was chosen for its slow tempo, flowing melody, and romantic style.

2. "Allegro" from "Percussion Music" by Michael Colgrass, 1 min., 27 sec. This piece was only percussion instruments, with simple to intricate rhythms. There is no melody.
3. "Prince of Denmark," also called "Trumpet Air," by Jeremiah Clark: 3 min. Instruments in this version are trumpet, organ and tympani. It is in a stately, baroque style, in a major key, and is often used in state or bridal processions.
4. "Thank the Lord for the Nighttime," Neil Diamond, 3 min., 35 sec. With voice, guitar and percussion. This is the only piece using vocals. It is strongly rhythmic, in a fast tempo, in early rock style, and harmonized with basic I, IV and V₇ guitar chords.
5. "Sakura," Japanese folk tune, played on a koto, a Japanese stringed instrument, 3 min., 23 sec. This piece was chosen because of its distinctive plaintive melody, its minor tonality, and its oriental quality. The tempo is slow, and while it has a discernible beat, the rhythm patterns are very simple and repetitive.
6. "Unsquare Dance": Dave Brubeck, 2 min., 5 sec., with piano, bass and percussion. This is a jazz piece, with a lively tempo and an irregular 7/4 meter. There are complex rhythm patterns executed with sticks and an up-beat but intricate

melody.

7. "Canon" by Johan Pachelbel, 1653-1706, 4 min., 45 sec., played by strings and harpsichord. This piece begins with a very simple theme played by the cello, and builds gradually to a climax as the other strings enter in Canon, each expanding and varying the theme. It is in a slow tempo, with a strong, steady pulse, and is in a major key.

Treatment of the Data

Data for analysis were obtained from the following sources:

1. Results of the auditory discrimination test administered to all students.
2. Notes and transcribed tape recordings from the individual interviews.
3. Transcribed tape recordings and researcher's notes of the individual listening sessions.
4. Worksheets on which the students wrote about the listening selections.
5. Transcribed tape recordings and notes of group interviews with each of the three groups involved in the study.
6. Worksheets completed by the students during the group listening sessions.

A qualitative, or descriptive, approach to data analysis was used, because the objectives of the study were related to gaining a better understanding of the retarded child's experience of music, rather

than verifying specific hypotheses about it. Here the approach differs from an essentially quantitative one, in which numerical data are analyzed with a view to confirming or rejecting stated hypotheses.

The interviews and listening sessions were informal, so that many subjects volunteered a wealth of anecdotal information which could not be categorized, but was still useful in gaining insight into their attitudes. However, all the subjects were asked certain specific questions during the course of their interviews, their responses to these were classified, and in some cases, quantified. Frequency counts and rank ordering of information were done when appropriate, but analysis extends beyond this numerical data to interpretation of what the students were actually saying.

In describing ways to ensure the credibility and dependability of qualitative research, Guba (1982) suggests doing "member checks," whereby data and interpretations are continuously tested with the students themselves, and with others from whom data is solicited. During and after data collection, the researcher's oral and written observations were checked for accuracy by the students, who were asked to read the preliminary notes on their own interviews. In some cases, it was necessary to read the notes to the students. The researcher checked for accuracy by asking, "Is this what you meant?" "Is what I have written correct?" and "Did I leave anything out?"

Since the classroom teachers were present at the group discussions, they were asked to read the notes and transcriptions pertaining to their own session, and to assess them in light of their own observations.

The data, and later its preliminary analysis and interpretation,

were also submitted for examination to two persons not associated with the study. Both of these external raters have experience in qualitative research methods, and one has taught elementary school music. Their observations and conclusions were in accord with those of the researcher, but resulted in some additional insights, which have been included in interpretation.

The final draft of interpretations and analysis was also submitted to the first rater for additional examination.

To ensure dependability of findings, different methods were used to obtain information. Students were asked to answer questions verbally, in informal interviews. They were also expected to write some responses. Samples of response sheets appear in Appendix G. As well as recording verbal and written responses to the music, the students' physical responses, such as facial expression, foot-tapping, humming and keeping the beat in various ways, were noted.

Interpretation of the Data

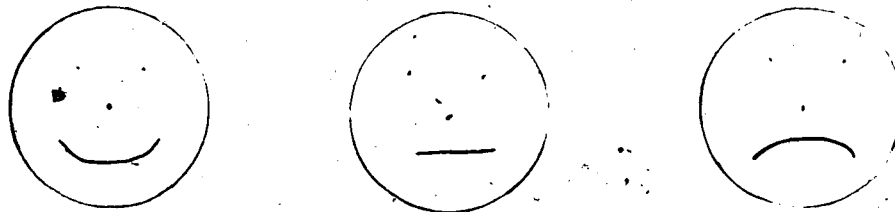
The score on each student's auditory discrimination test was recorded, and the total score, as well as the median and the mean for each group, was computed. Responses to the two types of item (same and different) and to the questions on how the phrases differed, were also categorized and recorded on tables and graphs which appear in Chapter IV. Within- and between-group comparisons were made of these scores to determine variations among the three groups in ability to perceive sameness and differences in musical phrases. Observations of students'

listening behaviors and of their strategies for answering the test questions were made by the researcher and classroom teachers, and recorded. These observations, together with the comparisons of scores, were all studied to obtain information related to the students' listening skills and strategies.

The tapes of the individual interviews were transcribed and summarized, along with notes taken by the researcher during the interviews. From these data, a profile of each student was written, which described his/her musical preferences and habits. The students' written and verbal responses to the seven selections were also recorded on these profiles, which were then separated into three sets, one for each of the three groups. The following data were extracted from the profiles and categorized on charts:

1. ratings of each of the seven musical selections: like, indifferent, or dislike.
2. type of emotion evoked by each selection for each student.
3. types of images evoked by the music.

For rating each selection, the students were asked to indicate their response by putting a mark on one of three ikon, represented below:



A mark on the first ikon indicated a liking for the selection; the second, indifference; and the third, dislike.

For purposes of studying preferences within and between groups, numerical values were assigned to the selection ratings. A "like" response, or mark on the first ikon, was given three points, an

"indifferent" response was assigned two points, and a "dislike" response, one point. Points for each selection were totaled, and represented on graphs, so that groups' and individual preferences could be studied.

As well as points for each selection, totals for all the selections were computed for each group, as were total scores for liking, indifference, and disliking, to facilitate comparisons of types and degrees of musical affective response between groups.

The data from the group discussions and listening sessions were organized in the same manner as that from the individual interviews, so that changes in responses between individual and group settings could be examined.

Having thus categorized all responses and observations, the profiles, charts and graphs were subjected to further analysis, with the following questions in mind:

1. Are different patterns of imagery discernible in the three groups?
2. Do varying patterns of emotional response appear in the three groups?
3. Is there variation in the strength of response, positive or negative, between groups?
4. What differences in affective response emerged in the data, as a result of the subjects' being in a group situation, as opposed to an individual interview?

In the final stage of the analysis of the data, the comparisons and categorized observations which had been made were interpreted, with a view to addressing once again the research questions posed in Chapter I. These interpretations form the basis for the content of Chapter IV.

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CHAPTER IV

FINDINGS OF THE STUDY

The purpose of this study was to explore the place of music in the lives of a group of educable mentally handicapped students, and to compare their experience of music with that of a group of chronological age peers and a group of mental age peers. The research was conducted in three stages:

1. tests of auditory discrimination
2. individual interviews and listening sessions
3. group interviews and listening sessions

This chapter presents and interprets findings, which are organized in three sections, corresponding with the three stages of the data collection.

Tests of Auditory Discrimination

The scores for the test were classified into four categories:

1. number correct out of the total of eleven
2. number of identical pairs correct out of five
3. number of different pairs correct out of six
4. number of correct identifications of ways in which items differed, out of six

The responses to the six items which were not identical were

also examined separately, and a frequency count done to see if some musical elements were more easily perceived than others by the students.

The scores for each student appear in Table 1, p. 55, and mean raw scores for each group appear in Table 2 on p. 56. Numbers of students scoring correctly for each pair appear in Table 3 on p. 57.

All students achieved relatively high total scores. Only three students out of the total of thirty had more than three incorrect answers in the task of deciding whether the phrases were identical or different. One EMH student had five incorrect responses, and two grade 6 students had four.

One might expect that if total scores were high, scores in categories two, identical items, and three, different items, would also be high. However, students in all three groups found it easier to identify sameness than difference. This is apparent in their scores, which are higher in category two than in category three, but it was also evident in their behavior as they did the test. EMH and grade 3 students made their decisions quickly about the identical items and wrote their responses immediately and confidently. Grade 6 students were more tentative as they marked their answer sheets, and sometimes changed their responses. It is interesting to note that they scored lower in this category than the two other groups.

Members of all three groups showed more indecisiveness over items which were different, and required more time to decide on the answers, even without the time needed to describe the differences.

Scores in category four, describing the differences, were considerably lower than in any of the other categories, with no one having more than four out of six correct responses, and several students having

Table 1
Auditory Discrimination Test Scores

	Student Numbers									
	1	2	3	4	5	6	7	8	9	10
<u>EMH</u>										
Total correct (11)	9	10	9	11	6	8	8	10	8	8
Identical pairs (5)	4	4	5	5	3	3	5	5	5	4
Different pairs (6)	5	6	4	6	3	5	3	5	3	4
Identified difference (6)	1	4	1	4	0	0	0	0	1	0
<u>Grade 6</u>										
Total correct (11)	7	8	9	9	9	10	11	7	10	8
Identical pairs (5)	3	4	4	5	4	4	5	4	4	4
Different pairs (6)	4	4	5	4	5	6	6	3	6	4
Identified difference (6)	2	3	3	3	2	3	0	2	2	2
<u>Grade 3</u>										
Total correct (11)	11	11	10	11	10	11	9	10	10	10
Identical pairs (5)	5	5	5	5	5	5	4	5	5	4
Different pairs (6)	6	6	5	6	5	6	5	5	5	6
Identified difference (6)	5	4	2	4	1	2	1	3	2	3

Table 2
Auditory Discrimination Test

Mean Raw Scores

	<u>EMH</u>	<u>Grade 6</u>	<u>Grade 3</u>
1. Total number correct, out of 11	8.7	8.7	10.2
2. Number of identical pairs identified, out of 5	4.3	4.1	4.8
3. Number of different pairs identified, out of 6	4.4	4.6	5.4
4. Nature of difference identified, out of 6	1.1	2.1	2.5

Table 3

Auditory Discrimination Test

Number of Students Scoring Correctly on Each Pair

Pairs which were not identical have two numerals in each column. The first numeral denotes the number of students in each group who recognized the pairs as being different. The second numeral indicates how many students were able to describe or label the difference.

<u>Pair Number</u>	<u>EMH</u>	<u>Grade 6</u>	<u>Grade 3</u>
1. Different tempo	9/4	10/8	10/8
2. Same	9	7	9
3. Same	7	7	9
4. Different intensity	8/3	10/4	10/4
5. Different beat	7/0	7/2	8/2
6. Same	9	8	9
7. Different pitch	6/3	6/2	10/5
8. Same	9	10	10
9. Different melody	7/1	9/1	10/4
10. Same	9	9	9
11. Different tonality	8/1	6/2	7/3

one or none correct. Three of the EMH students, and one of the grade 6 students, made no attempt to describe differences in items. It is in this category that the EMH students' lack of musical concepts, experience and vocabulary becomes obvious. They were usually able to distinguish between same and different, but they could not explain the differences. When questioned orally, they would shrug and say, "I don't know; it's just different."

However, two students in this group did answer four of the six questions correctly, while none of the grade 6 students was able to answer that many, which suggests their powers of discrimination are as good as or better than the grade 6 students'.

The grade 3 students scored higher than the other two groups in all four categories. Further investigation would be necessary to establish any reliability for this finding, as the sample in this study is too small, and the number of test items too small to permit generalizations to be made. Nevertheless, it is interesting to speculate on why a group of grade 3 students would perform better in this test than a group of grade 6s, who are three years older and who have had more musical experience. Perhaps the older students, having more musical background, were more analytical and looked for differences which did not exist. It is possible that they had a more sophisticated approach to the test when only simple differentiation skills were needed. A second possibility is that the grade 6 group did not take the test seriously, so were not making as much effort to listen carefully. However, their observed behavior does not support this assumption. If anything, they appeared to be trying harder than the other groups to do well on the test. Another possible explanation is that the older students' aural sensitivity has

already been dulled from frequent listening to very loud rock music.

The six items on the test in which the pairs were not identical were as follows:

- item one: differed in tempo
- item four: differed in loudness
- item five: differed in meter (2/4 and 3/4)
- item seven: differed in pitch
- item nine: differed in melody
- item eleven: differed in tonality

Table 3 shows scores for each group on the six items. All groups did best on item number one, both in knowing that it was different and in explaining how it was different. Item four, loudness, was also easy, although it is surprising that, while 28 of the 30 students knew the phrases were different, only eleven were able to describe the difference. Item 11, in which one phrase was major and the other minor, was the most difficult for the grade 3 and grade 6 students. Eight EMH students answered this item correctly, and one of these was able to describe how it was different, by saying, "It got sad." None of the grade 3 and grade 6 students used the words major and minor, but explained the differences by writing, "It changed from happy to sad," or "You changed a few notes."

Again, because numbers of students and test items were small, one cannot place great significance on these scores. Differences of one or two points could be attributed to chance, or the result of guessing. The scores do support research (Zimmerman, 1968; Petzold, 1966) which states that the ability to discriminate loud/soft and fast/slow are the simplest auditory discrimination skills, while change in tonality is a

more complex factor.

The difference in item number five also was difficult for students to describe. The melody was played first in 2/4 time, then in 3/4 time. Two students in each of the grade 6 and grade 3 groups were able to say the beat was different. Other students who attempted a response said that the second melody was slower or faster.

The main purpose of the auditory discrimination test was to determine if the students, particularly the EMH group, were able to perceive sameness and difference in musical phrases well enough to enable them to make sense of other music listening experiences. The test achieved its purpose in that the results indicated that these discrimination skills are present. The EMH students scored as high as the grade 6 students in category one, and higher than grade 6 students in category two. Their lower score in category four, identifying differences, is possibly due to lack of musical training rather than lack of innate ability.

Individual Interviews and Listening Sessions

Individual Interviews

1. EMH Group. All ten of the EMH students were co-operative and appeared to enjoy their interviews. They were anxious to tell about their families and themselves, and they were curious about the research project. They were not able to volunteer a wealth of information about musical experiences because their experience has been narrow, and some were hampered by limited vocabulary. Upon direct questioning, however, they

were able to give an overall picture of their musical attitudes and preferences. They became more talkative during the listening sessions, and some added more comments after hearing the pieces.

These students all stated that rock music is their favorite type of music. Four of the boys expressed a preference for "heavy metal" groups and named Twisted Sister, Iron Maiden and Judas Priest as their favorites, while girls disliked these groups intensely and listed other rock groups such as Michael Jackson, Madonna and Prince. Seven students said that their parents preferred country music, especially Willie Nelson and Kenny Rogers. Two families played other ethnic music at home, and one student named several artists enjoyed by her parents. Not surprisingly, this girl had more variety in her musical tests as well. She named Lionel Ritchie, Diana Ross, Tina Turner and the Pointer Sisters, as well as the current rock groups, as favorites. She is also the only student of this group who has tapes of her own. Other students listen to the radio, or to their families' records and tapes.

All ten students said that they listen to music "a lot," the favorite time being after school, and the preferred place their own rooms. They all also like to listen when they get up in the morning and when they are working. Six students said they like to listen to their radios or tapes in bed at night.

None of these students spoke at length on school music, other than to say that they like it. Some of the students had had no school music prior to this year, and those who did had learned to sing some songs and play some rhythm instruments.

All ten students stated that they like music and that it is important in their lives. The most frequently stated reason was simply,

"It makes me feel good." Other comments were, "Music is fun: you can sing and dance to it"; "If I listen when I'm mad I feel better"; "It's good if I'm alone or if I have nothing to do." Two students were not able to give a reason. Eight students said they like to dance to their music, but one, a boy, said he will only dance if he is alone. Two students, both boys, said they do not dance. Eight students responded that they also sing with the music, and two of these added that they know all the words to several current songs. All ten stated that it does not matter to them if they listen alone or with others, although one said, "It doesn't matter, but if it's soft music, I like to be alone."

None of the children had ever been to a concert outside school.

2. Grade 6. Grade 6 students were all very interested in the study, and according to their teacher, looked forward to their interviews and discussed them with their classmates afterward. Several asked about the purpose of the project with such questions as "What are you going to do with all this when you take it to the university?" "Are you going to write a book about us?" "Will you let us know what you found out?" Three students brought their favorite tapes to play during the interviews.

When questioned about their preferences, they were able to say exactly why they like them. One played two selections by a group, Rockwell. He knew all the words and said that when he is alone he sings along with the tape. He likes the rhythm and the beat of these selections and said he liked the guitar work. His father plays guitar, so he can appreciate the special effects executed by the guitarist in these works.

Another student played a sad song by Ray Charles and one by Eddie Cruiser. He likes the way Ray Charles plays the piano, and the

words of his songs make him feel sad, but he likes to listen to him.

The third student brought a Roger Whittaker tape and played two of his songs. He was anxious that no one find out that Roger Whittaker is really his favorite musician, as "everybody would think I'm weird." He likes him because he has a good voice, and the words to his songs mean something: "My parents have all his records and we listen to them together. He's good to listen to in the car because he's relaxing."

Nine of the ten students in the group cited rock music as their favorite music, and four enjoy country music as well. One prefers Roger Whittaker but also likes some rock music. Eight students own several tapes of their own. Two own no tapes, but they listen to older siblings' tapes. These two are new Canadians, and their parents listen to music from their own culture. The other eight sets of parents prefer country music, according to the children.

These students, too, like to listen to music "a lot." Several said that they always have music playing. Typical comments were: "I turn my radio on as soon as I get up, and I listen in bed at night until my mother makes me turn it off"; "It's nice to have on after school. I go to my room and spend time alone and listen then"; "I listen while I do my homework."

The girls, especially, like to dance and prefer to listen to the music with their friends, while the boys prefer to listen alone, and will sing and dance when alone.

All ten students said that they feel music is important in their lives, for reasons similar to those given by the EMH students.

Some of their statements were:

1. "It makes me feel better if I'm angry."

2. "It's nice to have if you're alone or if there's nothing to do. Otherwise, I'd be bored a lot."
3. "If I'm lonely it helps me feel better."
4. "I really want to learn to play guitar."
5. "You have to have it at parties."

None of these students had been to a concert outside school. Six students said they like school music and four said it is "O.K." or "not bad." One student stated he enjoys participating in the Kiwanis festival, and others named singing and recorder as favorite activities. Some students expressed a distaste for clapping rhythm patterns, having to do hand signs, and "learning notes."

3. Grade 3. The grade 3 students were co-operative, but generally not as enthusiastic about leaving class to come for their interviews, as were the other two groups. They also did not display any curiosity about the project.

These students all stated that they like music, but they were vague in their statements on preferences. Several stated that they like "Lots of different kinds of music." Typical comments were: "I like some soft and some loud"; "I like fast music best"; "Rock and country and everything"; "I like Cindy Lauper and Madonna and lots of others too." Four students were not able to name specific recording artists. Only two have tapes of their own, while eight said that they listen to whatever is on the radio. Three students were not able to say what music their parents like. Two students said that their parents prefer rock music, while four said their parents like country music best. One student said that his parents do not listen to music.

These students do not appear to have specific preferences about where or when they listen to music, or whether they listen alone or with others. Eight of the ten enjoy school music. They list singing as their favorite musical activity and some of them named several songs from the school music program as favorites. Again, none of these students have been to concerts outside school.

Generally, the grade 3 students had not yet formed firm opinions about music, and appeared to be open to different types. Although they all said that they like music, it does not seem to play a very important part in their lives. Five students said that music is important in their lives, but three could not say why. One student said, "It's nice to listen to," and another said, "It's fun." Four students said that they would rather watch TV than listen to music, and one said that she prefers to play with her friends.

Summary

The observations from this stage of the study seem to indicate that the EMH students' attitudes toward music are similar to those of the grade 6 students, their chronological age peers. Their interest in the study, their preferences, the amount of time they spend on music: all are closer to the experience of this group than to that of the grade 3 students. Both the EMH and grade 6 students had more definite ideas about what they liked and disliked, and their preferences were narrower than those of the grade 3 students.

The main difference in the experience of the EMH students appears to be that they do not own their own tapes and records, largely because they do not all have their own spending money, and they are not

able to go shopping on their own.

Individual Listening Sessions

Each listening session took place after the individual interview, usually after a short break. The musical selections were all on one cassette, which was stopped after each piece so the student could comment, write and answer questions about the music. Students sometimes also spoke and wrote as they listened. Each listening session lasted approximately thirty minutes. After each piece, if the student did not comment, he/she was asked, "How do you feel about this piece? What kind of feeling does the music have for you?" Other questions asked were, "Does it remind you of anything? What sort of picture would you draw or paint, if you were drawing or painting while the music was playing? What kind of movie or TV show do you think this music could go with?" Lastly, they were asked if they liked the piece. It was made clear that they did not have to answer the questions and that it was more helpful to the study for them to say and write nothing than to invent answers.

There were observable differences in the ways in which the children approached the listening task. The EMH students anticipated each piece with curiosity, and four of them especially enjoyed operating the tape recorder. While not as verbal, generally, as the other groups, there was variety in their responses. Some were tentative at first, but gained confidence as they listened and spoke, and realized that there were no "wrong" answers. In some students a lack of vocabulary and of background experience was evident, but they were able to respond to questions. These children also responded physically to the music more

than either of the other two groups. They smiled and frowned, beat time and pretended to be conductors, clapped, swayed, snapped fingers and made faces and "thumbs down" gestures at selections they disliked.

The grade 6 students, on the other hand, were far more restrained in their responses to the music than either of the other two groups. They were co-operative, but, on the whole, not visibly enthusiastic about listening to the selections. Their attitude could suggest indifference, but it is perhaps more likely that it was a result of the self-consciousness which is often seen in pre-adolescent children. They had more highly developed vocabulary skills than did the EMH children, but they did not expand on their responses unless asked to do so. Their only bodily response to the music was a slight smile or a scowl, and some light pencil-tapping to the beat of "Thank the Lord for the Nighttime."

Grade 3s had a different approach to the listening task from the other two groups. As stated before, they did not appear to be as interested as the other students in their interviews. However, they tended to become very involved in the listening session, and were the most verbal of the three groups in describing their reactions to the music. They appeared to be open to accepting different styles of music, and their comments were, on the whole, the most creative of the three groups. Their facial expressions varied and changed as they listened, and some children closed their eyes for short periods, tapped their feet or swayed back and forth to the beat. They did not move as much as most of the EMH group, but they were certainly more physically involved than were the grade 6 students.

Grade 3 students appeared to have the openness of the EMH students, but their vocabulary skills are closer to those of the grade 6

group, so that they were better able to express themselves. It is possible, too, that they have more highly developed imaginations than do the EMH students, because of a richer background of educational and social experiences. They have also not yet reached adolescence, a period in which conformity to the peer group becomes extremely important to the child.

The next section of this chapter presents discussion of the three groups' affective responses to the music in terms of the three tasks:

1. describing the feeling of the music
2. describing the images evoked by the music
3. rating the music in terms of liking, dislike or indifference

1. Describing the Feeling of the Music. The students were asked to think, as they listened, about what kind of feeling the music had. The ~~wording~~ "What kind of feeling does this piece have for you?" was used rather than "How does this piece make you feel?" because music can have a happy or exciting or sad feeling without causing the listener to feel happy or sad. Conversely, music can cause a person to feel sad or angry or happy, depending on what association that particular music has for the listener, and also depending on what mood the listener is in at the time.

Overall, students used the word "happy" more than any other, to describe the feeling of the music. Selections were thought to have a happy feeling in 47 instances. The next most frequent response was "sad," with 34 responses, followed by "boring," with 26 responses. Both the EMH and grade 3 groups followed this pattern, but grade 6 did not, as Table 4 below shows.

Table 4

Responses to Describing the Feeling of the Music

	<u>EMH</u>	<u>Grade 6</u>	<u>Grade 3</u>
happy	23	12	22
sad	8	13	13
boring	12	10	4
no feeling	4	8	8

A more detailed frequency count of responses appears in Table 5 on p. 70. Grade 6 students used the happy response less frequently than grade 3 or EMH students, and they used it less than they used sad. The difference in response is evident in "The Swan" in which four EMH students and two grade 3 students, but no grade 6 student, used "happy." Several grade 6 and grade 3 students, but only two EMH students, used "sad" for this piece. Three EMH students, but no one else, thought that "Sakura" has a happy feeling. These two examples, while only a small sample, suggest that the grade 6 group, and to some extent the grade 3s, are already conforming to stereotyped concepts which assume that slow music is sad or boring, music in a minor key is sad, and fast music is happy. EMH students do not show as much evidence of having acquired these patterns, perhaps because they have not been exposed to as many different types of music, or they have not heard slow music associated with sad events as much as have others.

Limited vocabulary skills may also be a factor in their using "happy" more than any other word. It is commonly learned earlier than "sad" and other adjectives, and appears in primary readers frequently.

Table 5

"What Feeling Does the Music Have?" (Individual)

	happy	sad	relax- ing	excit- ing	angry	boring	ener- getic	noth- ing	Other
Swan									
Side 6	4	2	1	2	1	1	0	lonely (1)	
Side 3	0	5	3	1	0	0	0	disgusted	
percussion	2	6	1	1	0	0	0		
Side 6	4	0	2	1	2	1	2	scared (1)	
Side 3	1	0	0	4	1	1	3	nervous (1)	
Side of Denmark	1	0	0	0	1	1	3	scared (2) weird (1) funny (1)	
Side 6	5	0	1	2	1	1	1	scared (1)	
Side 3	4	1	1	3	0	2	2		
Side 6	5	0	0	0	0	1	0	proud (1)	
Side 3	0	0	0	0	0	1	0		
Side 6	5	0	1	1	2	1	1	crazy (1)	
Side 3	5	0	0	0	0	5	1	shaky (1)	
Side 6	6	0	1	1	1	0	0	good (1)	
Side 3	0	0	0	0	0	0	0		
Side 6	3	3	0	1	2	1	1	depressed (1) romantic (1) nice (1)	
Side 3	5	5	3	3	0	3	1	nervous (1) tired (1) horrid (1)	
Side 6	3	3	1	1	1	1	2	nervous (1) weird (1) dancy (1)	
Side 3	0	0	0	0	0	0	0		
Square Dance									
Side 6	2	1	1	1	1	3	2	bad mood	
Side 3	1	1	3	5	1	1	1	motionless (1)	
Side 6	7	3	1	1	1	1	1		
Side 3	1	2	1	1	1	1	1	peaceful (1) romantic (1) good (1)	
Side 6	1	2	2	2	2	2	1	good (1) like dancing (1)	
Side 3	2	4	1	1	1	1	1	stupid (1)	

"Unsquare Dance" elicited a "happy" response from seven grade 3s, but only one grade 6 and two EMH students. However, five grade 6s thought the piece had an energetic feeling, a response also chosen by two EMH students.

The most agreement occurs in the two selections which were also the most popular: "Prince of Denmark" and "Thank the Lord for the Nighttime," with most students in all groups using "happy," "energetic" or "excited" to describe the feeling of the music. There was only one "sad" response to these two selections. One grade 6 girl thought "Prince of Denmark" had a sad feeling; but then added, "But it's partly happy, too." These two pieces also had the smallest number of "bored" or "nothing" responses.

In 19 instances, students said or wrote that the music had no feeling for them. EMH students used this response only three times, compared to eight times for each of the other two groups. As might be expected, 11 of the "no feeling" responses were to pieces for which the students felt indifference. The other eight were for pieces which the students liked. The "no feeling" response was used eight times in reference to "Percussion: Allegro," while it was not used more than one or two times with any of the others. The three groups were similar in this respect. "Percussion: Allegro" was the only selection which had no melody, which suggests that it is difficult to attach a feeling to music which does not contain a melodic element.

Sometimes students expressed ambivalence about feelings, as the examples below show:

EMH student: "The Swan": A person dancing sadly. It's happy

Grade 6: "Percussion: Allegro": Makes me feel both sad and happy.

"Prince of Denmark" (same student): It makes me happy and sad.

"Pachelbel Canon": A sad movie: makes me a little bit happy.

Grade 3 students: "The Swan": It's sad music, but a happy dance.

"Pachelbel Canon": Makes me happy but nervous.

"Pachelbel Canon": It kind of puts me in a good mood like ballet, but I kind of don't like it. It has a boring feeling.

The above comments suggest that these students are aware that conflicting feelings can occur simultaneously, a fairly complex emotion which at least some EMH students can express. Others may have complex emotions but have trouble expressing them.

Two EMH students spoke about how music could affect their moods. Both students were referring to the "Pachelbel Canon." A girl who liked the piece said, "Could do ballet to this. It would make me feel better if I were depressed." A boy who disliked it said, "It's sad. If I felt bad and listened to that it'd make me feel worse." A grade 3 boy made an astute comment when referring to "Sakura": "This is sad but I still like it. Whether the music makes you feel good or bad depends on how you were feeling before." These comments were not in response to a specific question about changing moods; they were part of the students' general answers to the question, "What feeling does the music have?" indicating that they are aware of their moods and how music can affect them.

few differences among the three groups in actual words used to describe feelings. It had been assumed that the grade 6 group, having superior vocabulary skills, would have more variety in their choice of words, but this was not so. In each of the three groups, the students relied on seven common adjectives: happy, sad, relaxing, exciting, angry, boring and energetic. Apart from these, the grade 3 and EMH groups each used nine other adjectives, and grade 6 used eight other adjectives.

One student should be mentioned separately at this point.

Student No. 10 in the EMH group, a boy, did not respond to the task in the same manner as did the other children. He appeared to be functioning at a lower intellectual/emotional level than the rest of the group, and did not attempt to really listen to the music and think about its feeling. He said that every piece was "happy," as soon as it began playing.

To summarize the findings from the question "What feeling does the music have?" in relation to comparing the EMH students to each of the other groups, it appears that EMH students, their chronological age peers and their mental age peers respond to the feeling aspect of music in similar ways. They usually use the same words to describe the feelings conveyed by different styles of music, although the EMH students described more music as being "happy" than did the others.

Three or four students in each group offered additional insights about mood in music. One EMH student and three students in each of the other groups spoke of some music as evoking conflicting feelings, and two EMH students and one grade 3 student commented on how music can change or intensify a mood.

2. Describing the Images Evoked by the Music. The students appeared to enjoy this portion of the listening session. Student number 10 in the EMH group, the boy who answered "happy" when describing the feeling of the music, is the only student who did not seem to understand the process. When asked about images, he merely looked around the room and named one of the animals pictured on posters on the wall, even if the questions were phrased in several different ways. He was very eager to please, and tried to answer questions before they were finished being asked, so that he did not take the time to listen or to think about the music. Therefore, his answers to this portion of the listening task are not being considered in the discussion.

Students from all the groups associated a wide variety of images with the music. Some children were very definite about what the music portrayed for them, and described their images in great detail. Others did not elaborate on their descriptions. Examples of both approaches could be observed in all groups, but generally the grade 3 students were the most verbal and most definite about their images, the EMH students were the least verbal, but most expressive physically, and the grade 6s were the most passive.

Some students showed certain patterns of thought in their responses. One EMH girl had romantic associations for every selection except "Sakura." Her images all included people holding hands, kissing, or dancing or getting married. She would add details about the setting and the characters, such as, "They are very, very happy." In describing "Prince of Denmark," she said:

"This is a queen or princess getting married. They're coming up the aisle in the church and everybody's looking at her. The

her flowers and they get into a car with cans tied to the back. If I painted this it would be with nice pale colors."

Student number 4 in the EMH group, a boy who disliked most of the music, had no images for three of the selections, and very brief ones such as "night" or "people clapping" for three others. His only different response was for "Prince of Denmark," which he said was "like people going into the woods to shoot deer and buffalo." It is interesting that his response to this piece is completely different from his other responses and also that it differs from all the other students' ideas about "Prince of Denmark," which reminded everyone else of royalty, parades, weddings or patriotic events.

One other EMH student, a girl, just described people playing the instruments heard in the music for the pieces. For example, about "Pachelbel Canon" she said: "It's some men playing violins and things," and for "Unsquare Dance": "I hate that: those sticks make me nervous. But I'd paint a man playing sticks and clapping." She deviated from her pattern once, for "The Swan," which she described as reminding her of "a nice horse standing in a barn and it's a nice sunny hot day."

One grade 6 girl associated each selection with different movies which she had seen. "Percussion: Allegro" reminded her of "Jaws," the "Pachelbel Canon" of "Flashdance," and so on.

Apart from the examples mentioned above, the students approached each selection differently and used a wide variety of ideas in their descriptions. Some pieces elicited very similar responses from all students. "Prince of Denmark," as mentioned earlier, is one of these. Another one was "Unsquare Dance," which reminded almost all students of people dancing, clapping or having parties. These patterns will be

discussed more fully in the section which examines each selection separately in terms of student responses.

In four instances, different EMH students had no images for the music. Two students had no images for "Unsquare Dance" and one of these also had no response to the "Pachelbel Canon." A third student had no response to "The Swan." In the grade 6 group, there were five instances of no response, and in the grade 3 group, just one instance, which could suggest that the grade 3 students on the whole were being slightly more imaginative or perhaps were more enthusiastic about the task.

Slow pieces, which were the least popular with the children, and which they most often described as sad or boring, evoked a wider variety of ideas than did the more popular, upbeat ones. This was true of all the groups.

Generally, in comparing responses among the three groups, no definite patterns emerge. All groups use animals, people making music, parades and nature images in their responses. The EMH students appear to respond similarly to the other students in describing images, although not always in as great detail, as grade 3 students. Grade 6 students had the greatest number of original ideas but they tended not to expand on them. Grade 3 students, on the other hand, did not describe many unusual images, but they elaborated on their ideas, adding details and comments.

One interesting feature of the EMH students' responses is that they made frequent use of the first person, and personalized their stories and images by including themselves or family members in their descriptions, as shown in the following examples:

"This is like when I was a baby and my mom played music for me."

". . . My brother is playing drums."

". . . Me and my sister are dancing."

". . . My mother died."

In order to present some examples of the groups' tendencies described above, each selection will now be discussed separately, in terms of the different responses from each group.

"The Swan":

"The Swan" evoked feelings of sadness more than did any other selection. Fifteen students thought the music was sad, lonely or depressing, and six thought it was happy. No pattern of images is prominent in the responses to this piece, although seven students mentioned dancers. This was one of the least popular selections overall. Only five students disliked it, but fourteen felt indifference toward it. However, it was one of the favorites with the EMH children.

"Percussion: Allegro":

This piece has no melody. It features several percussion instruments repeating simple and complicated rhythm patterns of varying intensity. Most of the children were puzzled or amused by it, and several remarked that it did not seem to be real music because it has no tune. Some found it irritating and said that it made them nervous. The images described were dramatic: police chases, haunted houses, a dragon fight, a monster, a spaceship blasting off. The rhythmic intensity of the piece seems to convey tension and excitement. It was the second least popular selection overall, with seven students disliking it, and twelve

"Prince of Denmark":

"Prince of Denmark" was very popular with the children. It was the favorite of the grade 3 group, and was second with grade 6. There was a pattern of responses to this piece. The trumpets and the style of music reminded the listeners of parades, wedding processions, patriotic events, royalty and big orchestras. The only student who disliked the piece, an EMH girl, said that it made her feel scared. This was the only piece which student No. 4 in the EMH group did not dislike.

Students reacted physically to the piece by beating time, pretending to be conductors or by marching. Several made comments such as, "This is really nice"; "You're finally playing some good music"; "The trumpet sounds so nice." One grade 3 boy said, "It reminds me of CBC Sunday Morning," referring to the theme song of that program, which is also in a baroque style and features trumpets. One EMH girl said, "It makes me think there'll be no more war." This is the only selection which EMH student No. 10 spoke about, other than to name an animal. While listening to "Prince of Denmark," he said, "This is good stuff."

"Thank the Lord for the Nighttime":

This selection is the most similar in style to current rock music, so it is not surprising that it was the most popular piece overall, and especially with grade 6. Interestingly, the three students who disliked it, disliked it intensely, commenting, "I hate this music"; "This makes me angry"; or "This would put me in a bad mood." Most images were related to singers, guitar players and dancers. A biker, a cowboy and a truck driver were also mentioned.

"Sakura":

The reactions to this selection were varied. It was the least popular with all the groups: only four students liked it. Yet it had the broadest range of comments and images from the students. Grade 6 students, especially, had more original thoughts about this piece than about others. For example:

"It reminds me of a Siamese cat; the way they move, you never know what they will do next: they're mysterious."

". . . It's sort of like mushrooms dancing." (Student would not elaborate on this.)

". . . It's very sad: reminds me of people being divorced."

". . . It makes me think of someone suffering from not having enough food."

At least one student from each group perceived the music as having an Oriental sound, and made the following associations:

EMH: A Chinese girl playing a harp.

Grade 6: Chinese dancing; someone died.

Grade 3: A girl in China dancing. (2 students)

A Chinese band.

People doing a dragon dance.

Other images which occurred in each group were death, rain and loneliness.

One grade 3 student said that he was reminded of an operating room, because the theme made him think of a heart monitoring machine.

Two students had no images for the piece.

"Unsquare Dance":

"Unsquare Dance," a jazz piece, was the third most popular piece overall. Most children liked its novel rhythms and the jazzy piano style. However, as in "Thank the Lord for the Nighttime," children who did not like it had strong feelings about it, usually saying that all the clapping "got on their nerves" or got tiresome.

The piece did not inspire creative comments or many different images. Five students had no images for it. Almost all the students who did have ideas were reminded of people clapping, dancing and playing instruments. One EMH child said it was like a butterfly flying to different flowers, and one grade 3 boy was reminded of Peter Pan.

Several students noticed the unusual 7/4 meter. They were not able to analyze how it was different from other music, but would give up trying to clap or otherwise keep the beat, and two grade 6 students commented, "This has a weird beat." One said, "How could you keep time to this, anyway?" Another boy said that it made him feel motionless, his way of saying he could not move to it and keep time.

"Pachelbel Canon":

This piece elicited nature ideas from several students. Some examples are shown below:

EMH: ". . . The sun is up, there are flowers and birds,
I'm swaying back and forth."

". . . A rainbow; a boat in the middle of a blue lake."

Grade 6: ". . . a kite gliding in the air."

". . . birds gliding in the air."

"... lightning and tears." (The student would not expand on this idea.)

Grade 3: Trees swaying in the wind.

"... sitting outside on a nice day; grass, birds."

"... forest with flowers and animals."

Four students mentioned dancers.

Most EMH students enjoyed listening to the "Canon," but only one grade 6 student liked it, and seven students were indifferent. Despite the pleasant images, only four students felt that the music had a happy feeling. Others described it as being peaceful, romantic or relaxing, but eight students felt that it was sad.

Summary sheets showing images, feelings and ratings for each of the seven selections appear in Appendix H.

To summarize the findings from the second listening task, "describing the images evoked by the music," in terms of comparing the EMH students to the other two groups, there are fewer discernible differences between groups than there are between individual students in each group.

The following tendencies were evident:

1. EMH students' images were as varied as those of the other students, but they were not as verbal as the others in their descriptions.
2. Grade 3 students gave more detail in their descriptions than either of the other two groups.
3. EMH students personalized their descriptions more than the

4. Some selections prompted very similar responses from most students, regardless of which group they were in.

3. Rating the Selections. After listening to each selection, making comments and answering questions about moods and images suggested by the music, each student was asked to rate the piece, using one of three words: like, indifferent or dislike.

Table 6 on p. 83 shows a frequency count of responses to each selection, for each group. As the figures show, there are distinct differences among the groups in how they rated the music. EMH students used the "like" rating in 40 instances out of a total of 70 items. It was the most frequent response within their own group, and it was also used more by this group than by either of the others.

The EMH children also used the "dislike" response more than the other groups, although the frequency was low for all groups. One student was responsible for six of the "dislike" responses, as he disliked all the selections intensely, except "Prince of Denmark," to which he was indifferent. He is the only student of the total of thirty who never used the "like" rating. Two other students in the group did not dislike any pieces. The other seven students used all three responses in their ratings.

"Indifferent" responses occurred the least frequently with the EMH group, with only 14 of a possible 70 items being so rated, compared with 34 for grade 6 and 24 for grade 3.

Two pieces, "The Swan" and "Pachelbel Canon," which had the highest number of "like" responses from EMH students, were among the

Table 6

Distribution of Like, Indifferent and Dislike Responses
Individual Interviews

	E.M.H.			Grade 6			Grade 3		
	L	I	D	L	I	D	L	I	D
1. The Swan	7	1	2	0	8	2	4	5	1
2. Percussion: Allegro	6	3	1	1	6	3	4	3	3
3. Prince of Denmark	6	2	2	7	3	0	8	2	0
4. Thank the Lord	7	1	2	9	1	0	6	3	1
5. Sakura	2	4	4	0	5	5	2	6	2
6. Unsquare Dance	5	3	2	6	4	0	6	2	2
7. Pachelbel Canon	7	0	3	1	7	2	5	2	2
	40	14	16	24	34	12	35	24	11

L = Like
I = Indifferent
D = Dislike

The most frequent response from the grade 6 group was "indifferent." Grade 6 students used this response 34 times, which represents nearly half the items. There are two pieces, both slow in tempo, which no one in the group liked, and three pieces all with a fairly fast tempo, which no one disliked. Therefore, in five of the seven selections, the students in grade 6 used only two responses.

The grade 3 group's responses differ from both of the other two groups, although their distribution of responses resembles that of the EMH group more than that of grade 6. They used a "like" response more frequently than grade 6s did, but not as often as the EMH group, and they used the indifferent response more often than the EMH group, but less frequently than grade 6. Figure 1 on p. 85 presents, in the form of bar graphs, the same information contained in Table 6 on p. 83. These graphs help to clarify some of the similarities and differences in type of responses between the groups.

In order to assess the pieces in terms of group preferences, numerical values were assigned to the ratings. Each "like" response was given three points, each "indifferent" response, two points, and a "dislike" response, one point.

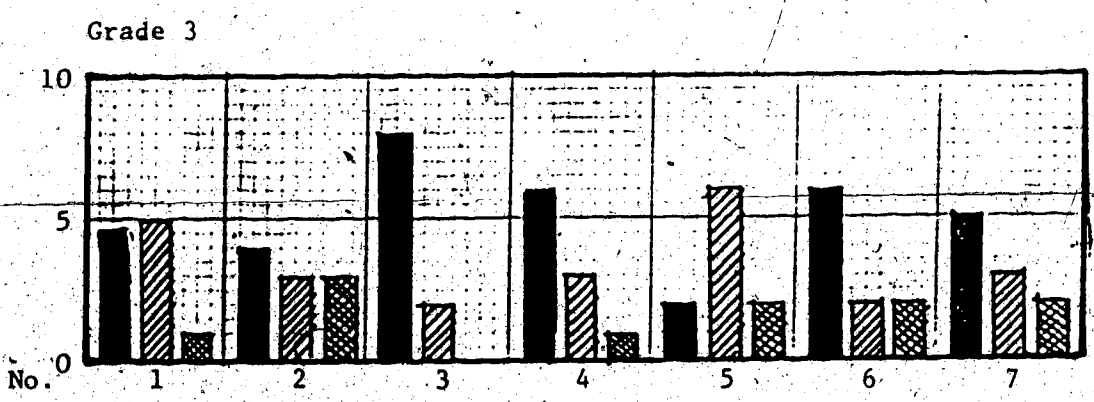
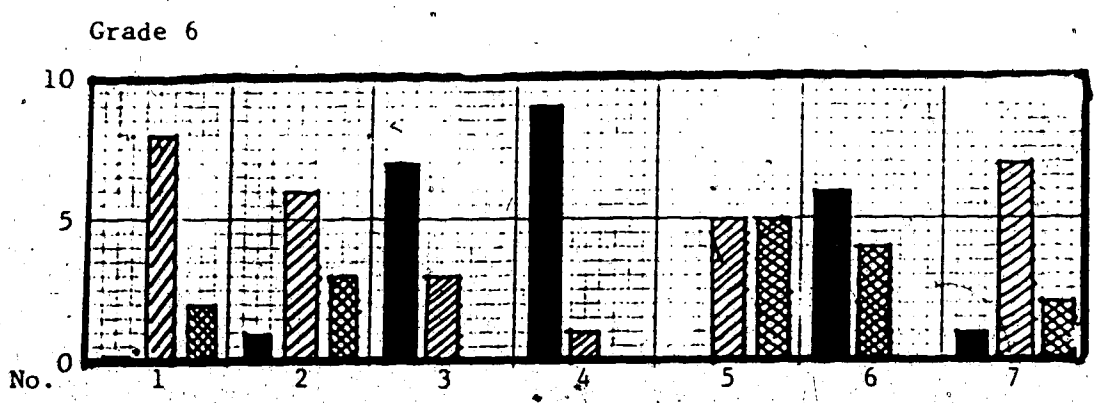
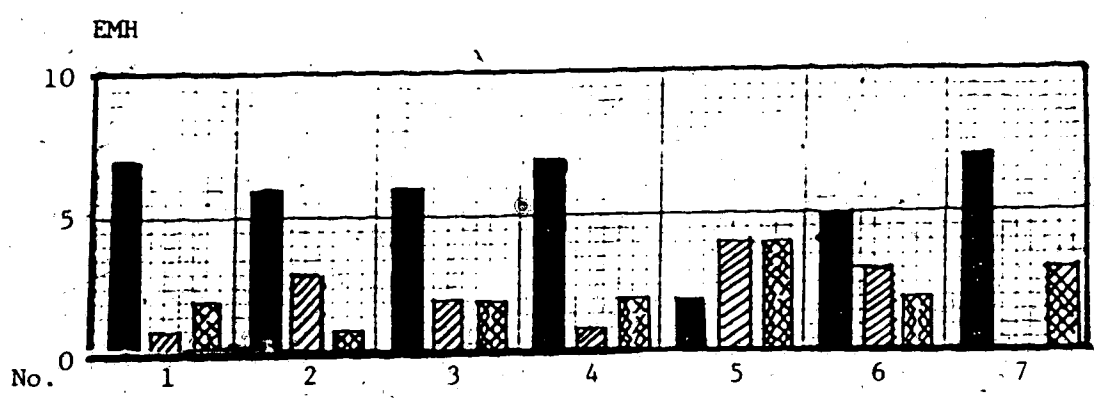
Table 7 on p. 86 shows the ratings of each selection for each group. The EMH group had the smallest range in preferences, with six pieces having between 23 and 25 points. "Sakura," with only 18 points, was clearly their least popular piece.

This contrasts with the range of the grade 6 group, which is 14 points, between "Thank the Lord for the Nighttime" with 29 points, and "Sakura" with 15. Grade 6 scores fall into two distinct groups. The first group contains the three favorite pieces with 29, 27 and 26 points,

Figure 1

Distribution of Like, Indifferent and Dislike Responses

Individual Interviews






Like  Dislike  Indifferent 

Table 7
 Ratings of Selections by Each Group
 Individual Interviews

	E.M.H.	Grade 6	Grade 3	Total
1. The Swan	25	18	23	66
2. Percussion: Allegro	25	18	21	64
3. Prince of Denmark	24	27	28	79
4. Thank the Lord	25	29	25	79
5. Sakura	18	15	20	53
6. Unsquare Dance	23	26	26	75
7. Pachelbel Canon	24	18	23	65
Total	164	151	166	481
Range	7	14	8	

and the second group has four pieces, three each with 18 points and one with 15.

It was expected that the group which was the most indifferent to the music would have the smallest range in ratings, but such was not the case. Grade 6 students were indifferent in many instances, but they all liked or disliked the same pieces, creating high and low scores. Nine grade 6 students liked "Thank the Lord for the Nighttime," and no one disliked it. On the other hand, no one liked "Sakura," and five students disliked it. This high rate of group agreement among the grade 6s, which suggests that they have acquired some stereotyped attitudes to music, created greater extremes in scores.

In the other two groups points were distributed more evenly, since students liked and disliked different selections.

The grade 3 group, again, in this respect lies between the EMH and the grade 6 groups. Their range is just one greater than that of the EMH group, but the seven scores are evenly distributed from 20 to 28. Their favorite piece is clearly "Prince of Denmark," which eight students liked and no one disliked. In this group, as in the grade 6 group, a tendency to prefer fast over slow music is apparent. The three highest scores are, as in grade 6, "Prince of Denmark," "Unsquare Dance," and "Thank the Lord for the Nighttime," all of which have fairly fast tempi as well as a strong beat. "Sakura," besides having a slow beat, is in a minor tonality, which many students felt is sad or boring.

Again, there were observable differences in the manner in which children of the different groups made their choices. EMH students decided quickly whether they liked a piece, often as soon as it started playing, but they sometimes changed their minds while talking about it.

They were very emphatic about music they disliked, commenting, "I just hate this"; or "Good, that one's over." Their facial expression changed as they listened, reflecting their reactions to the music.

The grade 6 students were co-operative, but not enthusiastic, about this part of the listening task. They too, did not take much time to decide on their responses. They did not make extra comments, did not move around, and their facial expressions changed very little.

Grade 3 students tended to "think out loud" about their decisions before marking their responses, with comments such as, "That's a good one"; "I really like this one"; and "Well, I sort of like that, but not really." One boy said of "Thank the Lord for the Nighttime," "Well, I don't really like it, but it would put me in a happy mood." He decided that he was indifferent to the piece.

With the grade 3 group, more than the others, it seemed that when the "indifferent" response was chosen, it was because the students could not decide whether they disliked a piece, or because they liked one part of a selection and not another. This was true of some EMH children as well. Grade 6 students, however, really did appear to be indifferent to the music when they chose that response.

To summarize findings from the third task, rating the selections: EMH students' responses were closer to those of grade 3 students than to those of grade 6. Both EMH and grade 3 students used a "like" response more than any other response, while grade 6 students used the "indifferent" response most often.

Group Interviews and Listening Sessions

Group Interviews

A week after completion of the individual listening sessions, the students in each group were interviewed together in their own classrooms. The EMH class consisted of the ten students chosen for the actual study, plus the student previously mentioned in Chapter I who had not been included. The grade 6 group and the grade 3 group discussions each included the whole class. The class members who had not been part of the actual study groups were eager to learn about the study and to contribute their input. The remarks of the original group members were specifically noted so that they could be compared with comments they had made during individual sessions. Other student input was recorded and the data considered as additional information which was useful in making generalizations and drawing conclusions about responses to music in the different age groups.

1. EMH Group. The EMH students gradually separated into two distinct groups during the group discussion and listening session, with the boys forming one group and the girls the other. The students named the same groups and artists that they had mentioned previously, but with the boys expressing a strong preference for the "heavy metal" groups, and the girls naming female vocalists such as Madonna, Cindy Lauper, and Tina Turner. The boys looked to Student No. 4 for leadership. He was the one who had disliked all the music earlier, and the other boys echoed his preferences in the group situation.

The girls did not appear to have a leader, but they were

unanimous in criticizing the boys' choices of favorite artists. The girls all agreed that they enjoy country music, and some "romantic" music, a statement which caused the boys considerable amusement.

The students' comments during the group interviews were largely consistent with what they had stated in their individual interviews.

They spoke of listening to music with their families and friends, and of sometimes preferring to be alone when they listened. They all agreed that they like to dance to music, although in individual interviews some had stated that they do not dance.

Three of the boys stated that they enjoy watching rock videos. The other students were indifferent to them, and one girl said, "Rock videos are bad for you."

The students agreed that they like school music, especially singing songs, and playing rhythm instruments. The girls, but not the boys, said they would like to learn some dances.

All the children reiterated their feeling that music is important to them, but not all could say why. As in the individual interviews, they made general comments, as in the examples shown below:

"I don't know, but I really like music."

"It makes me so happy."

"It has such a nice sound."

"Music makes me want to boogie."

"I want to learn to play in a band."

In this group discussion, peer influence was very evident, especially among the boys. Four of the boys would look at Student No. 4 and wait for his comments before making their own, which always echoed his. The girls also agreed with each other, but no one girl stood out as leader.

2. Grade 6. The students listed the same groups as favorites as they had in their individual interviews. Some discussion centered on groups whose song lyrics often contain themes of violence, sex, drugs and suicide. Some students said that their parents are concerned about the effects of listening to such music over long periods of time, and one girl stated that listening to these groups all day "isn't good for you." Several girls and two boys agreed with her. Others felt that the words are not to be taken seriously, and that no one listens to them. One boy stated, "I listen to it for the beat and the music; I like the guitars. I don't pay any attention to the words."

There was also discussion of rock videos, which several students say they watch every day after school. Again, students told of parents' concerns, and three students reported that they are not allowed to watch rock videos, and that they agree with their parents. Other students felt that they are harmless. One boy said, "They help you enjoy the songs more because once you've seen the video, when you hear the song you can see the pictures in your mind." Another boy stated, "Some of them are really sick, but they'd never make me act different than I already am. Sometimes I just watch and wonder what they'll think of next."

There was general agreement that listening to hard rock music or watching videos over long periods could perhaps affect some people in negative ways, but that this could happen only if they already had abnormal tendencies. ~~No students in the class felt that they, personally,~~ could be adversely affected by rock music or videos.

In response to other questions, most students said they own several tapes, that they like to listen to music alone in their rooms, or with their friends outside. About half the students said that they sing

along with their music, and more than half said that they sometimes move or dance to the music. These responses were all similar to those in the individual sessions.

In reference to school music, students stated that they enjoy singing, when they have good songs. They named several folksongs of other countries, "Consider Yourself" from "Oliver," and some strongly rhythmic spiritual/gospel songs from the grade 6 program as examples. They said that they enjoy adding instruments to their singing, and most also enjoy learning folk dances. Several children expressed a dislike of activities involving hand signs and solfège.

All students who expressed opinions on the subject agreed that music is important in their lives. Some comments were: "It would be awfully quiet without it!"; "I have it on all the time: sometimes I don't really notice it, but I miss it when I can't have it."

The class group included students who take or have taken music lessons. Some of these stated that they really enjoy learning music, while others say that they do not like the lessons or practising, but they think they will be glad to have their skills when they get older.

The class appeared to enjoy the discussion, and several children voiced varying opinions on the topics. Those who spoke did not seem to feel under pressure to agree with their classmates. However, several children did not volunteer any comments.

When naming favorite artists and types of music, there was a very narrow range of responses, suggesting that either the students actually do like only current rock stars, or that they are shy about admitting a preference for other types of music in front of their classmates. There is just one example of possible peer group pressure: the

boy who named Roger Whittaker as his favorite singer in his individual interview did not mention him in the group situation. These responses support research findings of Nolin (1973), LeBlanc (1979), Greer (1974), who report that as children grow into adolescence, their musical preferences narrow.

3. Grade 3. The grade 3 group discussion took place in the classroom, with all class members being included, as in the grade 6 group. Generally, the children expressed the same opinions and displayed the same attitudes in this setting as they had in their individual interviews. They agreed that they like to listen to music, but they did not exhibit strong preferences for one type of music over another. A few children own tapes of artists such as Anne Murray, Kenny Rogers and Michael Jackson. Instead of mentioning specific artists, these students would speak about characteristics of music, saying, "I like fast, lively longs"; or "I like music with a good beat"; or "I like nice soft, quiet music." Their comments suggest that their musical preferences are still unformed and that these attitudes are more flexible at this point than those of either the EMH or the grade 6 group.

There seemed to be consensus that punk and heavy metal groups were "sick" or "stupid" and they criticized their older siblings' devotion to such groups, repeating comments they had heard from their parents, about "bad words in the songs."

When asked if they like to sing or dance to their music, about half the students said they sing along with music at times, but there was general laughter at the mention of dancing. Later, a few students said they dance a little to music.

This class was enthusiastic about school music. They said they especially like singing, using rhythm instruments, and learning about the instruments of the orchestra. They were able to name several of their favorite songs from the school music program, ranging from lively action songs, to folk tunes, both slow and fast.

Students in this class said that music is important in their lives, although they were not as emphatic about it as grade 6 students.

Some of the comments were:

"Well, it's really nice to have music on the radio because it's happy. If you're alone you don't feel alone, really."

"It's nice to be able to play or sing when you're happy."

"It's nice to have at church, and at concerts, and when you have weddings and things like that."

"It's nice, but you need sports more."

"I don't really need it, I don't think."

The grade 3 children appeared to be very relaxed and open in their approach to the group discussion. Some students were not interested and did not contribute, but other students voiced their opinions freely and did not seem to be looking to any person or to the group for direction or approval. There was little real disagreement about the value of music and the students did not appear to feel strongly enough about specific types of music or artists to be concerned about conforming to the group.

Summary

The EMH children's expressed attitudes in the group interviews were closer to those of their chronological peers, the grade 6 students,

than those of the grade 3s. Both EMH and grade 6 students spoke of spending a large part of their leisure time in listening to music, both groups have very specific preferences in popular music, and students from both groups are familiar with current rock and country groups. The grade 3 students, on the other hand, do not appear to have yet developed strong preferences for one type of music. They can still relate to what is commonly called "children's music," so they enjoy the music from their school music program more than the older children do. The EMH and grade 6 students seem to have left behind the world of children's music for the commercially successful music which is produced for the adolescent and young adult market.

Group Listening Sessions

In this section, responses from the group listening sessions for each group are presented and compared to results of individual sessions. Rather than comparing results among the three groups, these comparisons will concern differences within each group between the individual and group sessions.

The group listening sessions were held in the groups' classrooms, with the whole class participating. Only the data from the ten students of each class who were actually participating in the study are used in comparisons between the group sessions and individual sessions.

The children were encouraged to discuss the music as they listened, and to share their opinions before writing their responses. Their responses and ratings appear in Tables 8 and 9 on pp. 96 and 97.

Table 8.

Distribution of Like, Indifferent and Dislike Responses

Group Interviews

	E.M.H.			Grade 6			Grade 3		
	L	I	D	L	I	D	L	I	D
1. The Swan	5	4	1	1	4	5	5	4	1
2. Allegro (Percussion)	9	0	1	0	9	1	5	2	3
3. Prince of Denmark	10	0	0	9	1	0	7	2	1
4. Thank the Lord	7	2	1	9	1	0	6	2	2
5. Sakura	0	3	7	1	5	4	2	5	3
6. Unsquare Dance	8	1	1	5	5	0	6	3	1
7. Pachelbel Canon	10	0	0	1	6	3	5	4	1
	49	10	11	26	31	13	36	22	12

Table 9
 Ratings of Selections by Each Group
 Group Interviews

	E.M.H.	Grade 6	Grade 3	Total
1. The Swan	24	16	24	64
2. Allegro (Percussion)	28	19	22	69
3. Prince of Denmark	30	29	26	85
4. Thank the Lord	26	29	24	79
5. Sakura	13	17	19	49
6. Unsquare Dance	27	25	25	77
7. Pachelbel Canon	30	18	24	72
Total	178	153	164	495
Range	17	13	7	

1. EMH Group. The EMH students had considerable interaction while listening, and displayed strong feelings about some of the selections. The split between girls and boys remained during discussion of images and feelings, because the boys were making fun of the girls' responses, and teasing them with remarks such as, "This music reminds me of ugly girls." The girls were annoyed because they took the listening tasks seriously. They were embarrassed by the boys' behavior, although it was not disruptive and did not last long.

In answer to the first question, "What feeling does the music have?" there were a number of changes, as shown in Table 10 on p. 99. The biggest changes were in "The Swan," "Unsquare Dance" and "Pachelbel Canon." In the case of "The Swan," four children who had thought it had a happy feeling in the individual interviews changed their responses to sad or relaxing, and one who had previously thought of it as sad found it boring in the group situation. Eight students rated the "Pachelbel Canon" as having a happy feeling in the group situation, in contrast to only one in the individual interviews. This was obviously a result of group interaction, as one girl said as she listened, "Oh, this is nice. It makes you think of a bright sunny day, and flowers waving back and forth. It makes me happy!" The other students all agreed, and added other images. Similar interactions took place with other selections.

Some responses did not change. The two students who said in the individual sessions that "Thank the Lord for the Nighttime" made them angry had the same feeling in the group session, and the two who had previously found "Prince of Denmark" boring still found it boring in the group, although they now liked it.

In the second task, describing images and feelings, the students

Table 10

"What Feeling Does the Music Have?"

EMH Students' Responses in Individual and Group Sessions

	happy	sad	relax- ing	excit- ing	angry	boring	ener- getic	noth- ing	Other
The Swan									
Individual	4	3	1		2			1	
Group	4	4	3		3				
Percussion									
Individual	4	0	2		1		2	scared (1)	
Group	3		4	1		3			
Prince of Denmark									
Individual	5	0	1	2	2	1		scared (1)	
Group	6		4	4	2			neat (4)	
Thank the Lord									
Individual	5	0	1	1	2	1		crazy (1)	
Group	4			2	2	2		weird (3)	
Sakura									
Individual	3	3			1			depressed (1) romantic (1) nice (1)	
Group	5	5			5			strange (2)	
Unsquare Dance									
Individual	2		1	1	1	3	2	bad mood (1)	
Group	7				3			jumpy (1)	
Pachelbel Canon									
Individual	1	2	1	1	1	1		peaceful (1) romantic (1) good (1)	
Group	8	2						nice (8) peaceful (1)	

remembered much of what they had said in their individual sessions and repeated it, with some additions. The whole group agreed that "Percussion: Allegro" was Hallowe'en music, and listed a number of related images such as haunted houses and ghosts. "Prince of Denmark" again prompted images of queens, princesses and weddings from the girls, and parades and presidents from the boys. During the playing of "Sakura," everyone pretended to fall asleep. One girl said that it reminded her of someone writing very slowly.

While there was not great variety in the images, no one appeared to feel under pressure to conform to the group. It seemed, rather, that the students wanted to discuss together and to reach consensus. They showed great satisfaction when they all agreed on something, and they could reinforce and add to each other's images. If someone disagreed, he or she would be mildly teased, but not criticized or humiliated.

In the third listening task, that of rating the selections, there was considerable change from the individual to the group situation.

Each time that they came to rating a selection, the division between the two groups disappeared and the children would discuss together whether they liked the piece. The boys still looked to their leader but did not always agree with him, while the girls appeared to act independently, usually agreeing with each other and with the boys. Table 11 below shows the EMH students' ratings of the selections in the individual and group situations. This group's ratings changed far more than either of the other two groups'. All ten students liked "Prince of Denmark" and "Pachelbel Canon" in the group session, and no one liked "Sakura." This increased the range in their ratings, so that in the group sessions, the EMH group has the largest range of preferences, whereas in the individual

Table 11
 Comparison of Distribution of Responses of EMH Students
 in Individual and Group Sessions

	Individual responses			Group responses		
	L	I	D	L	I	D
1. The Swan	7	1	2	5	4	1
2. Percussion: Allegro	6	3	1	9	0	1
3. Prince of Denmark	6	2	2	10	0	0
4. Thank the Lord	7	1	2	7	2	1
5. Sakura	2	4	4	0	3	1
6. Unsquare Dance	5	3	2	8	1	1
7. Pachelbel Canon	7	0	3	10	0	0
	40	14	16	49	10	11

Ratings

	Individual responses	Group responses
1. The Swan	25	24
2. Percussion: Allegro	25	28
3. Prince of Denmark	24	30
4. Thank the Lord	25	26
5. Sakura	18	13
6. Unsquare Dance	23	27
7. Pachelbel Canon	24	30
Total	164	178
Range	7	17

sessions, they had the smallest. The EMH students used the "like" response even more frequently in this session than in their individual sessions, and both their "indifferent" and "dislike" responses dropped, as can be seen in Table 12.

There was evidence of peer pressure in this task, as the students seemed to want to have unanimous decisions. One boy wanted to rate his reaction to "Pachelbel Canon" as "indifferent" but the others all said, "It's nice! Say you like it . . . we all like it!" The boy then changed his mind, saying, "Well, it's kind of nice: I guess I like it," and changed his answer. This tactic was not always successful. One student disliked "Percussion: Allegro" and refused to change her mind, saying, "It's a stupid song and you guys are stupid to like it."

The students all agreed, without pressure from anyone, that "Prince of Denmark" was their favorite selection.

2. Grade 6. The grade 6 students, like the EMH students, had considerable discussion during their group listening session, especially while dealing with the second task, that of describing images. This session differed from the EMH session in that the grade 6 students directed most of their comments at the researcher, instead of interacting with each other. The students tended not to react to each other's statements, so that the session was a series of comments from different people, rather than a dialogue.

In answering the first question, "What feeling does the music have?" students did not discuss orally, but preferred to write their answers. There was very little change from the individual sessions, except that some students wrote down no answer for the question. For

some reason, the word "confused" was used in five instances in this session, while it had not been used at all before. Perhaps the class had encountered and discussed the word in another class activity and it had recently become a part of their vocabulary. Their responses in individual and group situations are summarized in Table 12 on p. 104.

The second task, describing images prompted by the music, drew more oral participation from the students, with nearly everyone anxious to contribute their ideas. Some students in the study group talked about the same images they had described in their individual sessions. They were surprised when told that they had all had very similar images for some songs, such as "Prince of Denmark," even when listening independently, and discussed how this could happen. One student remarked, "Well, that's the kind of music they always play in shows about kings and things and they play music like that in parades, so if we hear it by itself we think of those things." The student, of course, was right: she was unknowingly paraphrasing research findings which confirm this phenomenon. Davies (1978), for example, states that certain kinds of music acquire certain connotations because of conventional usage. Love scenes from movies are usually accompanied by legato music played by string instruments, so this kind of music acquires sentimental connotations.

When all the responses were analyzed, it was found that there were very few differences between the images given in the individual and the group sessions.

In performing the third task, rating the selections, the students again did not have much discussion about how they would rate the pieces. They preferred to write their answers. Their ratings changed very little, except that in the group situation they rated "The Swan"

Table 12

"What Feeling Does the Music Have?"

Grade Six Students' Responses in Individual and Group Sessions

	happy	sad	relax- ing	excit- ing	angry	boring	ener- getic	noth- ing	Other
The Swan									
Individual	5	3			1				lonely (1)
Group	2	2			1				depressed (1) sleepy (2) tired (1)
Percussion: Allegro									
Individual	1				4		1	3	nervous (1)
Group				2	1	3	3		nervous (1) confused (1) scared (1)
Prince of Denmark									
Individual	4	1		3			2	2	
Group	4			2	1	1	2		lively (1)
Thank the Lord									
Individual	5			1			5	1	shaky (1)
Group	2			2			4		dancy (1)
Sakura									
Individual	5				3				nervous (1) tired (1) horrid (1)
Group	3				1				mysterious (1) confused (2) lonely (1)
Unsquare Dance									
Individual	1						5	1	motionless (1) hungry (1)
Group	1			3			3		lively (1) nervous (1) confused (1)
Pachelbel Canon									
Individual	1	2	2					2	good (1) like, dancing (1)
Group	1	1	2					1	sleepy (1) unappealing (1) confused (1)

lowest of all seven, and their level of indifference dropped slightly. They still used the "indifferent" response more than the other groups did. Table 13, on p. 106, shows the comparisons between their responses in the individual and group sessions.

The fact that the responses changed very little in the two situations suggests that peer pressure was not really a factor in determining student responses to the three listening tasks. However, it is interesting to note that the students did not really want to discuss their ratings or their feelings in the group: they preferred to write them down. Describing what they would paint, or what kind of movie the music would suggest, is perhaps not so personal or threatening as stating whether they like a piece, or what feeling a piece has for them. In this respect, they differed from the EMH children, who were very vocal about all parts of the listening session.

3. Grade 3. The grade 3 students, unlike the others, tried very hard to remember what they had said and written during their individual sessions, so that there would not be discrepancies in their answers. Although they were reassured that this was not a test of memory, and that they were expected to have several different answers in this session, they still made an effort to write the same responses that they had written earlier. They were successful in their attempts, for their results are almost identical to their first ones.

In dealing with the first task, describing the feeling of the music, students were open and anxious to share opinions. They often asked each other, "What did you put for this one last time?" There was more dialogue than there had been during this task in the grade 6 class,

Table 13

Comparison of Distribution of Responses of Grade 6 Students
in Individual and Group Sessions

Ratings of Selections

	Individual responses			Group responses		
	L	I	D	L	I	D
1. The Swan	0	8	2	1	4	5
2. Percussion: Allegro	1	6		0	9	1
3. Prince of Denmark	7	3	0	9	1	0
4. Thank the Lord	9	1	0	9	1	0
5. Sakura	0	5	5	1	5	4
6. Unsquare Dance	6	4	0	5	5	0
7. Pachelbel Canon	1	7	2	1	6	3
	24	34	12	26	31	13

Ratings

	Individual responses	Group responses
1. The Swan	18	16
2. Percussion: Allegro	18	19
3. Prince of Denmark	27	29
4. Thank the Lord	29	29
5. Sakura	15	17
6. Unsquare Dance	26	25
7. Pachelbel Canon	18	18
Total	151	153
Range	14	13

and no one seemed to be concerned about what their classmates thought of their opinions. However, there were students who remained silent and merely wrote their answers. The differences in responses to this task are small, as Table 14 on p. 108 shows.

For the second task, describing images, grade 3 students persisted in recalling what they had said in the previous sessions. They enjoyed sharing their ideas, and contributed some new ones, which were similar in most cases to those already given by others. They often associated the music with television shows which they had seen. Several students agreed that "The Swan" would be good music for "All My Children," a soap opera.

For the third task, rating the selections, the children chose almost exactly the same responses as they had in the individual sessions, as can be seen in Table 15 on p. 109. As in the EMH class, the children agreed that their favorite was "Prince of Denmark" and that they liked "Sakura" the least of all the selections.

No evidence of peer group pressure was seen in this session with the grade 3 class. The children enjoyed talking about the selections and often disagreed mildly with each other. There was no swinging of opinion from one side to another as in the EMH class, and there was no reticence about voicing likes, dislikes and feelings, as in the grade 6 class. Participation was high, with very few students not speaking during the session.

Summary

Evidence of peer pressure was evident in the EMH group listening session, to a lesser extent in the grade 6 group, and very little, if at

Table 14

"What Feeling Does the Music Have?"

Grade Three Students' Responses to Individual and Group Sessions

	happy	sad	relax- ing	excit- ing	angry	boring	ener- getic	noth- ing	Other
The Swan									
Individual	2	6	1	1	1	1	1	1	disgusted (1)
Group	4	4	2	2	1	1	2	2	nervous (1)
Percussion: Allegro									
Individual	1	1	1	1	1	1	1	3	scared (2) weird (1) funny (1)
Group	2	2	1	2	1	2	1	1	nervous (1) fenny (1)
Princé of Denmark									
Individual	5	3	1	3	1	1	1	1	proud (1)
Group	3	1	2	2	2	2	1	1	dumb (1)
Thank the Lord									
Individual	6	1	1	1	1	1	3	1	good (1)
Group	4	1	1	1	1	1	1	1	funny (1)
Sakura									
Individual	3	3	1	1	1	1	2	2	nervous (1) weird (1) dancy (1)
Group	3	3	1	1	1	2	1	1	strange (1) nervous (1)
Unsquare Dance									
Individual	7	3	1	3	1	1	1	1	hungry (1)
Group	4	3	1	1	1	1	1	1	
Pachelbel Canon									
Individual	2	4	1	1	1	1	1	1	stupid (1)
Group	7	3	2	2	1	1	1	1	rotten (1) peaceful (1)

Table 15

Comparison of Distribution of Responses of Grade 3 Students
in Individual and Group Sessions

Numbers of Students Showing Liking, Indifference, and Dislike

	Individual responses			Group responses		
	L	I	D	L	I	D
1. The Swan	4	5	1	5	4	1
2. Percussion: Allegro	4	3	3	5	2	3
3. Prince of Denmark	8	2	0	7	2	1
4. Thank the Lord	6	3	1	6	2	2
5. Sakura	2	6	2	2	5	3
6. Unsquare Dance	6	2	2	6	3	1
7. Pachelbel Canon	5	3	2	5	4	1
	35	24	11	36	22	12

Total of Ratings for Each Selection

	Individual responses	Group responses
1. The Swan	23	24
2. Percussion: Allegro	21	22
3. Prince of Denmark	28	26
4. Thank the Lord	25	24
5. Sakura	20	19
6. Unsquare Dance	26	25
7. Pachelbel Canon	23	24
Total.	166	164
Range	8	7

all, in the grade 1 group. EMH responses changed significantly, especially in rating the selections, while grade 6 and grade 3 responses changed very little. Some changes in response may have been due to the fact that the students were listening to the selections for the second time in this session. Research studies such as that conducted by Getz (1966) show that repeated listenings do affect preference. A study conducted by Bradley (1972) indicates that repetitive listening is a factor in changing preference decisions. However, the children heard the selections only twice, and there was a lapse of at least a week between every child's individual and group session, so it is doubtful that repetition was a significant factor in any changes in ratings.

Observations from both the individual and group sessions tend to support findings by researchers such as Crawford (1972), who concluded that sixth graders were significantly less positive toward music experiences both in and out of school than were younger children. He also found that students held more positive attitudes to out-of-school music than to in-school music appearances. Nolin (1973) also found, through a musical attitude inventory, that there is a decline in positive attitudes to music in students as they grow older.

The findings presented in this chapter will be discussed in Chapter V, in terms of their relationship to the research questions asked at the beginning of the study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This chapter contains a brief summary of the study, the main findings, recommendations for further research, and implications for music education.

Summary

The purpose of this study was twofold:

1. to investigate the place of music in the lives of a group of educable handicapped children;
2. to compare the musical experiences and responses of the retarded children with those of a group of their chronological age peers and with a group of mental age peers.

The participants in the study were thirty students from an elementary school: ten eleven-year-old EH students, ten grade 6 students and ten grade 3 students, aged eight. A test of musical auditory discrimination was administered to the students to compare the groups' abilities to recognize identical and different musical phrases.

The students were interviewed individually about their musical preferences and listening habits. Then they were asked to listen to seven musical selections and to describe their reactions to the music. They were also asked to rate the pieces according to their preferences.

Group interviews and listening sessions were then conducted with each of the three groups. During these discussions the students answered the same questions and listened to the same music as they had in the individual sessions, but they were encouraged to interact with each other in formulating their responses. All the data collected were examined, responses were tabulated and categorized, and resulting patterns were described.

Findings

Research Question 1: How does affective response to music of mildly retarded children compare with that of

- (a) children of the same chronological age?
- (b) children of the same mental age?

It was found that retarded children's expressed attitudes toward music were very similar to those expressed by their chronological age peers. Both groups demonstrated a strong preference for rock music, and little knowledge or interest in other types of music. Both groups were very enthusiastic about "their" music. The mental age peers (the grade 3 group) showed broader, less well-defined preferences. They liked several different types of music, with preferences being determined by musical elements such as tempo or beat rather than by genre. The grade 3 students appeared to be more positive toward school music than were either the EMH or grade 6 students. However, the EMH students had had very little school music.

In listening to the seven musical selections, the retarded

students' responses were more similar to those of their mental age peers than those of their chronological peers. The EMH and grade 3 students tended to show stronger feelings, positive or negative, toward the selections than did the grade 6 students, who frequently expressed indifference. No differing patterns of images and feelings for the music emerged from the different groups: all groups described a variety of images and feelings. Based on these findings, it can be concluded, then, that retarded children's affective response to music is similar to that of normal children.

Research Question 2: How does musical auditory perception of mildly retarded students compare with that of

- (a) children of the same chronological age?
- (b) children of the same mental age?

The purpose of the auditory perception test was to determine the students' ability to discriminate between identical and different pairs of musical phrases, and to identify the nature of the difference, when applicable. In this study, the retarded children's scores were closer to those of their chronological peers than to those of their mental age peers. The grade 3 group's mean scores were higher than either of the other two groups' in all four categories of scores. The EMH students scored as high as the grade 6 students in total number correct, and higher than grade 6 in identifying identical pairs. Their scores were slightly lower than those of the grade 6 group in identifying different pairs, and considerably lower in naming the types of differences, probably because of less well developed vocabulary skills and lack of training in musical concepts. The conclusion is that retarded children's

musical auditory perception is similar to that of normal children.

Research Question 3: Research clearly states that peer group pressure is a factor in musical preferences of children (Nolin, Taylor).

How do retarded children's responses to group pressure compare to that of

(a) children of the same chronological age?

(b) children of the same mental age?

It was thought that considerable change in students' responses between the individual and the group sessions would be indicative of peer group influence. If this is so, then the EMH students showed more evidence of group pressure than either of the other two groups, since their responses changed the most. Grade 3 students did not seem to be concerned about conforming to the group during discussions, while grade 6 students appeared wary of voicing preferences which differed from those of their classmates.

EMH students and grade 6 students were alike in that both groups showed evidence of being strongly influenced by the rock music phenomenon. In this respect, the EMH students were very like their chronological peers. However, in their openness to listening and responding to other types of music, they were closer to their mental age peers.

Implications for Music Education

From the findings and conclusions of this study, the following implications are suggested:

1. The fact that the EMH students scored as high as the grade 6 students in several aspects of the auditory discrimination test, despite having had very little music education, suggests that they are as capable of developing musical concepts as are average students, although they may need more time to do so. These students need to receive a structured music curriculum which helps them to develop their aural skills, so they can reach their potential in musical responsiveness and aesthetic awareness.

A review of guidebooks for special education music revealed a lack of attention to music listening activities which are designed to increase aesthetic awareness and to enhance enjoyment of music for its own sake. As stated earlier, aesthetic considerations are often presented in the introduction, with no reference to their being made in the actual lesson plans and activities. Since most of these students' involvement with music as adults will be primarily as listeners rather than performers, it is important to develop programs which are designed to acquaint the students with as wide a variety of good music as possible.

2. The EMH students were spontaneous and uninhibited in their responses to the musical selections. They exhibited more willingness to listen to different music than did the grade 6 students. Teachers can respond to this openness by exposing the children to a great variety of musical experiences. Since the children responded in such a variety of ways to the music used in this study, a wide range of well-planned listening experiences would probably raise their level of response. This, in turn, would help to make them aware of a wider range of emotional responses within themselves, as well as serving to enhance their vocabulary.

3. The fact that the EMH children often related the music to

themselves suggests that they may be more inclined than other children to identify with feelings and images which they feel the music conveys. Thus it may be even easier for them than for others to use music as a vehicle to express their emotions. Since some studies indicate that retarded persons often experience emotional disturbances because they may lack the vocabulary skills needed to express their feelings, developing musical aesthetic awareness may be especially valuable for these children.

4. The EMH children responded more physically to the music than did the others. Therefore, in planning listening lessons, provision should be made for plenty of movement, and the children should be encouraged to respond freely to the music.

5. The EMH students exhibited a strong desire to be like average adolescents. This impression was verified by the teachers in the pilot study and the research study, who said that their students want more than anything to be "just like the other kids." Thus they try to follow the latest fads in clothing, slang expressions, and popular music. While it is desirable to expand their musical horizons for all the reasons cited above, it is also important that they be encouraged to enjoy their own current favorite rock groups. This is part of the normal development of young people, and is something which can be a vehicle for integration and normalization.

Recommendations for Further Research

Since little information is available on affective response to music in retarded children, there are numerous possibilities for further

investigation. As this study progressed, several relevant topics for further research became apparent. These are as follows:

1. The retarded children in this study had had no training in musical skills and concepts. More research needs to be done on the effect of music education on these students' musical auditory perception. The fact that they scored as high as the grade 6 students in some aspects of the test suggests that with training, their discrimination skills would not differ from those of their chronological age peers.

2. Year-long studies which would produce more information on the actual development of musical affective response are needed. It would be useful to conduct a study similar to this one, in which children are asked, at the beginning of the school year, to react to several types of music. The children should then be presented, during the course of the year, with a wide variety of planned listening experiences and activities, designed to develop awareness of musical concepts. Further interviews at the end of the year could then assess progress and change. Such a study could be extended over two or three school years.

3. Another useful longitudinal study would be one which explores the effect of a comprehensive music education program for EMH students during childhood and adolescence, on the extent to which they participate in musical activities as adults. Studies by Luckey and Shapiro (1977) and Corcoran and French (1977) stress that training in leisure time skills can help retarded adults to learn to cope effectively with unstructured situations. According to Katz and Yekutiel (1974), group home operators say one of their major tasks is teaching recreational skills to the residents, and parents of mildly retarded young adults state that the most important problem for their children is lack of suitable

companions. As a result, they spent their leisure time within the family, or alone. Would extensive aesthetic education motivate them to seek out music experiences?

4. Other studies should be done which compare auditory discrimination skills of children of different ages. In this study, grade 3 students scored higher than grade 6 students in all categories of the auditory test. If other studies have similar results, research should be conducted in order to find out why auditory perception skills actually decline in some children as they grow older.

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APPENDIX A

LIST OF QUESTIONS USED IN PILOT STUDY

These questions were asked in different order to different students during the pilot. Not all students were asked all the questions.

1. What is music?
2. Do you like music?
3. Why do you like (or not like) it?
4. What kind do you like best?
5. Do you have a favorite group or singer? Who is it?
6. What is it about this group that you like?
7. What kind of music do you do in school?
8. Is school music different for you than other music? If so, how is it different?
9. What is your favorite activity in school music?
10. If you could buy a new tape or record today, what would you buy?
11. Do you like to listen to music best when you're alone, or with others?
12. Do you ever dance and/or sing along with the music?
13. Do you have a favorite place and time to listen to music?
14. What kind of music do your parents like? Your brothers and sisters?
15. Do you or your parents ever go to concerts?
16. Do you watch rock videos? What do you think of them?
17. Would you like to take private music lessons? If so, what instrument would you like to play?
18. Is music important to you? Why or why not?
19. Do you like slow or fast music best, or do you like some of both?
20. Can music change your mood? For example, if you are feeling sad, or angry, can certain music make you feel better? Or if you were happy, could certain music make you sad, or nervous?

APPENDIX B

LIST OF MUSIC USED IN PILOT STUDY

1. ABBA: "Honey, Honey"
2. Bach, J. S.: "Brandenburg Concerto No. 3" (excerpt)
3. Brubeck, Dave: "Unsquare Dance"
4. Cash, Johnny: "The Rebel"
5. Chopin, Frederic: "Polonaise in A Major"
6. Clarke, Jeremiah: "Prince of Denmark"
7. Colgran, Michael: "Percussion Music" (Allegro excerpt)
8. Copland, Aaron: "Rodeo" (excerpt)
9. Diamond, Neil: "Thank the Lord for the Nighttime"
10. Dukes of Dixieland: "When the Saints Go Marching In"
11. "Gregorian Chant" (excerpt)
12. Greig, Edvard: "Norwegian Dance"
13. Lauper, Cindy: "Time after Time"
14. Leitch, Donovan: "Sun Magic"
15. Marley, Bob: "No Woman, No Cry"
16. Mozart, Wolfgang: "Eine Kleine Nacht Musik, Fourth Movement" (excerpt)
17. Orff, Carl: "Carmina Burana" (excerpt)
18. Pachelbel, Johan: "Canon in D"
19. "Sakura: Japanese Folk Tune"
20. Saint-Saens, Camille: "Carnival of the Animals (The Swan)"
21. Seeger, Pete: "Last Night I Had the Strangest Dream"
22. Stevens, Cat: "Peace Train"
23. Springsteen, Bruce: "Born in the U.S.A."
24. "Watkins' Ale and Maundy's Joy" (Renaissance recorder music)

APPENDIX C

LETTER TO PARENTS

University of Alberta
Edmonton, Alberta

April 23, 1985

Dear Parents:

I am a teacher with Edmonton Catholic Schools, currently on educational leave to complete a master's degree. My research concerns music in the lives of elementary school children of various ages and ability levels. The school board and the principal of _____ School have graciously granted me permission to use _____ School as my research base. I plan to interview thirty students individually and in groups, about the place of music in their lives. They will also be asked to listen to several musical selections. Although their responses will become part of my data and used in my thesis, their names and the school's name will not be used.

May I please have your permission to interview your child? Please sign the consent form below and return it to the school if you and your child are willing to participate in this project. Thank you for your co-operation.

Sincerely,

Yvette Brown

I hereby grant permission for my child _____
to participate in the research project being conducted by Yvette Brown
at _____ School.

Date

Signed

APPENDIX D

MUSIC ITEMS FOR AUDITORY DISCRIMINATION TEST

1a *moderate*

1b *allegro*

2

3

4a

4b

5a

5b

6

The image shows a page of musical notation with nine staves. The first two staves, 1a and 1b, are marked with the tempo 'moderate' and 'allegro' respectively. The notation includes treble clefs, time signatures, and various rhythmic patterns such as eighth and sixteenth notes. The staves are numbered 1a through 6, with 1a and 1b being the first two staves. The notation is arranged in a vertical column on the page.

7a 

7b 

8 

9a 

9b 

10 

11a 

11b 

APPENDIX E

SAMPLE STUDENT ANSWER SHEET FOR
AUDITORY DISCRIMINATION TEST

Name _____

1. same

different

2. same

different

3. same

different

4. same

different

5. same

different

6. same

different

Name _____

7. same

different

8. same

different

9. same

different

10. same

different

11. same

different

APPENDIX F

ANSWER KEY TO AUDITORY DISCRIMINATION TEST

Name _____

1. ~~same~~~~different~~second one is faster.2. ~~same~~

different

3. ~~same~~

different

4. same

~~different~~The second one is softer

5. same

~~different~~The second one has a different beat.6. ~~same~~

different

Name _____

7. some

~~different~~The second one is higher.8. ~~some~~

different

9. some

~~different~~The second one is a different tune.10. ~~some~~

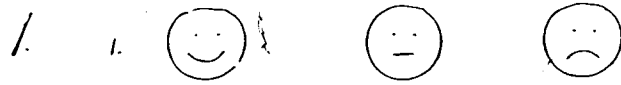
different

11. some

~~different~~The second is in a minor key.

APPENDIX G

SAMPLE OF STUDENT RESPONSE FORM
USED IN INDIVIDUAL INTERVIEWS



2. I see _____

3. I feel _____



2. I see _____

3. I feel _____



2. I see _____

3. I feel _____



I see _____

I feel _____

5 ,   


2 | see

3 | feel

6 ,   

2 | see

3 | feel

7 ,   

2 | see

3 | feel

APPENDIX H

SUMMARIES OF STUDENTS' REACTIONS
TO THE MUSICAL SELECTIONS

I. THE SWAN

Student Number	Feeling of Music	Ideas from the Music	Rating	
EMM GROUP			Ind. Group	
1	happy	A tree and two people sitting together. They like each other.	L	L
2	sad	A man playing a violin.	I	I
3	relaxed	Flowers, light colors, a garden.	D	D
4	bored	--	D	D
5	--	When I was a baby and my mom played music for me.	I	I
6	sad	A horse in a barn on a sunny day.	L	L
7	happy/sad	A person dancing sadly/I cried when she finished.	L	I
8	bored	A prince and princess dancing.	D	I
9	happy	A ballet dancer, with a pink dress. Other dancers too.	L	I
10	happy	A rabbit.	L	L
GRADE 5/6 GROUP				
1	depressed /sad	Old-fashioned movie: a sad love story.	I	D
2	relaxed	Ballet dancers. A love movie.	I	I
3	lonely/sad	A dove flying gracefully.	I	I
4	relaxed /sleepy	Two people dancing in a movie. Cinderella going to a ball.	I	I
5	sad/sleepy	A sad movie.	I	D
6	sad	Someone going away.	D	D
7	sad	A person playing a violin.	D	D
8	sad	A bunch of people at a funeral.	I	L
9	bored	Soap opera music.	I	D
10	relaxed	Music for a wedding.	I	I
GRADE 3 GROUP				
1	sad	A happy dance.	I	I
2	sad	A person yelling softly, and someone playing a piano.	I	L
3	sad/boring	Like floating on air: me and my friend on a swing.	L	I
4	sad	Dancing slowly: a ballerina.	I	I
5	relaxed	--	I	I
6	happy	A butterfly flying around in the sun.	L	L
7	disgusted	Like a love story.	D	D
8	sad	Someone feeling sad: black skies.	L	L
9	very sad	A park, with sad children playing.	I	L
10	happy	Romantic. Just a design with curved lines and bright colors.	L	L

2. PERCUSSION: ALLEGRO

Student Number	Feeling	Ideas from the Music	Rating	
EIGHT GROUP			Ind.	Group
1	very happy	Drums, dripping tap, two people holding hands, kissing.	L	L
2	relaxed	My brother playing drums.	L	L
3	--	Someone's chasing me. Has a good beat.	D	D
4	bored	Hates it: not music; would shut it off.	L	L
5	happy	Indians.	I	L
6	happy	Someone playing a drum.	I	L
7	scared /excited	Going in a scary house and going down the hall.	L	L
8	so-so	Haunted house: Hallowe'en.	L	L
9	relaxed	Bright colors.	I	L
10	happy	Bunny: country music.	I	L
ELEVEN-YEAR-OLDS				
1	--	Instruments played.	I	I
2	bored	The jungle.	D	D
3	Like it's going to rain.	People dancing in a strange nationality.	I	I
4	nervous	Criminals being chased down the alley by police.	I	I
5	happy	The movie "Jaws."	L	I
6	bored	A play.	I	I
7	sad/happy	A dragon fighting with a person.	I	I
8	bored	A parade all mixed up.	D	I
9	bored	Hawaii detective show.	D	I
10	energetic	A parade.	I	I
NINE-YEAR-OLDS				
1	happy	Someone making funny faces.	L	L
2	scared	A train going through a dark cave.	L	L
3	up dancing	Monster coming after someone.	I	L
4	energetic	Playing drums, like dancing.	I	D
5	funny	People playing.	D	D.
6	--	Spaceship blasting off.	L	I
7	weird	A Western movie; "my brains are being pounded out."	D	D
8	excited	Elephants stamping; mouse walking.	L	I
9	sad/scared	People running away from something scary.	D	L
10	medium	A ship, someone racing.	I	L

3. PRINCE OF DENMARK

Student Number	Feeling of Music	Idea from the Music	Rating	
			Ind. Group	
EVEN GROUP				
1	happy	Wedding: everyone happy.	L	L
2	bored	The President walking with other people.	I	L
3	energy	Someone special is coming in: a princess.	I	L
4	bored	People going in the woods and shooting deer and buffalo.	L	I
5	--	A maestro: like a symphony.	L	L
6	good	King and queen; trumpet.	L	L
7	excited /scary	People marching with instruments and singing.	D	L
8	bored	The president coming into Canada.	I	L
9	happy	Makes me think there'll be no war.	L	L
10	happy	Two birds; "good stuff."	L	L
ELEVEN-YEAR-OLDS				
1	energetic	Flags of countries: happy.	L	L
2	happy	When a queen is coming.	L	L
3	excited	A prince getting married and a parade; I'm at the wedding.	L	L
4	excited/ energetic	A parade, lots of people.	L	L
5	ordinary	Chariots of fire.	I	L
6	happy/ excited	A castle.	L	L
7	sad/happy	A statue of liberty.	I	I
8	energetic	A band marching down the street.	I	L
9	happy	Parade, the queen; Shakespeare play.	L	L
10	normal	The National Anthem.	L	L
NINE-YEAR-OLDS				
1	happy	Conductor: orchestra.	I	I
2	proud	Orchestra: lots of people.	L	L
3	happy	Queen coming down aisle: wedding: wants to go and meet them: like	L	L
4	like dancing	Parade: person playing a horn.	L	L
5	happy/ excited	Queens and kings; a commercial.	L	L
6	excited	A band with	L	L
7	energetic	A band, a parade.	I	D
8	happy	Someone getting married.	L	I
9	relaxed	People marching in a parade.	L	L
10	happy	Like soldiers marching. "I'd want to play bagpipes."	L	L

4. THANK THE LORD FOR THE NIGHTTIME

Student Number	Feeling of Music	Ideas from the Music	Rating	
EIGHT GROUP			Ind.	Group
1	happy	"I'd boogie"; guy and girl singing.	L	L
2	bored	Billy Idol standing onstage.	I	I
3	excited	Makes me move fast; paint an abstract design.	D	D
4	angry	A picture of night.	I	I
5	happy/ relaxed	A lot of singers.	L	L
6	bad mood	Guitar players.	D	L
7	crazy	Exciting; woman and man dancing outside; lots going on.	L	L
8	happy	Me and my little sister dancing.	I	L
9	happy	Pink, blue, orange, red.	L	L
10	happy	A duck; a rock movie.	L	L
ELEVEN-YEAR-OLDS				
1	energetic /excited	--	L	L
2	happy	Rock stars.	L	L
3	happy	People at a party dancing and having fun.	L	L
4	--	Guy playing guitar on a stool, on stage, lots of people.	I	I
5	energetic	Guys dancing. "Footloose."	L	L
6	energetic /happy	People dancing.	L	L
7	happy	A person on a motor bike driving down the road.	L	L
8	energetic	A band on stage at a concert.	L	L
9	happy/ energetic	Blotches: colors of the rainbow.	L	L
10	shaky	A singer, lots of people.	L	L
NINE-YEAR-OLDS				
1	happy	Band in the country.	L	L
2	happy	People dancing.	I	L
3	angry	Singing in a country bar; smoke.	D	D
4	happy	Someone singing and dancing; country music.	L	D
5	happy	Someone dancing and singing.	I	L
6	happy	A cowboy riding on his horse.	I	I
7	good	Somebody driving.	L	L
8	relaxed	Would maybe dance to it.	I	I
9	happy	People singing and dancing.	L	L
10	excited	A car or truck driving down the road; a drummer.	-	L

5. SAKURA

Student Number	Feeling of Music	Ideas from the Music	Rating	
EIGHT GROUP			Ind.	Group
1	sad	A grave: everyone standing around: mother died.	D	D
2	happy	Home: think of my brother.	I	D
3	sad	Raining outside: someone crying.	D	D
4	depressed	People making music.	I	I
5	nice	Singers.	I	I
6	sad	Chinese girl playing a harp.	I	D
7	romantic	A person playing a piano.	D	I
8	bored	Someone sneaking into school at night: no one around.	D	D
9	happy	Sun, a lake.	I	D
10	happy	Dog.	I	D

ELEVEN-YEAR-OLDS

1	sad/bored	A Siamese cat: the way they move: mysterious: never know what they'll do.	D	I
2	tired	Mushrooms dancing. Japan.	I	I
3	very sad	People being divorced.	I	I
4	sad	--	I	I
5	sad	China dancing; somebody died.	D	D
6	bored	Sad movie.	I	D
7	sad	Someone suffering from not enough food.	D	L
8	bored	--	D	D
9	horrid	Ballerinas; pink and silver and creamy; screechy.	D	D
10	nervous	A piano..	I	I

NINE-YEAR-OLDS

1	normal	A girl in China, dancing.	I	I
2	relaxed / sad	A funeral.	L	L
3	bored	Someone running away after a murder: country colors.	I	I
4	dancing mood	A Chinese girl dancing.	I	I
5	sad	Rain falling.	D	D
6	--	People doing a dragon dance.	I	I
7	weird	A Chinese band.	I	D
8	nervous	Someone walking quietly.	I	D
9	sad	People walking by themselves: sad.	L	I
10	relaxed	Like an operating room.	I	I

6. UNSQUARE DANCE

Student Number	Feeling of Music	Ideas from the Music	Rating	
			Ind.	Group
EMI GROUP				
1	energetic	Everyone dancing with their husbands: happy:	L	L
2	energetic	People playing drums.	L	L
3	like going slow	Butterfly.	D	L
4	bored	People clapping.	I	L
5	good	The band.	L	I
6	bad mood	Man playing sticks; man clapping.	D	D
7	exciting	A person clapping and one playing piano; one dancing.	L	L
8	bored	--	I	L
9	bored	--	I	L
10	happy	--	L	L
ELEVEN-YEAR-OLDS				
1	energetic /excited	--	L	L
2	energetic	People in Hawaii dancing.	L	I
3	motionless	Kids having aerobics.	L	L
4	lively/ excited	A person playing piano.	I	I
5	energetic	Saturday Night Fever: parties.	L	L
6	jump	People dancing.	L	I
7	happy	A person playing a bass and one clapping their hands.	L	L
8	active	A party and people dancing.	I	I
9	so-so	--	I	L
10	exciting	Lots of people clapping.	I	I
NINE-YEAR-OLDS				
1	happy	A guy clapping.	L	L
2	angry	People; clapping gets on my nerves.	D	L
3	happy	Someone visiting, playing piano, people around; want to dance.	I	I
4	bored	People switching crackers around (fr. commercial).	D	I
5	happy	Clapping hands, playing piano; sticks.	L	I
6	happy	People clapping at end of a concert.	L	L
7	--	A band with one person in the audience.	L	L
8	happy	Someone clapping and stamping their feet.	I	I
9	happy	People clapping and using instruments.	L	L
10	happy	Like Peter Pan; someone running.	L	L

7. PACHELBEL CANON

Student Number	Feeling of Music	Ideas from the Music	Rating	
			Ind.	Group
EIGHT GROUP				
1	peaceful	Two people getting married	I	I
2	angry	Someone playing a piano.	D	L
3	relaxed	Could do ballet: a black flute with blue background.	D	L
4	bored	Would turn off the radio.	I	I
5	good	Equipment on a stage.	L	L
6	sad	Sleep.	D	L
7	romantic	Sun is up, birds, flowers, rainbow. I'm swaying back and forth.	L	L
8	sad	--	D	L
9	excited	Rainbow; a boat in the lake.	L	L
10	happy	--	L	L

ELEVEN-YEAR-OLDS

1	--	A kite flying or gliding in the air.	I	I
2	went to dance	Birds gliding in the air.	L	D
3	bored	Ballet dancers.	I	I
4	relaxed	--	I	I
5	good	"Flashdance."	I	D
6	a little happy	The ocean.	I	I
7	sad/unhappy	Person playing a bass in the opera.	D	L
8	sad	People talking about sad things.	D	I
9	bored	Lightning and tears.	D	D
10	relaxed	A music instructor.	I	I

NINE-YEAR-OLDS

1	happy	Trees swaying in the wind.	L	I
2	sad	People crying.	I	I
3	bored	Blank picture: nothing there any more.	D	L
4	happy	Ballerina dancing with a man.	L	I
5	sad	Sitting outside on a nice day; grass, birds.	D	L
6	relaxed	Forest with flowers and animals.	I	L
7	stupid	Two people dancing in their house, to dance music.	I	D
8	sad	Someone sitting inside, looking out window.	L	I
9	sad	People in bed, thinking.	L	L
10	--	Someone running across Canada.	L	L