

THE RELATIONSHIP OF MUSICAL DEPRIVATION  
UPON THE ACADEMIC ACHIEVEMENT OF  
FOURTH AND FIFTH GRADE STUDENTS

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A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR  
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We hereby recommend that the Thesis prepared under  
our supervision by O'Shelia Moore Brown

entitled The Relationship of Musical Deprivation

Upon the Academic Achievement of Fourth and

Fifth Grade Students

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## CHAPTER I

### Introduction

Throughout history, man has been concerned with his origin and destiny. It is no wonder then that man has also been consistently concerned with the source of his special talents. In the past fifty years or more, researchers have displayed more interest in musical aptitude than in musical achievement. It must be recognized that beliefs regarding both the source and description of musical aptitude should and do affect teaching procedures.

Since music is a vital area of our public education, it should be designed to touch the lives of all students concerned, whether they are from deprived homes or not. The chief reason for the neglect of music as a primary subject of education is that its technique is a complete mystery to the average person. It is generally assumed that some special talent is required for musical performance of any kind.

Public Schools of America have a basic purpose of helping each child achieve the maximum development of his potential ability. The progress of education developed in America has come closer to achieving this goal than any other educational program.

If it is desired that musical taste shall not remain

the privilege of the cultured few, but shall penetrate the real heart of the whole people, a genuine musical education should be provided at school.

## I. The Problem

### Statement of the Problem

The purpose of this investigation was to explore the relationship of the musical and academic abilities of children with normal background in music with the academic and musical abilities of the musically deprived children.

It was the problem of this study to identify musically deprived children and to compare their musical abilities and academic abilities with the musical and academic abilities of children with normal musical background.

### Importance of the Study

It has been recognized that in order for deprived children to make successful progress in the school, they need proper instruction, motivation, and guidance from adults. Children from culturally deprived homes come to school with an interest in school experiences but without the background, values, and skills of the middle-class child. They should be given a sense of security, recognition, belonging and conformity, pre-eminence or excellence, and consistency. These basic needs are extremely important because they are the objectives of democracy, as well as the guidelines of school method. From personal observation and face to face experiences with students engaged in the music program in the Clara Oliver Elementary School, there



was a prominent need for identifying the musically deprived child and determining the relationship between music deprivation and academic achievement.

Since children of the school come from varied backgrounds, their learning patterns are more diverse than their cultural exposure. It was decided to make this investigation of the students' musical abilities in the middle grades to identify their specific difficulties, so that they would be able to receive stimulating instruction in the public school music program from the music teacher.

This investigation was limited to one hundred and five fourth and fifth grade pupils. The number of children in this project represents a small per cent of the total enrollment in the middle grade. However, these classes were chosen because the investigator was the music teacher and served as a homeroom teacher for one of the class sections.

#### Collection of Data

In this investigation, Colwell's Elementary Music Achievement Test was used to determine the quality of musical performance. The California Comprehensive Test of Basic Skills, Level II, Form R was given in order to establish some level of achievement in reading and language. A Questionnaire was developed by the author, to identify or define musically deprived children. The raw scores in both test and the questionnaire were recorded and tabulated.

### Basic Assumptions

The effective teacher of the deprived student requires skill and insight to understand the needs of children. It was felt that this study would provide some needed insight, understanding and resourcefulness so that the teacher could do a more effective job of teaching music to boys and girls. At any time that the pupils suffer from educational, cultural or social discrimination, the teacher should possess knowledge of the culture of the disadvantaged group, including understanding of the culture of these children. They need, along with love, consideration. It is believed that respect and consideration are things they likely have not received in their culture at large.

A sound cultural understanding should enable the teacher to establish a much better relationship with the child who is typically antagonistic toward the school and, on the surface at least, unmotivated to perform musically at school.

The music program enriches a part of the activities of the entire school day. The teacher will capitalize upon these activities to provide training, experience, and practice in music, as well as raise their cultural sights. Wise use of the music period in the classroom, insures continuity of growth and development in all musical skills.

## II. The Organization of the Remainder of the Project

Chapter II consists of literature related to the problem, that is home environment, school responsibilities,

the interrelations of the basic skills and needs, as well as accounts of some previous studies.

Presented in Chapter III are the materials and procedure, as well as the groups studied in this investigation. The data of the Colwell Elementary Music Achievement Test, the California Comprehensive Test of Basic Skills, and a Questionnaire were collected and results shown in tables.

Chapter IV gives a summary of the findings from the tests and questionnaire that were given and includes conclusions and recommendations for improved music teaching and learning.

## CHAPTER II

### Review of the Literature

The characteristics of deprived children was reviewed in order to understand these groups of people in our society. It was found that the disadvantaged child can be found in any ethnic group and they are originally from most parts of the United States, now settled in the ghetto areas. They are a part of our schools and must be recognized by the teacher as children with academic difficulties, sometimes related to their environment.

The slow-learning child is a child whose mental ability is high enough to justify keeping him in the regular classroom but low enough to give him considerable difficulty in keeping up with the average speed of the class.<sup>1</sup> For this reason, it may be difficult to distinguish the characteristics of a "culturally deprived" child from those of the "slow learner" or "mentally retarded one."

The differences of actual slow learners from other children may be in degree rather than in kind, with variations existing among all of us.

As Plato said:

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<sup>1</sup>Robert De Hann and Jack Kough, "Helping Children with Special Needs, Elementary School Education, II (Chicago: Science Research Associates, 1956) p. 152.

. . . it occurs to me myself that to begin with, our several natures are not all alike, but different. One man is naturally fitted for one task, and another for another.<sup>1</sup>

Some writers state that slow learners are essentially normal in their emotional, social, physical, and motor development, while others point out many differences.

The following are some characteristics of the slow learner most cited, in comparison with children considered intellectually normal:

1. Short attention and interest span.
2. Limited imagination and limited creative thinking.
3. Slow reaction time.
4. Absence or easy loss of self-confidence.
5. Low power of retention and memory.
6. Academic retardation, especially in reading, achievement age lagging behind chronological age.
7. Ease of confusion; fears, anxieties.
8. Laziness--but perhaps due to ill health or emotional maladjustment, rather than as a constitutional factor.<sup>2</sup>

In classroom, the slow learners may ask questions, frequently of irrelevant nature; demand attention; withdraw from academic work; withdraw from social situations, cheat, argue, or create other disciplinary situations.

In the past, many slow learners have gone through

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<sup>1</sup>Plato, The Republic, Book II.

<sup>2</sup>Willard Abraham, The Slow Learner (New York: Center for Applied Research in Education, 1964), p. 18.



our schools and into the working world without having, in any way, been identified. In some instances identification could have had a detrimental effect, calling special attention to an individual who is close to the normal and capable of adjusting to home, community, and occupational settings in a manner that satisfied both him and society.<sup>1</sup>

Slow learners face many of the same pressures as the normal children but exhibit an inability to cope with them. In the low-income areas where the largest number of slow-learning children live, the schools in general have a larger proportion of older cafeterias, libraries, and recreational facilities; a larger percentage of unqualified or less competent teachers; larger classes; less parent participation; poorer attendance rates; more sickness; more transient enrollments; a smaller number of remedial and social welfare services available; more delinquency; more non-readers; and more school failures.<sup>2</sup>

Like these slow learners, the culturally deprived child has learning problems due to pressures he finds extremely difficult to adjust to.

"Unruly" students are considered a norm among disadvantaged youngsters. Those who are given special help return to the classroom as difficult as ever. The problem of discipline is acute, and in the ghetto school is the

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<sup>1</sup> Ibid., p. 19.

<sup>2</sup> Ibid., p. 25.

teachers' number one problem.<sup>1</sup>

It should be noted that disadvantaged children are not naturally "bad" in class. They want to learn and can be taught, as long as the teacher does not lose his confidence or surrender his authority. With any group of children, a teacher's authority will be tested immediately, and probably thereafter, depending on how he helps himself and the class. The students who are testing the teacher hope he will not find out what they are doing or hope he will not be able to cope with them, but at the same time, if the teacher ignores them or indicates that he is helpless, they will feel insecure and lose their respect for him. By the same token, the other children in the class are watching and hoping that the teacher handles the situation properly. If he fails them, they too will reject and eventually turn against him. The tests will probably be more difficult and more frequent with disadvantaged children. Since these children have problems at the outset, the teacher can ill-afford to fail, or he will never feel effective with them.<sup>2</sup>

It should be remembered that socially disadvantaged pupils are those who have been denied some social experiences that "normal" children have had. The experiences which socially disadvantaged children have not had are certain experiences in the family. Compared with other children

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<sup>1</sup>Allan C. Ornstein, "Techniques and Fundamentals for Teaching the Disadvantaged," Journal of Negro Education (Spring 1971), p. 136.

<sup>2</sup>Ibid., p. 137.

whose parents give them average or better advantages for getting started in modern life, the socially disadvantaged child lacks several of the following:

1. A family environment which sets an example for reading, provides a variety of toys and play materials with colors, sizes, and objects that challenge his ingenuity with his hands and his mind.
2. A family conversational experience which answers his questions and encourages him to ask questions. A family who strives to extend his vocabulary with new words--adjectives and adverbs. And a family which gives him a right and need to stand up for and to explain his point of view on the world.<sup>1</sup>

The disadvantaged pupils are not used to paying attention to the teacher's talking for long periods of time, because they are not accustomed to hearing their parents converse with each other or with them. Therefore, physical, or highly expressive people, make good teachers for disadvantaged children. They appear to be able to communicate with these children on many levels and through media.<sup>2</sup> The musical experiences, for that reason, must be extremely rich in music itself, rather than by talking about music or stressing the symbolic aspects of music, such as music reading.<sup>3</sup>

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<sup>1</sup> John M. Beck and Richard W. Saxe, Teaching the Culturally Disadvantaged Pupil (Springfield: Bannerstone House, 1965), p. viii.

<sup>2</sup> Frank Reissman, The Culturally Deprived Child (New York: Harper and Row Publishers, 1962), pp. 84-88.

<sup>3</sup> Frances Andrews, "The Preparation of Music Educators for the Culturally Disadvantaged," Music Educators Journal, LIV (February 1967), p. 44.



The disadvantaged child's patterns of speech, usage and pronunciation do not, for the most part, approximate the standards of language expected by the school . . . The oral language of the disadvantaged child is usually on the vulgar level.<sup>1</sup>

Miller thinks it is important that "teachers trained in traditional ways" have the benefit of another type of training that will reduce the "shock and feeling of strangeness," which is generated by contact with disadvantaged children. She notes that:

The children of the slums walk to school over streets littered with broken glass and broken people . . . Some have not slept, have not eaten, and are barely clothed. These are not easy to teach. When they are little, they arouse pity; when they grow big, they arouse anger.<sup>2</sup>

Generally, the working-class families use a "restricted" form of language, while the middle-class families use a more "elaborate" form.

It is important, however, to avoid the error of saying that all children of working-class families are socially disadvantaged. Approximately 65 per cent of the children of this country are living in working-class homes. That is, their fathers and mothers do manual work for a living. The majority of these families give their children a fairly good start for life in an urban industrial democratic society.

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<sup>1</sup>Eddie G. Ponder, "Understanding the Language of the Culturally Deprived Child," Elementary English, LII No. 7 (November 1965), p. 769.

<sup>2</sup>Theresa Miller, "Is it Always the Child?" Saturday Review, LXIX No. 2 (October 15, 1963), pp. 77-94.

Their children are adequately fed and clothed. They are loved and protected by their parents. While working-class children as a group are somewhat different from the children of white-collar workers, it would not be reasonable to say that the working-class children are socially disadvantaged or culturally deprived. Working-class children as a group score slightly below children of white-collar families in intelligence tests; they fall slightly below on tests of school achievement; they attain somewhat less formal education. But the differences are relatively small and become even smaller when the socially advantaged children are removed and the majority of working-class youth who remain are compared with white-collar children.<sup>1</sup>

The socially disadvantaged, then, are groups with the following characteristics:

1. They are at the bottom of the American society in terms of income.
2. They have a rural background.
3. They suffer from social and economic discrimination at the hands of the majority of the society.
4. They are widely distributed in the United States, while they are most visible in the big cities, they are present in all except the very high income communities. There are many of them in rural areas, especially in the southern and western states.

The disadvantaged may or may not be identified as any single group. Some authorities would include in the disadvantaged group those children who come from homes

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<sup>1</sup> Beck, op. cit., p. ix.



where money is plentiful and love is lacking.<sup>1</sup>

In racial and ethnic terms, these groups are about evenly divided between whites and non-whites. They consist mainly of the following:

1. Negroes from the rural South, many of whom have migrated recently to the northern industrial cities.
2. Whites from the rural South and the southern mountains, many of whom have migrated recently to the northern industrial cities.
3. Puerto Ricans who have migrated to a few northern industrial cities.
4. Mexicans with rural background who have migrated into the West and Middle West. Also, rural Spanish-Americans in the south-western states.
5. European immigrants with a rural background, from eastern and southern Europe.

Altogether, these groups make up about 15 per cent of the United States population. Since they tend to have large families, their children make up as much as 20 per cent of the child population. Not all socially disadvantaged children come from these groups, but the majority do. Not all children in these groups are socially disadvantaged, but the great majority are.<sup>2</sup>

According to the noted psychologist, Maslow, humanistic psychologists are discovering "that the human being has higher needs, that he has instincts--like needs, which are a part of his biological equipment--the need to

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<sup>1</sup>Sidney Tiedt, Teaching the Disadvantaged Child (New York: Oxford University Press, 1968), p. 5.

<sup>2</sup>Beck, op. cit., p. x.

be dignified . . . and to be respected and the need to be free for self-development."<sup>1</sup>

Maslow refers to the most wonderful experiences of life, happy or ecstatic moments, moments of rapture or creativity as peak experiences, and he has made some interesting studies on what effects these experiences have on people. Some of the after effects of these experiences are listed below:

They can change the person's views of himself in a healthy direction.

They can change his view of other people and his relations to them in many ways.

They can change more or less permanently his view of the world, or of aspects of parts of it.

They can release him for greater creativity, spontaneity, and expressiveness.

The person is more apt to feel that life in general is worthwhile, even if it is usually drab, painful, or ungratifying, since beauty, excitement, honesty, play, goodness, truth, and meaningfulness have been demonstrated to him to exist.<sup>2</sup>

The home is an important contributing factor to the child's pre-school training. It determines many of his attitudes and interests. Breckenridge and Vincent agree that of all agencies of society which affect children, the home exerts the first and most insistent influence. The number and kind of people in the home will influence a

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<sup>1</sup>Abraham Maslow, "Music Education and Peak Experiences," Music Educators Journal, LIV (February 1968), pp. 72-75, 163-167.

<sup>2</sup>Abraham Maslow, Toward a Psychology of Being (Princeton: D. Van Nostrand Co., Inc., 1962), p. 95.

child's discipline, his tensions and joys in family activities. It will also influence his anxieties, as well as his satisfactions, his loyalties, and affections. In the home, consciously or unconsciously, the parents prepare the child for school.<sup>1</sup>

The child from the culturally deprived home comes to school with an interest in the new experiences but without some of the background, skills, and values typical of the middle-class child. The culturally advantaged child has been amply rewarded for his previous learning, and he is likely to begin school valuing achievement as good in its own right. In contrast, the culturally deprived child has difficulty in learning for his own sake and in learning for the approval of an adult. He values things and activities which are concrete and which have immediate and tangible rewards. He has difficulty in seeing the relevance of much of school learning since he is unable to comprehend fully or accept the deferred and symbolic gratification that the middle-class child has come to accept.<sup>2</sup>

Adams, Gray and Reese reported that a stable home environment is an important factor influencing learning. A child who comes to school knowing he is loved by his father and mother who both love each other, has a good chance to

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<sup>1</sup>Marian E. Breckenridge and E. Lee Vincent, Child Development (Philadelphia: W.B. Saunders Company, 1955), p. 154.

<sup>2</sup>Reissman, op. cit., p. 11.

adjust to school happily and readily.<sup>1</sup>

It is within the home that the self begins to develop and to unfold. It is here that he may have the good fortune to be warmly accepted or rejected. By the virtue of being accepted or rejected from the earlier period of his life, he will have freedom to experiment with life, to test his powers, to discover the limits and boundaries of his abilities, to explore his feelings, including his feelings of affection, anger, and fear, without danger of humiliation or risks of status. In such an atmosphere, he is free to discover himself, to develop his potentials, to find a place for himself in relationship to others, and to develop ideas and attitudes concerning his own worth in a healthy and unencumbered way.<sup>2</sup>

How we as teachers can help the disadvantaged child become a useful contributing member of society, is a problem which has plagued educators for years. Recently this problem has been brought into focus through the concentrated efforts of civic action groups, sociologists, psychologists, educators, and other segments of our population.

Youngsters growing up in depressed neighborhoods become increasingly aware of an affluent society which exists for others, but is out of reach for them. The easy

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<sup>1</sup>Fay Adams, Lillian Gray and Dora Reese, Teaching Children to Read (New York: The Ronald Press, 1949), p. 154.

<sup>2</sup>Arthur T. Jersild, In Search of Self (New York: Teachers College, Columbia University, 1952), p. 62.

pleasure filled life of material things seemed to be available only if one was born with the right skin color or happened to live in the right part of town.<sup>1</sup>

The teacher, who is mature and has learned about these children, does not have lowered expectations, yet still can deal with a typical occurrence in an understanding manner. This type of teacher is not stunned by the morality of a child who has, for example, found a nickel and refuses to return it to its owner. He understands the child's insistence about stating the community's law of possession. Rather than condemning the child who says, "what I found and I have is mine," he sees it as another opportunity to teach. This teacher is not shocked by profanity, but rather teaches that the word is not acceptable. The teacher in the disadvantaged areas who is successful, clearly defines limits and shows his respect and liking for the children by indicating his belief in their ability to adhere to standards and by his insistence that they do so. Since so many of the children in depressed area schools have had repeated experiences with failure, the successful teacher recognizes the need for modifying the child's previous educational environment to emphasize what is wholesome and constructive in the child's makeup. He knows he must convince his students of their ability to achieve.<sup>2</sup>

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<sup>1</sup>Tiedt, op. cit., p. 4.

<sup>2</sup>Sidney Trubowitz, A Handbook for Teaching in the Ghetto School (Chicago: Quadrangle Books, 1968), p. 62.



It is widely believed that poor children lag in school because they are members of a disadvantaged group. Experiments in a school suggest that they may also do so because that is what their teachers expect.<sup>1</sup>

One of the central problems of American Society lives in the fact that certain children suffer a handicap in their education which then persists throughout life. The reason usually given for the poor performance of the disadvantaged child is simply that the child is a member of a disadvantaged group. There may well be another reason. It is that the child's shortcomings may originate not in his different ethnic, cultural, and academic background, but in his teacher's response to that background.<sup>2</sup>

A study was conducted at the University of Illinois by Karnes, Teska, Hodgins and Badger. It was entitled "Educational Intervention at Home By Mothers of Disadvantaged Infants." Twenty mothers of infants between the ages of 12 and 24 months were recruited from the economically depressed neighborhoods of Champaigne, a community of 100,000 in central Illinois. The mothers were asked if they were willing to attend a two-hour meeting each week for 15 months. These mothers would be paid \$1.50 an hour to attend, with transportation and baby sitting services provided for the women, most of whom did not have full-time jobs. They were

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<sup>1</sup> Robert Rosenthal and Lenore Jacobson, "Teacher Expectations for the Disadvantaged," Scientific American, 218, No. 4 (April 1968), p. 19.

<sup>2</sup> Ibid., p. 19.

provided a sequential educational program to use at home with their children and were instructed in principles of teaching which emphasized positive reinforcement. In addition to these child-centered activities, a portion of each meeting was devoted to mother-centered goals related to fostering a sense of dignity and worth as the mother demonstrated self-help capabilities within the family setting and the community at large.

In conclusion, it was found that a program of mother training can do much to prevent the inadequate cognitive and linguistic development characteristics of the disadvantaged child. The educational intervention through the mother affected the child's total environment and was reflected in his later school competency.<sup>1</sup>

The goal of a music program is not merely to develop performers, but also consumers of "good music." The music program can and must give youth, especially culturally disadvantaged youth, a sense of identity and belonging.<sup>2</sup>

Plans for the education of the culturally deprived must be made with all or the inherent problems taken into consideration, and it is appropriate to examine what each subject area can contribute, and how it can be taught most

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<sup>1</sup>Merle B. Karnes, "Educational Intervention at Home by Mothers of Disadvantaged Infants," Child Development XXXI (December 1970), pp. 925-934.

<sup>2</sup>Eugene B. McCoy, "Music and the Disadvantaged Child," Catholic School Journal, LXVIII (December 1968), pp. 47-48.

effectively. Music education, for an example, is one type of aesthetic education, that must begin with a clear understanding of its basic purposes, the justification for its inclusion in the general public school curriculum, and what seems to be its special values for disadvantaged students.<sup>1</sup>

Ernst feels that every music curriculum should afford all students the following musical outcomes:

#### Skills

1. He will have skill in listening to music.
2. He will be able to sing.
3. He will be able to express himself on a musical instrument.
4. He will be able to interpret musical notation.

#### Understandings

5. He will understand the importance of design in music.
6. He will relate music to man's historical development.
7. He will understand the relationships existing between music and other areas of human endeavor.
8. He will understand the place of music in contemporary society.

#### Attitudes

9. He will value music as a means of self-expression.

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<sup>1</sup>Naomi Armstrong, "Music Education for the Culturally Deprived Students," The High School Journal, LII (November 1968), p. 62.



10. He will desire to continue his musical experiences.

11. He will discriminate with respect to music.<sup>1</sup>

It would seem reasonable to question whether or not the inclusion of aesthetic education might be somewhat premature at this point, for no one can dispute the prime need for help in solving personal problems and the mastery of communicative and quantitative skills which are essential for making a living. Merely enabling these young people to make a living, however, will not significantly change their lives unless they are also exposed to influences that make living exciting and meaningful.<sup>2</sup>

"The successful teacher of music in disadvantaged areas must give up mass application of musical materials and must forego the naive approach that assumes pupils will like and understand the music of Brahms, Stravinsky, and Bartok, because I, the teacher, do." Instead, untraditional, methods and inclusion of unorthodox materials may be indicated to reach the disadvantaged, and the training of the future teacher should reflect the use of such materials and methods. Such teacher preparation may include:

- (a) The development of an understanding of the depressed conditions in which many of the

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<sup>1</sup>Karl D. Ernst, Charles L. Gray, Music in General Education (Washington, D.C.: Music Educators National Conference, 1965), pp. 4-8.

<sup>2</sup>National Association of Secondary School Principals, "The Arts in the Comprehensive Secondary School," Perspectives in Music Education, Source Book III, B.C. Kowall, ed. (Music Educators National Conference; Wash. D.C., 1966).

culturally disadvantaged exist, conditions that may create not only complete indifference to the musical values accepted by the average teacher, but a lack of interest in musical experiences and materials.

- (b) A heavy emphasis on the properties of music as a common means of expression that has always existed in many cultures and at many levels.
- (c) A teacher commitment to the business of opening up understanding of music in the hearts and minds of children who are poorly cared for, and in many cases, inadequately housed, clothed, and fed.
- (d) An emphasis on learning by doing; by making much music. Problems of verbal communication with the disadvantaged child may be great.
- (e) The teacher of the disadvantaged must somehow be inoculated against the aspects of cultural shock typical of the improverished, submarginal environment.
- (f) The training of the new breed of teacher in areas of applied, theoretical and historical music must be both thorough and practical.
- (g) The future teacher of the disadvantaged must be conditioned to expect only the long-term effort to show results, and prepared, if necessary, to write off certain groups of pupils and begin with those whose level of receptivity justifies a reasonable expectancy of success. In other words, he must be prepared to live with a little success and much failure in the beginning of his work.
- (h) The training of such teachers must develop a spirit of endurance and dedication that will equip them to engage and perservere in the endeavor of bringing music to those who need it, regardless of the poverty and misery of the conditions in which they exist.<sup>1</sup>

The disadvantaged youth lives in a world of his own, unable to adjust to new situations without causing or

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<sup>1</sup> Andrews, op. cit., p. 43.

creating chaotic situations. He has no feelings of belonging, hence, he views people unfamiliar to him with frustration, distrust, and negativism. Not only is he poor economically, but he is also poor in spirit. "No greater challenge can be presented to today's music teacher than the unfolding of goodness and beauty to youngsters who have a dark veil of nothingness surrounding them."<sup>1</sup> No other subject matter can meet the immediate and pressing personal needs of the disadvantaged youth better than music.

Emphasis of music education has been taught more for non-musical reasons than for genuine musical values, since 1838 when it was first given a place of equal importance with other academic subjects in the curriculum in the schools of Boston. It has become increasingly apparent that music cannot hold a justifiable place in the curriculum based only on the seven cardinal principles of education or upon the four objectives of the Educational Policies Commission.<sup>2</sup> The study of music deserves a place in the curriculum because of the educational qualities that are unique to music, because an aesthetic experience brought about through music is one important way of enhancing and enriching the living process and because "musical experiences when cultivated by training give rise

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<sup>1</sup> McCoy, op. cit., p. 48.

<sup>2</sup> William Bruce, Principles of Democratic Education, (New York: Prentice-Hall, Inc., 1939), p. 454.



to a special type of interest and enjoyment."<sup>1</sup>

In the spring of 1966, a project was launched in seven urban schools (elementary and junior high schools) in Lexington, Kentucky, when a Title I grant made possible the purchase of a large number of stringed instruments, (one hundred violins and a proportionate number of violas, cellos, and string basses) which could be loaned to students, and the employment of two teachers to give instruction of these instruments. In addition to learning to play these instruments and learning about music, it was also found that many of these students improved in their work as well. Some of the reasons given for this were that the music classes provided motivation for them to attend school more regularly, and the pride of owning a real instrument seemed to add a great deal to the morale of these boys and girls.<sup>2</sup>

Dorothy Maynor, a retired, world-acclaimed Negro soprano, recently founded and now devotes her time to the Harlem School of Arts, in New York City. She described some of her purposes and dreams for the school as follows:

. . . What we are counting on, and in some small ways our hopes are bearing fruit already, is that a lad who seems to have a little or no purpose, who has never been taken very seriously by his parents or by the other kids on the

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<sup>1</sup>Harry Broudy, "Educational Theory and the Music Curriculum," Perspectives in Music Education (December 1964), p. 183.

<sup>2</sup>Armstrong, op. cit., p. 62.



block or even by his teachers in the public schools, that such a boy or girl might, just by learning to concentrate on mastering an instrument, or in the blending of colors . . . in some way this child may be taught to dream and to realize that dreams are quite real. And if this is kept up for a while, that child will one day look in the mirror and see something that he never saw before--the makings of a real human being.<sup>1</sup>

According to Roe, schools in depressed areas are often thought of as difficult schools. Teachers must design and use teaching techniques to cause the disadvantaged child to know, to love, and to appreciate music in as many forms as possible, and thus to bring joy to their lives and added culture into their nature. Music can aid a child to adjust and become a part of and a contributor to the class. It gives success and assurance and the child realizes that though he may fail in other phases of knowledge, he can reassure himself through his musical successes and soon venture into the fields of knowledge again.<sup>2</sup>

Steinhoff evaluated eighty-seven summer programs in schools of the disadvantaged. Evaluation was based on questionnaires to teachers and principals, class observations, and interviews with staff members, children, and parents. It was found that (1) the quality and success of the program depended on the quality of the teachers, and

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<sup>1</sup> Dorothy Maynor, "Arts in the Ghetto," Music Educators Journal, LIV (March 1968), pp. 39-40.

<sup>2</sup> Paul Roe, "The Music Teacher and the Disadvantaged Child," Texas Music Educator, (May 1969), p. 58.

(2) the programs were overly ambitious and did not reach all of the children for whom it was established. However, it was felt that the programs were valuable and should be continued.<sup>1</sup>

Music is an important segment of every child's training and for the culturally disadvantaged, it is an absolute necessity. Through music, intellectual achievement is sensed; cultural traditions recognized; group interdependence accepted. Music sustains dreams, reinforces concepts and skills learned in other subjects, and stabilizes the pressures inherent in a competitive, academically oriented class.<sup>2</sup>

Bentley devised a test which measures the degree of interest in music. He feels that to be talented is not necessarily to be interested, nor to be interested, talented. Every music teacher has pupils of very considerable ability who dislike music and others of moderate aptitude who show a keen interest and desire to learn.<sup>3</sup>

Investigators and contemporary researchers, Haecker and Ziehen, through questionnaires and interview techniques, studied the source of aptitude through achievement

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<sup>1</sup>Carl Steinhoff, "Summer Programs in Music for the Disadvantaged Child," Journal of Research in Music Education XVI, No. 1 (Winter 1966), p. 84.

<sup>2</sup>Alfred Balkin, "Music for the Educable Child," Music Educators Journal, LII (February 1966), p. 89.

<sup>3</sup>Rosamund Shuter, Psychology of Musical Ability, (London: Methuen and Company, 1968), p. 89.

characteristics objectively. They found that generally (1) if both parents were talented, their children would very likely be talented; (2) if only one parent of the two was talented, their children would usually be talented; and (3) if neither parent was talented, their children would be less talented than they. This study also suggested that males, as a group, have more musicality than females.<sup>1</sup>

From empirical knowledge, it is known that different people were born with diverse degrees of every special aptitude. That is, people are born with unequal potential. If an individual, regardless of his high level of potential, were not afforded musical exposure, his potential would probably not be adequately developed, and, therefore, for all practical intents and purposes, he would be considered to possess little aptitude.<sup>2</sup>

A disadvantaged youngster seldom, if ever, leaves his environment. He rarely knows much of the "outside" and can not communicate effectively with any one outside his environs. He has no hopes, dreams, or aspirations, for all he ever sees is degradation, hopelessness and the signs of poverty. He knows little of the general culture and its values. He has a set of values foreign to the general culture, and in many instances, his values are in violent

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<sup>1</sup> V. Haecker and T. Ziehen, "The Source of Musical Aptitude," Music Educators Journal, LVII (April 1971), p. 35.

<sup>2</sup> Edwin Gordon, "The Source of Musical Aptitude," Music Educators Journal, LVIII (April 1971), p. 36.

opposition to those considered acceptable by the majority.<sup>1</sup>

In June, 1966, The Spectator, a local newspaper serving Somerset and Swainsa, Mass., ran the following headline: "Not White, Not Rich, Not Different. Somerset-Swainsa Families Made Hit With Children From Brooklyn School." The story behind the headlines was of a most rewarding experience for culturally disadvantaged pupils. It was a unique project in which a chorus of one hundred junior high school children, most of whom had never left their own neighborhoods, were transported to another state, lived in strange homes with strange families for a weekend, and presented The Testament of Freedom, Randall Thompson's musical setting of texts written by Thomas Jefferson. This group, ranging in ages eleven through fourteen, had been so successful in learning and performing the composition that they were given the opportunity to perform it in an all white, middle-income town. Many of the students had never spoken to a white person other than teachers and community service personnel. They were quite apprehensive about the trip, in spite of the personal letters they had received from their host families expressing pleasure in the coming meeting. Upon arriving in the town, they experienced many things they never knew existed, such as policemen escorting them into town. They had always been afraid of the police and his uniform. With the families, the students enjoyed the planned activities and soon the ice was broken. After

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<sup>1</sup>McCoy, op. cit., p. 47.



the performance, a meeting was held to evaluate the experience. The trip was declared a resounding success, and during the following weeks at school, the disadvantaged youth spoke often of the friends they had made. None ever made mention of the fact that they were white, only that they were friends.<sup>1</sup>

According to Balkin, music should be an integral part of school programs. A program which disregards music is neglecting a significant avenue for the child's emotional development. The public school has neglected these musically deprived children too long, therefore, it is important for the teacher to encourage the development of potentialities for growth in the enjoyment and participation in music that are inherent in every child.<sup>2</sup>

Orf is one of the music educators of this era who understands children. It is evident that he created his method of teaching music to fit the needs of children living in a low-socio-economic environment. Usually, these students are lacking in musical experiences and abilities due to early deprivation prior to entering public school. His technique is based on the following steps:

- (a) child discovers experience
- (b) child repeats experience
- (c) child makes up his own experience
- (d) child discovers new experiences that

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<sup>1</sup>Richard Piro, "Not White, Not Rich, Not Different," Music Educators Journal, LIV (October 1968), p. 47.

<sup>2</sup>Balkin, op. cit., p. 89.



- require understanding of the first experience, and  
 (e) child repeats new experience.<sup>1</sup>

In a recent study by King, who set out to see if there was any relationship between the factors of intelligence and the ability to learn to read music. Music reading was conceived to be the act of scanning music symbols and interpreting them in terms of musical factors such as pitch, time, and rhythm. The results strongly suggested that there was a definite relationship between intelligence and the ability to read music. The poor music readers seemed to test lower on the scale of intelligence than did good music readers.<sup>2</sup>

"One out of every three Americans is being termed disadvantaged." Music educators must become aware of this problem and develop programs designed for the disadvantaged. In some areas of the country, music educators have done just that. For an example:

In Cincinnati, disadvantaged youth have benefited greatly from public and private philanthropic agencies. The regular concerts of the Cincinnati Symphony Orchestra for school students have been subsidized by philanthropists so that no child who really wants to attend the concerts is deprived of that opportunity.

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<sup>1</sup>Carl Orf, "Orf and the Exceptional and Urban Children," Music Educators Journal, LV (March 1959), p. 49.

<sup>2</sup>Harry A. King, "A Study of Music Reading and IQ Scores," Journal of Research in Music Education, XVI, No. 1 (1969), p. 82.

In San Francisco, six chamber orchestra concerts were held at various schools in culturally handicapped neighborhoods during the 1966 spring semester. The programs were part of the new pilot series of concerts by the San Francisco Symphony Orchestra. Each program was specifically designed to give students basic experiences in listening through the understanding of musical rhythms, melodic concepts, musical form, harmonic development, and orchestral color. The aim of these experiences was to enrich the culturally deprived student and give him an opportunity he could not financially afford.<sup>1</sup>

Disadvantaged youth not only enjoy singing and dancing, they take delight in play acting. They need more opportunities to pretend or to do a bit of unsophisticated role playing. Puppets are ideal for the older child to conceal his shyness, feelings of insecurity and embarrassment.

The music class must be recognized as a laboratory whose purpose is to teach by means of physical exposure to music and experimentation with the making of music. The classroom should not be a museum which merely preserves and disseminates correct facts and attitudes.<sup>2</sup>

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<sup>1</sup>Carl Marburger, "New Dimensions of Educational Programs for Disadvantaged Youth," Music Educators Journal, LII, (November, 1966), p. 40.

<sup>2</sup>Claude Palisca, "Music in Our Schools: A Search for Improvement," Report of the Yale Seminar on Music Education, Washington, D.C., U.S. Department of Health, Education and Welfare, Office of Education, 1964, p. 9.

Our society's sickness (poverty, segregation, drugs, crime, etc.) touches every subject in the school curriculum, including music. The strain on every subject has been severe. It is breaking the backbone of many city music programs. Experienced music teachers are leaving the profession or fleeing to the safety of the suburbs. The status of music in the cities is crumbling under an avalanche of frustration and failure. In the ghetto, music teachers find that every ideal they were taught to adhere to seems to be open to attack, or at least, seriously questioned. They also find an enormous gap between their middle-class values and the particular values held by their students. The disadvantaged student, for an example, isn't particularly interested in learning the names of the instruments of the orchestra. He isn't "turned on" by cowboy songs. He isn't interested in classical music; in fact, he'll tell you, with complete certainty, how dull it sounds compared to James Brown or Aretha Franklin.<sup>1</sup>

The arts are in a more favorable position in the Mexican-American community than in the black community. The reason for this difference is due to the role of the father. The Mexican-American community is oriented toward the father; whether he is in the home or out of it, he still runs the home. In most Mexican-American communities, the father is someone who is artistically inclined. That is, he may play

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<sup>1</sup>"Facing the Music in Urban Education," Music Educators Journal (January, 1970), p. 43.

a guitar, sing, or grow flowers. In contrast, in the poor black community, this is not usually so. For one thing, often in the poor black community, it is the mother that the children revolve around, and she is often too busy for that kind of thing.<sup>1</sup>

Marsh and Fitch conducted a study to determine the effect of singing specially composed music on (1) articulation of ending(s) consonants as pronounced in continuous speech by southern Negro children and (2) the syllabic frequency in continuous speech of southern Negro children. There were three groups: (1) a group taught to sing the specially composed music, (2) a group taught to chant the rhythm of specially composed music, and (3) a no-contact control group. The students used consisted of thirty southern Negro children in fourth, fifth, and sixth grades. All subjects had failed to articulate at least two of the three specified ending(s) consonants.

It was concluded that the treatment sessions were too short to change significantly the learning history of the subjects. However, it was felt there was enough improvement in certain areas to warrant further study.<sup>2</sup>

Self-esteem has been of interest to investigators for a long time, but more recently, it has gained new

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<sup>1</sup>Max Kaplan, "We Have Much to Learn from the Inner City," Music Educators Journal (January, 1970), p. 41.

<sup>2</sup>James Fitch and Jayne Marsh, "The Effect of Singing on the Speech Articulation of Negro Disadvantaged Children," Journal of Music Therapy, VII (Fall 1970), pp. 88-94.



attention in regard to problem learners such as those in the study done by Michel and Martin. In the winter of 1968-69, the first experimental study in music and self-esteem was undertaken with fifteen Negro boys in an all-black elementary school whose ages were between 10 and 12 years, and they were in the fourth, fifth, and sixth grades.

Self-esteem is said to be the judgmental evaluation an individual makes of himself, and is related not only to early home environment, but also to achievement, including skill development. The study began with a seven and one-half week phase dealing with skill development in music for the fourteen subjects. The subjects were given a Self-Esteem Inventory and the Behavior Rating Sheet to fill out before the treatment, which was 15 sessions of ukulele lessons. At each of the sessions, the subjects were given points for good and attending behavior. Candy was used as a positive reinforcer, and after about four sessions, the reinforcement was increased to the earning of the ukulele itself. Despite the over-crowded classrooms, the intended teaching approach, such as simple chords on the ukulele to accompany favorite songs, proved useful. It was concluded that the development of musical skills may be an aid in increasing the self-esteem of disadvantaged problem students, and consequently may generalize to increased self-confidence in other tasks.<sup>1</sup>

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<sup>1</sup>Donald Michel and Doretha Martin, "Music and Self-Esteem: Research with Disadvantaged Problem Boys in an Elementary School," Journal of Music Therapy, VII (Winter, 1970), pp. 124-127.



Disadvantaged children are not difficult to recognize in our schools. The views and comments of the many authorities cited should enable teachers to be more tolerant of these children.

### CHAPTER III

#### Collection of Statistical Data

Data collected from the tests administered during the study are presented. Statistical calculations were made and interpreted and charts were added to further explain the statistical findings.

In attempting to determine musical background and ability, and to show the relation between musical deprivation and academic achievement, the California Comprehensive Test of Basic Skills, Level II, Form R, Parts four and five, was given to 105 fourth and fifth grade pupils in the eighth month (March) of the school year 1970-71. The data obtained were the pupils' total scores and grade placement.

The Elementary Music Achievement Test (EMAT) by Richard Colwell was a recorded aural test. Aural, Colwell explains, because music is a listening art. It contains various subtests requiring the student to recognize, by ear, pitch differences, tonality and meter. In Test I, which was the part administered, the subjects were asked to indicate (1) whether the second tone of a pair was higher than, lower than, or the same as the first, (2) which of the three tones played was the lowest, (3) whether a phrase was in duple or triple meter.

No method of determining or defining the deprived students (musically or socially) was known to the author,

therefore, a questionnaire was developed to assist in recognizing these children for the study (see Appendix). It consisted of fifty questions, pertaining to the child's home life or social background, as well as his musical knowledge. It was believed that those students who made low scores on the questionnaire would be the students socially deprived, as well as musically deprived, while those students who made the highest scores on the questionnaire would be considered students of normal musical background, as well as normal social background. Two groups, A and B, were developed by placing the higher scores from the questionnaire in Group A and the lower scores in Group B.

A total of 105 fourth and fifth grade pupils from Clara B. Oliver Elementary School, Dallas, Texas, were administered a series of tests to determine the relationship of musically deprived students and their academic achievement as compared to children of normal musical background and their academic achievement.

Of the 105 students, sixty were chosen, according to their Social and Musical Background Questionnaire scores, to make up the Groups A and B. Thirty students with the top scores were in Group A and thirty students with the lowest scores were in Group B. Statistical calculations were made only on these two groups.

The chronological ages of students in Group A ranged from nine years, five months, to eleven years, two months. The intelligence quotients ranged from a low of eighty-one

to a high of one hundred twenty-seven. Total language scores ranged from twenty to fifty-eight and the total reading scores ranged from fifty-eight to eighty-seven, while the Elementary Music Achievement Test (EMAT) scores ranged from forty-five to seventy-seven (Table I).

In Group B, the students' chronological ages ranged from nine years, nine months, to thirteen years, three months, and their intelligence quotient ranged from sixty-two to ninety-nine. The total language scores ranged from fourteen to forty-four, while the reading scores ranged from seventeen to thirty-eight, and the EMAT scores ranged from thirty-seven to sixty-nine (Table I).

Grade placement ranged as indicated by the Test of Basic Skills was: total reading, 6.4 to 2.9; total language, 5.1 to 3.6 for the thirty pupils in Group A. The thirty pupils comprising Group B showed a grade placement range as follows: total reading, 5.5 to 2.3; total language, 4.0 to 3.3.

In the Appendix, the number of correct responses, on the EMAT, of each student in Groups A and B are shown. In section one, Pitch, the student was able to make a total of twenty-five points. This section was divided into two parts, two-tone patterns (fifteen points) and three-tone patterns (ten points). In the Intervals section, the student could make a total of twenty-eight points. This section of the test was also divided into two parts, three-tone patterns (ten points) and phrases (eighteen points).

TABLE I  
Range of Scores  
Statistical Characteristics of Groups A and B

	A		B	
	Low	High	Low	High
Chronological Age	9-5	11-2	9-9	13-3
Intelligence Quotient	81	127	62	99
Reading	27	55	15	41
Questionnaire	58	87	17	38
Language	20	58	14	41
EMAT	44	77	37	69



The last sub-test, Meter, consisted of fifteen questions, each worth two points. This section, therefore, was equal to a total of thirty points. The highest possible score on the entire test was eighty-three.

Tables II and III indicate the frequency distribution of scores from the Elementary Music Test administered to Groups A and B, as well as the questionnaire scores given at the beginning of the Study.

From the Elementary Music Test (EMAT), percentile norms were calculated for both groups. It was found that from a possible score of eighty-three, in Group A, the lowest score on the test was forty-five and the highest score was seventy-seven. This was a range of thirty-two points. Half of the students (50 per cent) answered seventy-three per cent of the test items correctly. The poorest ten per cent of the students answered fifty-eight per cent of the questions correctly. Therefore, this test could be categorized as fairly easy for this group. A normal distribution was represented here, because the spread between Q-1 and Q-2 (5.75) was approximately equal to the spread between Q-2 and Q-3 (6.25). The median was the same as Q-2 (61.00), while the mean was 62.50 and the mode was 59.00 (Table IV).

From Group B, the lowest score, also, from a possible eighty-three, was thirty-seven, and the highest score was sixty-nine. This was a range of thirty-two points, also. Half of the students (50 per cent) answered fifty-eight per cent of the test items correctly. The poorest ten per cent

TABLE II

Distribution of Questionnaire and EMAT Scores of Group A

<div>EMAT →</div> <div>Questionnaire ↓</div>	44-45	46-47	48-49	50-51	52-53	54-55	56-57	58-59	60-61	62-63	64-65	66-67	68-69	70-71	72-73	74-75	76-77	Total
85-87													1					1
82-84									1						1			2
79-81																		0
76-78																		0
73-75						1				1								2
70-72											1							1
67-69						1												1
64-66				11								1	1			1		5
61-63	1		1					11		1			11			1	1	9
58-60						1		111	1			11				1	1	9
Total	1	0	1	2	0	3	0	5	2	2	1	3	4	0	1	3	2	30

TABLE III

Distribution of Questionnaire and EMAT Scores of Group B

EMAT Questionnaire	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	61-63	64-66	67-69	Total
37-39	1				11	1	1					5
35-36		1		11	1		1				1	6
33-34			1		11			1			1	5
31-32				11	1	1		1	1			6
29-30					11			1				3
27-28		1										1
25-26								1				1
23-24				1								1
21-22												0
19-20	1											1
17-18		1										1
Total	2	3	1	5	8	2	2	4	1	0	2	30

TABLE IV  
Percentile Norms

Percentiles	Total Population	A Upper 30	B Lower 30
100			
90	68	73.5	59.5
80	62.5	68	57
70	59.1	66.5	53.5
60	56.6	65.5	49.5
50	58.8	61	48.9
40	52	58.5	48
30	49.7	57.5	46.8
20	47.8	53.5	44.5
10	43.5	48.5	39.5
0			
Mean	56.1	62.5	51.2
Median	58.8	61	48.9
Mode	57	59	50
Q-3	60.3	67.2	55.7
Q-2	58.8	61	48.9
Q-1	48.9	54.2	46

of the students answered forty-seven per cent of the questions correctly. The test for Group B may be considered more difficult for this group than it was for Group A. The spread between Q-1 and Q-2 (2.90) was smaller than that between Q-2 and Q-3 (6.85). The median was the same as Q-2 (48.90), the mean was 51.20, while the mode was 50.00 (Table IV).

To allow a good statistical analysis to be made, it was decided to calculate correlation coefficient, mean scores, and standard deviation for the two groups. The correlation coefficient was calculated to show the correlation between the questionnaire scores and the EMAT scores, as well as correlation between the questionnaire and language scores and correlation between the questionnaire and the reading scores. Many methods were found for calculating the correlation coefficient, but the one chosen to use for this study was derived from the Product Moment formula. The formula is:<sup>1</sup>

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{[N\sum X^2 - (\sum X)^2] [N\sum Y^2 - (\sum Y)^2]}}$$

X = individual raw scores of one column of data

Y = individual raw scores of the other column

The results obtained for the two groups evaluated here are listed in Table V

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<sup>1</sup>Billy L. Turney and George P. Robb, Simplified Statistics for Education and Psychology, (Scranton, Pennsylvania: International Textbook Company, 1968) p. 114.



TABLE V  
Correlation Coefficient of Scores

	A	B
1. Questionnaire and EMAT	0.067	0.278
2. Questionnaire and Reading	0.566	0.397
3. Questionnaire and Language	0.648	0.238

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One per cent level is equal to 0.470.

Five per cent level is equal to 0.357.

The mean scores for each test were calculated by the formula:<sup>1</sup>

$$\bar{X} = \frac{\Sigma X}{N}$$

X = individual scores of the column data

N = total number of students. (Here N = 30 per group).

The calculated values for the mean scores are listed in Table V. The standard deviations were calculated by using the formula for standard deviation from original measures of scores. The formula is:<sup>2</sup>

$$S.D. = \frac{\sqrt{N\Sigma X^2 - (\Sigma X)^2}}{N}$$

The calculated values for the standard deviations are listed in Table V.

The commonly used levels of significance used are five per cent, and one per cent levels. For our groups, N=30. Therefore, for r to be significant at the one per cent level, r must be greater than or equal to

$$\frac{2.58}{\sqrt{N}} = \frac{2.58}{\sqrt{30}} = \frac{2.58}{5.477} = 0.470$$

For r to be significant at the five per cent level, r must be greater than or equal to

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<sup>1</sup>Ibid., p. 38.

<sup>2</sup>Ibid., p. 54.

$$\frac{1.96}{\sqrt{N}} = \frac{1.96}{\sqrt{30}} = \frac{1.96}{5.477} = 0.357^1$$

The results show that:

For Students With Normal Background

1. Correlation between questionnaire and EMAT was not significant at the five per cent level.
2. Correlation between questionnaire and reading scores was significant at the one per cent level.
3. Correlation between questionnaire and language scores was significant at the one per cent level.

For Musically Deprived Students

1. Correlation between questionnaire and EMAT was not significant at the five per cent level.
2. Correlation between questionnaire and reading scores was significant at the five per cent level.
3. Correlation between the questionnaire and language scores was not significant at the five per cent level.

The T-test of coefficient correlation validated the correlations stated above and shown in Table V. The formula is:

$$t = r \sqrt{\frac{N - 2}{1 - r^2}}^2$$

r = obtained coefficient of correlation

N = number of pairs of observations

When applied to this study, N = 30. Therefore, N - 2 = 30 - 2 = 28.

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<sup>1</sup>E.F. Lindquist, First Course in Statistics, (Cambridge: The Riverside Press, 1942), p. 189.

<sup>2</sup>J.P. Guilford, Fundamental Statistics in Psychology and Education, (New York: McGraw Hill Book Co., 1956), p. 219.

t for one per cent level of significance = 2.763.

t for five per cent level of significance = 2.048.<sup>1</sup>

Formula for t becomes:

$$t = r \sqrt{\frac{28}{1 - r^2}} = 5.2915 \quad r \sqrt{\frac{1}{1 - r^2}}$$

After the calculations were made using the correlation coefficients from Table V, it was further proved that:

For Students With Normal Background

1. The questionnaire and EMAT correlations were not significant at either level.
2. The questionnaire and reading correlations were significant at the one per cent level.
3. The questionnaire and language correlations were significant at the one per cent level. (Table VI)

For Musically Deprived Students

1. The questionnaire and EMAT correlations were not significant at either level.
2. The questionnaire and reading correlations were significant at the five per cent level.
3. The questionnaire and language correlations were not significant at either level. (Table VI)

Although some of the correlation coefficients were not extremely large, all but the case of the questionnaire and EMAT for students with normal background showed a significant positive correlation. The data shown in Table VII for the mean scores was very revealing. It showed that on all tests, the mean scores of the students with normal background

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<sup>1</sup> Ibid., pp. 238-239.

TABLE VI

Results of T-Test Calculations for Groups A and B

	A	B
1. Questionnaire and EMAT	0.3545	1.53
2. Questionnaire and Reading	3.63	2.29
3. Questionnaire and Language	4.5054	1.30



TABLE VII  
Measure of Central Tendencies

Tests	A		B	
	Mean	Standard Deviation	Mean	Standard Deviation
Questionnaire	62.16	7.77	32.06	4.99
EMAT	62.50	8.39	51.20	7.64
Reading	39.80	8.14	25.30	6.96
Language	37.86	10.32	26.00	9.88

was considerably higher than those with musically deprived backgrounds. The average of the mean scores was 12.55 points higher for the students with normal backgrounds.

Some musical and non-musical questions were chosen at random from the questionnaire. The calculations of the students responses were tabulated and shown in Table VIII. It was revealed that from Groups A and B, eleven pupils had pianos in their homes while twenty-four had either taken private lessons or had attended the piano or instrumental classes in their schools. Also, from the combined groups, fifty-seven indicated they had attended a musical concert. The students were asked if they would be able to imitate a rhythm clapped for them by their teacher. Fifty-five of the sixty pupils felt they could imitate the clapped rhythm. Further indications of the questionnaire were that seven students, from Group A, had never traveled out of the State of Texas, while nineteen from Group B had not been out of the State of Texas. Also, in Group A, twenty-five had not been out of the United States, and none of the students in Group B had ever traveled out of the United States. After further investigation, it was found that of the five pupils who had been out of the United States, three were children of men who had made careers in the Armed Forces. In Group A, twenty-two of the students correctly identified the meter of the three given songs in question number forty-eight, while eight students of Group B identified the meter correctly. It was further evidenced that Group A had twenty-five students to

recognize the primary rhythm instrument of a band and from Group B, twenty-one recognized the correct instrument.

Extensive amounts of research and calculations were done to reach the conclusions reported in this chapter. It was the author's intention to provide valid statistical information concerning the subjects of this study.

TABLE VIII  
Responses from Questionnaire

Item Numbers	A		B		Combined Groups		Number of Cases		
	Boys	Girls	Boys	Girls	Boys	Girls	A	B	Combined Groups
1					3 5%	8 13%			11 18%
10					12 20%	12 20%			24 40%
7					21 35%	36 66%			57 95%
30					21 35%	34 57%			
45	4 13%	3 10%	11 36%	8 27%			7 23%	19 63%	
46	12 40%	13 43%	5 17%	25 83%			25 83%	30 100%	
48	7 23%	15 50%	2 7%	6 20%			22 73%	8 27%	
49	17 57%	8 27%	15 50%	6 20%			25 83%	21 70%	

## CHAPTER IV

### Summary, Conclusions, and Implications for Improvement

This investigation was concerned with the effect of music deprivation upon academic success among fourth and fifth grade pupils in the Clara Oliver Elementary School. It was recognized that some of these pupils were below average rating in music ability and academic achievements, while others were average and slightly above in music ability and academic achievements. The fact that the final sixty pupils involved in this study varied in their language, reading, musical ability, and the musical questionnaire made it necessary to test, compute, and report the findings of Groups A and B separately throughout the study.

#### Summary

The findings indicated that pupils in the study who performed highest on the questionnaire, also performed relatively high on the Colwell Elementary Music Achievement Test (EMAT) and the sub-tests of the California Comprehensive Test of Basic Skills, while those pupils who performed low on the questionnaire, also performed low on the sub-tests of the California Comprehensive Test of Basic Skills. It was apparent, at the same time, that the middle sub-groups of those children who were tested followed no significant pattern of coincidence with relation to performance on



the questionnaire or on any of the tests.

An analysis of the questionnaire, Colwell's Elementary Music Achievement Test, and the achievement test showed that musical abilities of the children in Group B appeared relatively as homogeneous as those children in Group A. It was indicated that of the sixty students used in this study, the total reading scores ranged from thirty-seven to seventy-seven.

### Conclusions

In view of the fact that pupils vary in maturity, abilities, achievements, and background experience, provisions have to be made for the individual and cultural differences if effective learning is to take place. It is recognized that differences among individuals are obvious facts of nature and circumstances.

When teachers understand the various handicaps of each child in the classroom, they may vary the program of instruction. The deprived child will gain his own concepts, develop his skills, and draw conclusions in his own manner. The rate of his development and understanding will depend upon his handicap.

The disadvantaged child is deserving of the best quality of exceptionally skillful instruction in music, profitable musical experiences, and stimulating musical activities in the classroom. Music is an emotional outlet for most of these children and will assist in soothing or motivating them as needed. Music may be recognized as a tool

for the teacher. It is an entree into the adult society for each disadvantaged child and should be a regular and important part of his education. Implications from the findings were evident for the following conclusion:

The test results revealed that the pupils who had the (most serious) music disabilities showed (the most serious) academic difficulties; whereas, pupils who had little or no significant musical disabilities showed little or no significant academic disabilities.

#### Implications for Improvement

The following recommendations have been suggested for helping teachers to improve music instruction and musical experiences as it relates to listening learning, and enjoying music, among the fourth and fifth grade pupils in the Clara Oliver Elementary School:

1. Create an environment in which each child will have many opportunities, at his own rate of speed, to experiment with different kinds of rhythmic movements, exploring different kinds of rhythmic sounds and movements that are part of his daily environment and discover that instruments may be used for creating a rhythm as well as for playing a rhythm.
2. Encourage pupils to experiment with different ways of playing individual instruments in order to discover how their sounds may be changed by striking them differently.
3. Consider the children's need for certain skills and realize that their abilities to use these skills increase as they grow older.
4. Provide opportunities for children to hear symphonies and other cultural activities through recordings or live performances of orchestras.

5. Identify and eliminate as many indications of music deprivations through a systematic program of instruction, in order for pupils to understand the cause and effect relationships in other areas of the curriculum as possible.
6. Strengthen the identification of the phrase structure through bodily movement, group and/or solo singing, playing instruments, and creating original songs.
7. Make adequate provisions for differentiation of activities and musical experiences that are truly educational.
8. Create experiences which force the students to hear and identify sounds in relation to high(ness) and low(ness).
9. Further study be made to determine the causes of poor musical abilities existing among middle elementary grade pupils.

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APPENDIX A  
Questionnaire

Yes    No

- |     |     |     |  |
|-----|-----|-----|--|
| ___ | ___ | 1.  | Is there a piano in your home?   |
| ___ | ___ | 2.  | Do you ever play a piano at school, home or otherwise?                               |
| ___ | ___ | 3.  | Do you buy your lunch in the cafeteria at school?                                    |
| ___ | ___ | 4.  | Is there anyone in your family who plays an instrument well?                         |
| ___ | ___ | 5.  | Is there a color T-V in your home?   |
| ___ | ___ | 6.  | Do you watch T-V more than two hours a day?  |
| ___ | ___ | 7.  | Have you ever attended any musical concert?  |
| ___ | ___ | 8.  | Did you enjoy the concert enough to want to go again?                                |
| ___ | ___ | 9.  | Can you locate Middle C on the piano?  |
| ___ | ___ | 10. | Have you ever taken music lessons?   |
| ___ | ___ | 11. | Do you take music lessons now?   |
| ___ | ___ | 12. | Would your parents like you to make better grades?                                   |
| ___ | ___ | 13. | Would you like to make better grades?  |
| ___ | ___ | 14. | Do you sing in your church choir, school singing group, or any other choir?          |
| ___ | ___ | 15. | Do you like to cook?   |
| ___ | ___ | 16. | Are you a member of any group such as Cub Scout, Girl Scouts, Camp Fire Girls, etc.? |
| ___ | ___ | 17. | Do you find it difficult to concentrate on anything longer than thirty minutes?      |
| ___ | ___ | 18. | Have you ever been to a library outside the school?                                  |



- \_\_\_ 19. Do you enjoy your Music classes at school?
- \_\_\_ 20. Would you be able to name the musical syllables?
- \_\_\_ 21. Do you live in an Apartment?
- \_\_\_ 22. Have you ever lived in an Apartment?
- \_\_\_ 23. Do both your parents work?
- \_\_\_ 24. Do you walk to and from school?
- \_\_\_ 25. Have you ever read any book other than your regular school books.
- \_\_\_ 26. Does your family receive one or more of the daily newspapers?
- \_\_\_ 27. Are you able to study for more than thirty minutes at a time?
- \_\_\_ 28. Are you able to recognize some of the musical notes and their alphabetical names?
- \_\_\_ 29. Do you know the value (time) of the musical notes?
- \_\_\_ 30. Could you imitate rhythms your teacher claps?
- \_\_\_ 31. Could you clap various rhythms given to you on the blackboard?
- \_\_\_ 32. Have you ever been on a Talent Show?
- \_\_\_ 33. Would you like to be on a Talent Show?
- \_\_\_ 34. Would you like to sing or play an instrument professionally when you get older?
- \_\_\_ 35. Do you plan to finish High School?
- \_\_\_ 36. Do you plan to enter College?
- \_\_\_ 37. Have you ever visited a college campus?
- \_\_\_ 38. Do you know the four families of the orchestra?
- \_\_\_ 39. How many people live in your house other than your father, mother, sisters, and brothers?
- \_\_\_ 40. At the last concert you attended, how many instruments did you recognize?



- \_\_\_\_\_ 41. How many children are in your family?
- \_\_\_\_\_ 42. Are they in:  
\_\_\_\_\_ a. Junior High  
\_\_\_\_\_ b. Senior High  
\_\_\_\_\_ c. Elementary  
\_\_\_\_\_ d. College  
\_\_\_\_\_ e. Other
- \_\_\_\_\_ 43. Which sport do you like best?  
\_\_\_\_\_ a. Football  
\_\_\_\_\_ b. Basketball  
\_\_\_\_\_ c. Track  
\_\_\_\_\_ d. Tennis  
\_\_\_\_\_ e. Soccer
- \_\_\_\_\_ 44. Do you, along with your family, attend Church  
\_\_\_\_\_ a. Every Week  
\_\_\_\_\_ b. Twice a Month  
\_\_\_\_\_ c. Once a Month  
\_\_\_\_\_ d. Never
- \_\_\_\_\_ 45. Have you ever been out of the state of Texas?  
\_\_\_\_\_ a. Once  
\_\_\_\_\_ b. More than Once  
\_\_\_\_\_ c. Never
- \_\_\_\_\_ 46. Have you ever been out of the United States?  
\_\_\_\_\_ a. Once  
\_\_\_\_\_ b. More than Once  
\_\_\_\_\_ c. Never
- \_\_\_\_\_ 47. Can you tell when a song moves in 2's or 3's?
- \_\_\_\_\_ 48. Do these songs move in 2's or 3's?  
\_\_\_\_\_ a. Twinkle, Twinkle Little Star  
\_\_\_\_\_ b. Silent Night  
\_\_\_\_\_ c. Old MacDonald Had a Farm
- \_\_\_\_\_ 49. Which instrument in the band keeps the rhythm?  
\_\_\_\_\_ a. Drums  
\_\_\_\_\_ b. Trumpet  
\_\_\_\_\_ c. Tuba
- \_\_\_\_\_ 50. Name your favorite instrument

## SCORES OF COMPLETE POPULATION

	NAMES	QUESTIONNAIRE	IQ	TOTAL BATTERY	EMAT
1.	1	41	85	5.4	53
** 2.	2	29	84	3.5	50
3.	3	41	85	4.5	57
4.	4	48	85	4.5	62
** 5.	5	37	87	4.6	50
** 6.	6	30	63	4.4	49
* 7.	7	65	90	5.2	69
8.	8	40	81	3.9	57
** 9.	9	34	68	3.3	50
10.	10	56	92	5.5	48
11.	11	50	106	5.3	74
**12.	12	36	94	3.3	48
**13.	13	36	90	4.9	57
14.	14	39	90	4.0	52
15.	15	52	100	4.8	57
16.	16	53	80	5.9	55
17.	17	46	105	5.3	55
* 18.	18	61	102	6.4	75
19.	19	46	81	5.3	69
20.	20	43	86	3.7	42
21.	21	53	99	5.5	63
22.	22	46	90	4.8	57
* 23.	23	59	87	4.4	74
* 24.	24	59	89	4.5	77

* 25.	25	64	99	4.3	50
26.	26	50	99	4.2	61
27.	27	44	78	2.5	51
28.	28	61	84	4.1	67
**29.	29	34	62	3.4	51
**30.	30	34	86	3.8	61
31.	31	39	80	4.3	51
32.	32	44	71	4.3	56
33.	33	50	91	3.6	61
* 34.	34	59	94	3.9	67
35.	35	43	92	3.6	56
**36.	36	35	97	4.3	69
**37.	37	34	86	3.9	67
**38.	38	27	81	3.7	41
39.	39	60	105	5.9	70
40.	40	39	93	4.3	53
* 41.	41	63	83	3.6	63
**42.	42	20	63	2.2	39
**43.	43	17		2.0	42
44.	44	43	92	3.9	51
**45.	45	32	82	3.7	50
46.	46	44	94	4.6	72
47.	47	50	71	2.4	69
48.	48	39	97	3.9	48
**49.	49	34	74	3.8	45
* 50.	50	72	109	5.3	65
* 51.	51	65	100	5.1	67

52.	52	55	100	4.6	56
53.	53	44	101	6.1	60
* 54.	54	63	77	4.0	48
55.	55	48	98	5.5	53
* 56.	56	59	105	4.4	53
** 57.	57	37	99	4.7	50
* 58.	58	84	110	5.6	60
* 59.	59	87	127	8.1	68
60.	60	39	111	4.9	45
* 61.	61	63	98	4.1	45
62.	62	51	99	4.0	49
63.	63	55	97	4.0	53
* 64.	64	59	97	3.8	59
* 65.	65	58	83	3.9	60
* 66.	66	64	104	5.8	74
67.	67	46	94	3.4	47
* 68.	68	73	90	3.3	51
* 69.	69	75	113	5.1	63
* 70.	70	62	108	5.9	58
71.	71	41	106	4.9	52
* 72.	72	64	96	3.6	50
73.	73	39	84	3.1	56
* 74.	74	59	81	4.7	54
* 75.	75	83	117	6.5	73
76.	76	39	94	3.8	58
77.	77	49	90	3.0	59
78.	78	57	92	2.7	55

* 79.	79	62	103	4.4	67
* 80.	80	61	85	4.0	57
81.	81	39	75	2.4	43
82.	82	53	93	3.8	42
83.	83	39	88	2.7	51
84	84	46	91	3.1	51
* 85.	85	63	103	4.3	69
**86.	86	35	85	3.5	48
* 87.	87	59	93	4.5	59
**88.	88	31	88	3.0	48
**89.	89	36	85	2.9	49
90.	90	42	69	2.5	32
**91.	91	35	89	2.9	58
**92.	92	32	99	2.9	41
**93.	92	32	90	4.4	61
**94.	94	38	37	3.4	53
**95.	95	32	82	2.7	57
**96	96	32	85	2.9	54
* 97.	97	69	108	5.6	55
**98.	98	37	68	2.9	37
* 99.	99	62	102	4.9	63
**100.	100	24	86	3.7	47
**101.	101	29	94	3.8	60
**102.	102	26	99	4.7	58
**103.	103	37	90	4.4	57
* 104.	104	59	103	5.1	66
105.	105	43	91	3.2	58

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\* = Group A; \*\* = Group B



TABLE II

Distribution of Music Achievement Correct Responses  
Thirty Pupils Comprising Group A

Cases	Pitch			Intervals			Meter	Total
	Two Tone	Three Tone	Total	Three Tone	Phrases	Total		
1	15	9	24	8	16	24	10	68
2	14	5	19	3	12	15	13	60
3	13	8	21	7	17	24	14	73
4	11	7	18	8	16	24	9	63
5	10	5	15	9	16	25	7	54
6	15	10	25	8	12	20	10	65
7	10	7	17	8	10	18	10	55
8	13	8	21	8	16	24	10	69
9	12	9	21	7	15	22	12	67
10	8	7	15	9	10	19	8	50
11	14	9	23	9	16	25	13	74
12	9	6	15	7	10	17	9	50
13	7	8	15	10	9	19	7	48
14	6	5	11	3	9	12	11	45
15	14	10	24	8	16	24	10	68
16	12	8	20	9	14	23	13	69
17	10	8	18	6	10	16	12	58
18	12	7	19	4	14	18	13	63
19	12	8	20	7	12	19	14	67
20	14	9	23	8	16	24	14	75
21	11	8	19	5	11	16	12	59
22	11	9	20	8	14	22	12	66
23	14	9	23	7	17	24	14	75
24	14	8	22	10	17	27	14	77
25	11	7	18	9	14	23	12	67
26	10	5	15	8	9	17	13	58
27	9	7	16	8	9	17	13	59
28	5	6	11	9	12	21	11	54
29	9	8	17	7	13	20	11	59
30	10	8	18	5	9	14	14	60

TABLE III

Distribution of Music Achievement Correct Responses:  
Thirty Pupils Comprising Group B

Cases	Pitch			Intervals			Meter	Total
	Two Tone	Three Tone	Total	Three Tone	Phrases	Total		
1	5	4	9	5	8	13	10	42
2	4	3	7	7	7	14	9	39
3	5	6	11	4	8	12	12	47
4	14	5	19	4	11	15	13	60
5	7	8	15	8	9	17	9	50
6	6	6	12	4	9	13	8	41
7	11	6	16	7	15	22	10	58
8	7	5	12	8	11	19	9	49
9	5	4	9	4	9	13	13	48
10	9	4	13	7	14	21	12	58
11	10	8	18	5	10	15	14	61
12	9	5	14	7	4	11	11	47
13	9	9	18	5	11	16	10	54
14	14	3	17	4	7	11	11	50
15	10	7	17	3	8	11	11	50
16	8	9	17	5	9	14	10	51
17	11	10	21	6	9	15	12	60
18	9	5	14	4	14	18	14	67
19	6	6	12	4	9	13	10	45
20	13	8	21	8	14	22	13	69
21	5	5	10	4	8	12	10	41
22	11	6	16	5	11	16	8	48
23	6	5	11	6	9	15	11	48
24	13	4	17	3	7	10	15	57
25	12	8	20	6	9	15	7	49
26	10	9	19	6	5	11	10	50
27	9	3	12	5	7	12	13	50
28	4	3	7	6	8	14	8	37
29	9	6	15	3	11	14	14	57
30	12	5	17	4	10	14	11	53