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This study investigated students' musical achievement, provisions for music instruction, and the relationship between these two factors in Tennessee elementary schools. Richard J. Colwell's "Elementary Music Achievement Test" was administered to randomly selected sixth-grade pupils from 22 public school systems (62 classrooms) representing both urban and non-urban areas. Only one of the school systems tested had a mean score equal to or exceeding the mean of the test standardization sample. An instructional provisions inventory questionnaire, sent to all the state school systems, revealed that few provided adequately for music instruction, but urban systems rated better than non-urban ones. A comparison between achievement scores and instructional provisions of the six systems with highest scores and the six with lowest scores indicated that a direct relationship exists between the two factors. The conclusion was made that in both achievement and instructional provisions for music, Tennessee elementary schools are deficient. (JM)

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RELATIONSHIP BETWEEN SELECTED ASPECTS OF  
THE INSTRUCTIONAL PROGRAM IN MUSIC AND  
STUDENT ACHIEVEMENT OF SIXTH GRADE STUDENTS

by

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Murfreesboro, Tennessee

December, 1968

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U.S. DEPARTMENT OF  
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appreciation to his doctoral committee:

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## CHAPTER I

### INTRODUCTION

For many years music educators in Tennessee have been aware of the need for objective data related to the student's musical achievement and of the need for data that will reveal the provisions made for music instruction in the schools. It is the purpose of this study to meet these two needs by an investigation of music education in the public elementary schools of Tennessee. An investigation was made of the music achievement of sixth grade students by administering a standardized music achievement test. An investigation was made of music instructional provisions at the elementary school level by submitting a questionnaire to public school supervisors of instruction. In addition, an attempt was made to determine if a relationship exists between music achievement as measured by the standardized test and music instructional provisions as reflected through the questionnaire responses.

#### Need for the Study

Evaluation is essential to any good school instructional program. Thorough and regular assessment of all phases of the curriculum is necessary if students are to grow in knowledge and skill, if instruction is to be improved,

and if educators are to know the results of their work.

Similarly, evaluation has long been recognized as a necessary element in music education. Authors and researchers have dealt with evaluation from two main points of view: assessment of what is going on--that is, what provisions are made for activities, classes, personnel, materials, and so forth; and secondly, assessment of the product of music education--the student.

Several researchers in the recent past have studied evaluation from the first point of view. Data have been gathered by means of questionnaires, check lists, and interviews. The purpose of most such studies has been to report and analyze descriptive information pertinent to the purported music education program in a particular locale. But, as Johnson points out, such descriptive or status-surveys can only provide an overview of the programs of music education, and "greater emphasis needs to be placed on . . . appraisal of pupil progress."<sup>1</sup> Descriptive research, although valuable to the music educator in many instances, most often does not evaluate the end result of the educational process: the musical behavior of the learner.

In the ever-increasing body of literature pertaining

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<sup>1</sup>William L. Johnson, An Appraisal of Music Programs in the Public Schools of Illinois Excluding Chicago (Springfield: Office of the Superintendent of Instruction, State of Illinois, 1967), pp. 118-19.

to music education, the measurement of music achievement has been strangely neglected.<sup>2</sup> Investigation of general achievement is a matter of nation-wide procedure for most administrators and supervisors. Regular achievement testing has become a routine function. General achievement tests are, however, noticeably bare of questions or problems related to music. This lack of content can be construed to mean that the authors of these tests do not know how to test for music achievement or that they do not consider evaluation of music achievement important. It may also be interpreted to mean that we do not consider music achievement to be important enough to warrant its inclusion in general achievement tests.

Until recent years the administering of standardized achievement tests in music attracted little attention.<sup>3</sup> Still, since educators agree that measurable accomplishment should be sought in all subjects, the use of measures of music achievement is necessary. Leonhard and House suggest that measurement not only assists in finding out what is being offered and in appraising student achievement, but also provides aid in formulating future objectives. They say,

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<sup>2</sup>Richard J. Colwell, "An Investigation of Achievement in Music in the Public Schools of Sioux Falls, South Dakota" (unpublished Ed.D. dissertation, Graduate College, University of Illinois, 1961), p. 1.

<sup>3</sup>William E. Whybrew, Measurements and Evaluation in Music (Dubuque: Wm. C. Brown Company Publishers, 1962), p. 135.

[measurement] provides the principal means for the teacher to determine the worth of the musical experiences he organizes for his pupils and the validity of his teaching methods. Furthermore, it enables him to identify strengths and weaknesses in his method of teaching and [in] his instructional materials.<sup>4</sup>

There is a definite need for research that will provide objective information about the music achievement of school participants.

In addition, there is a need for information about school philosophies and instructional provisions which possibly contribute to music achievement. These needs are felt on national, regional, and state levels.

There is such a need in Tennessee. Music instruction in the schools of Tennessee is endorsed by the State Board of Education as an expected part of the total program. The following excerpt from Rules, Regulations, and Minimum Standards substantiates the premise that instruction in music should take place at all elementary school levels:

(a) Grades 1-6 or 1-8

A minimum of sixty minutes per week shall be devoted to a planned program of music experiences in the curriculum of all elementary schools.<sup>5</sup>

There is the need to study the two kinds of data, to

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<sup>4</sup>Charles Leonhard and Robert House, Foundations and Principles of Music Education (New York: McGraw-Hill Book Company, Inc., 1959), p. 336.

<sup>5</sup>Tennessee, State Board of Education, Rules, Regulations, and Minimum Standards (Nashville: State Board of Education, 1965), p. 38.

make comparisons, and, where appropriate and logical, to make recommendations based on these analyses.

The final criterion for judging the effectiveness of a program of music education is its effect on the musical behavior of students. It follows that, when possible, the best means of evaluating the program is to ascertain the progress of the students toward the objectives sought. . . . An evaluation of factors that may logically be expected to produce the desired outcomes is essential as a supplement to the evaluation of students.<sup>6</sup>

Data reported by this study give some indication of the strengths and weaknesses of the elementary music program in Tennessee. This should enable teachers and administrators to make immediate and specific appraisals and should contribute to long-range planning.

#### Related Literature

Of the research studies involving testing in music, most have dealt with aptitude; few have dealt with achievement.

Colwell,<sup>7</sup> in a study involving fifth and sixth graders, as well as high school students, used standardized tests to investigate the effect of instructional variables on student achievement. His study involved testing at the beginning and at the end of the school year. He computed correlations between types of course offerings, private instruction, grade

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<sup>6</sup>Leonhard and House, op. cit., pp. 356-57.

<sup>7</sup>Colwell, op. cit., pp. 1-306.

averages, home experiences, and achievement.

Swinchoski<sup>8</sup> constructed, standardized, and administered a test to students in several western states. His test is rather long and is not published. His sample was restricted to schools where music instruction was known to have been offered for two or more years. Many items on this test are difficult for the grade level cited. Several items tend to test subjective choices.

Snyder's<sup>9</sup> study involved the construction and validation of a music achievement test for college elementary education majors. The study is designed specifically for classroom teachers-to-be. In the study, music objectives are postulated and the test is constructed to measure these objectives.

Several service studies to investigate music instructional provisions, or the status of music education, have been made in recent years. A list of these is included in the bibliography. Most are pertinent to this study only in that they provide form and design ideas and have contributed

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<sup>8</sup>Albert A. Swinchoski, "The Development of a Standardized Music Achievement Test for the Intermediate Grades" (unpublished Ph.D. dissertation, University of Kansas, 1963).

<sup>9</sup>Alice M. Snyder, "The Development, Construction and Standardization of a Test of Music Achievement" (unpublished Ed.D. dissertation, School of Education, University of Oregon, 1958).

to an understanding of what has interested researchers.

Estes<sup>10</sup> studied changes in the status of music education between 1955-56 and 1961-62 in selected mid-western cities. His conclusion was that there were no significant changes in the status of music education in the surveyed communities.

Freeman<sup>11</sup> made a survey to determine to what extent music program objectives established by the Music Educators National Conference were being met. His study, based on The Outline of a Program for Music Education published by MENC, sampled school programs in 282 different communities in forty-five states. Freeman concluded that in spite of the fact that the MENC Research Council listed the items in the Outline as minimum requirements, few school systems used all, or anywhere near all, the items listed in the Outline.

The purpose of a study by Chugg<sup>12</sup> was to analyze classroom music programs in Utah, with special reference to

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<sup>10</sup>William V. Estes, "Change in Status of Music Education Between 1955-56 and 1961-62 in Public School Systems of Selected Cities Between 50,000 and 100,000 Population" (unpublished Ed.D. dissertation, University of Illinois, 1964).

<sup>11</sup>Warren S. Freeman, "A Survey and Evaluation of the Current Status of Music Education Activities in Public Schools of the U.S." (unpublished Ed.D. dissertation, Boston University, 1955).

<sup>12</sup>Melburne D. Chugg, "A Study of the Classroom Music Program in the Elementary Schools of Utah" (unpublished Ed.D. dissertation, University of Oregon, 1964).

the role of the regular classroom teacher. Information for the study came from a review of publications about music education, from the responses of school officials and teachers to a questionnaire, and from interviews with teacher education and supervisory personnel. Chugg concluded that the classroom teacher's potential in music is not known, that the teacher's preparatory music experiences in general are inadequate, and that policies concerning music are unclear both to teachers and principals.

Johnson's<sup>13</sup> study of music programs in Illinois sought to gather information similar to that requested in the questionnaire used in the present study. His questionnaire was sent to every public school in the state, excluding Chicago. A remarkably large return allowed him to make a thorough appraisal of offerings.

Emmert<sup>14</sup> found that one county in Tennessee had no evidence of a coordinated program in music education as late as 1950. This study reported that instead of a broadening program, there was a gradual decrease of offerings in music for students as they moved to higher grade levels. There was a wide variance of music offerings between schools and

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<sup>13</sup>Johnson, op. cit., pp. 1-144.

<sup>14</sup>Ruth F. Emmert, "Music Education for the Elementary Schools of Washington County, Tennessee" (unpublished Master of Education thesis, George Peabody College for Teachers, 1951).



within schools. There were few planned, sequential programs. Song books were scarce and were purchased by children. Music equipment and instruments were sporadically available.

Two National Education Association surveys gathered information about current trends in music education. Findings were reported by the NEA Research Division.<sup>15</sup> Instructional time allotment, the number of classrooms where music is taught by music teachers, the number of classrooms where music is taught by classroom teachers, and the percentage of schools offering organized instruction in music are cited in this report.

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<sup>15</sup>"Music in the Public Schools," NEA Research Bulletin, XLI (May, 1963), 56-59.

## CHAPTER II

### PROCEDURE

In order to assess the music achievement of elementary school children in Tennessee, a standardized music achievement test was selected and administered to samples of sixth grade students randomly selected from the public school population. To gather information about provisions for elementary music instruction, a questionnaire was designed and sent to all public school systems in the state. This chapter gives the procedures followed for the administration of these instruments and the methods used in analyzing the gathered data.

#### Sampling Procedure

A primary part of this study is the investigation of the music achievement of Tennessee elementary school children. In order to assure representation from the greater urban areas of Tennessee in the music achievement testing and in order to separate data from urban and non-urban areas, samples for the testing were drawn from five populations. Four of these were the four greater urban areas: Nashville and Davidson County, Chattanooga and Hamilton County, Knoxville and Knox County, and Memphis and Shelby County. The

fifth contained all the other school systems in the state.

From each of the county and city school systems composing the four greater urban areas, random samples were drawn until approximately 5 per cent of the sixth grade classrooms in the population were included in the sample. From the population of the non-urban areas, sixteen school systems were chosen at random. From each of these, approximately 10 per cent of the sixth grade classrooms, but at least one classroom from each of the sixteen systems were randomly selected. As a result of this procedure, children from a total of sixty-two classrooms representing twenty-two school systems were tested.

It was decided from the outset that all school systems in the state would be included in the investigation of music instructional provisions. Except for a few small systems, each school system in Tennessee has a supervisor of instruction who is charged with the responsibility of carrying out the instructional program. As this person should, in most cases, have greater knowledge of the condition of instructional matters, it was felt that the questionnaire should be addressed to him. Supervisors were identified from listings in the Directory of Public Schools for 1967-68.<sup>1</sup>

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<sup>1</sup>Tennessee, State Department of Education, Directory of Public Schools for 1967-68 (Nashville: State Department of Education, 1967).

In the few cases where no supervisor of instruction existed, questionnaires were mailed to the office of the superintendent.

### Description of Instruments

#### The Music Achievement Test

The student achievement part of this study is based on the belief that musical achievement can and should be objectively measured. Furthermore, proficiency in music should be judged by assessing those aspects of musical learning that relate to sensitivity to the elements of music sound and notation. After examination of all published standardized tests relevant to this purpose, the Elementary Music Achievement Test by Richard J. Colwell was selected for assessing student achievement.<sup>2</sup> The rationale behind the development of EMAT is that music in the elementary school has content that is universally basic and that can be easily measured.

As Colwell says,

this content is not a specific body of factual items since these items might differ widely in both area and quantity from school to school; rather, it is a set of skills and understandings the pupil must have to participate in making music or in listening to it. This rationale does not presume that all the learning content of music courses can be measured by any series of

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<sup>2</sup>Richard J. Colwell, Elementary Music Achievement Test (Chicago: Follett Publishing Company, 1967).

achievement tests; but it does assume the presence of a core of content, immediately related to the development of auditory abilities, which is essential to any music program worthy of the name.

EMAT is the result of extensive gathering of basic elements of elementary musicianship, agreed on by leading music educators. The author constructed the test after several conferences with elementary music education authorities, after careful analysis of strong extant elementary music programs and from examination of many music textbooks being used in elementary grades throughout the country.

The following description of the EMAT is paraphrased from the Administration and Scoring Manual.<sup>3</sup>

### Test 1

Emat Test 1 consists of three separate subtests, the first two of which have two parts each, as follows:

#### Subtest 1--Pitch Discrimination

Part A--Two-Tone Patterns

Part B--Three-Tone Patterns

#### Subtest 2--Interval Discrimination

Part A--Three-Tone Patterns

Part B--Phrases

#### Subtest 3--Meter Discrimination

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<sup>3</sup>Richard J. Colwell, Elementary Music Achievement Tests, Administration and Scoring Manual (Chicago: Follett Publishing Company, 1967), pp. 11-20.

### Subtest 1--Pitch Discrimination

Part A--Two-Tone Patterns.--This part is composed of fifteen items. In each item the pupil is asked to listen to two tones played on the piano to determine whether the second tone is higher, lower, or the same as the first tone. The smallest interval between pitches is a half-step. Discriminations are required throughout the normal playing range of the keyboard. The pupil answers each question by marking a box imprinted with H, L, or S (higher, lower, or same).

Part B--Three-Tone Patterns.--This part is composed of ten items. In each item the pupil is asked to decide which of three tones played on the piano is lowest. This part requires the same skill as does the two-tone part, but is made more complex by the addition of a third tone. Some items require the pupil to compare tone 1 with tone 2, and then tone 2 with tone 3. Other items require the comparison of tones 1 and 3 (2 being obviously not the answer and acting as a distractor). In this latter case, tonal memory is necessary if the pupil is to retain accurately the sound of the first tone so that he can compare it with tone 3. Answers are made by marking boxes imprinted with 1, 2, or 3.

### Subtest 2--Interval Discrimination

Part A--Three-Tone Patterns.--This part is composed of ten items. It requires that the pupil listen to one

measure of three tones played on the piano and decide whether all tones are related step by step like a scale or whether a "skip" or "leap" occurs between any two consecutive notes. The pupil answers by marking the box imprinted with S (scale-wise) or L (leaps).

Part B--Phrases.--This part, composed of eighteen items, requires that the pupil be able to distinguish scale-wise from skipwise movement in an actual musical phrase. Each item consists of a phrase played on the piano. The pupil decides whether the phrase moves generally in a scale-wise manner or generally "skips" from one tone to the next. Test items are answered similarly to those of part A.

#### Subtest 3--Meter Discrimination

The Meter Discrimination Test consists of fifteen items. It requires the pupil to distinguish between duple and triple meters. Each item is a phrase taken from a familiar elementary school song, played on the piano and including a harmonic accompaniment. In this subtest, the pupil hears the phrase once, the phrase being of sufficient length to establish the pulse and make possible the recognition of the combination of accented and unaccented pulses. He marks a box imprinted with 2 (for two-beat measure), 3 (for three-beat measure), or ? (for "in doubt").

Test 2

EMAT Test 2 consists of three separate subtests, each of which has two parts, as follows:

Subtest 1--Auditory-Visual Discrimination

Part A--Pitch

Part B--Rhythm

Subtest 2--Feeling for Tonal Center

Part A--Cadences

Part B--Phrases

Subtest 3--Major-Minor Mode Discrimination

Part A--Chords

Part B--Phrases

Subtest 1--Auditory Visual Discrimination

Part A--Pitch.--This part measures the ability to read pitches accurately. It contains twelve items. In each item the pupil listens to a four-measure phrase as he looks at a similar four-measure phrase notated on his Answer Sheet. He marks a box below every measure in which the notation is different in pitch from the melody he hears. He is not asked to indicate the specific deviation, only the measure in which it occurs. Since errors may occur in any or all of the measures of each item, the pupil makes four discriminations, one for each measure.

Part B--Rhythm.--This part is composed of twelve



items. It measures the ability to read accurately the rhythmic aspect of notation. Its construction is identical to that of part A, except that the errors that occur between the notation and the music heard are errors of rhythm rather than of pitch. As in part A, each test item consists of a four-measure phrase; the pupil marks a box above every measure in which the notation is rhythmically different from the melody he hears. He makes four discriminations for each question.

#### Subtest 2--Feeling for Tonal Center

Part A--Cadences.--This part requires the pupil to determine the key center of a group of chords in one key. There are ten items. Each item consists of a four-chord cadence, ending on the tonic chord, with the key tone in both soprano and bass. All the items are in the major mode. Following the cadence, three pitches are played and the pupil is asked to select the one that is the key tone for the cadence just played. The foils used in the answers are rarely tones from the tonic chord; usually they are scale steps obviously distant from the tonic feeling, such as the second or seventh degrees of the scale. The pupil records his answer by marking a box imprinted with 1, 2, or 3 for first, second, or third tones; or 0 if none of the tones is thought to be the key center.

Part B--Phrases.--This part measures the pupil's ability to recognize the key center, or key tone, of a short musical phrase. There are ten items. Each item consists of a melodic phrase at least four measures in length, presented with a harmonic accompaniment. The pupil selects the key tone from three individual tones played immediately following each phrase. The system for marking answers is identical with that of part A.

#### Subtest 3--Major-Minor Mode Discrimination

Part A--Chords.--This part consists of fifteen items which measure the pupil's ability to recognize major and minor chords. Each item contains two chords, played on the piano. Both chords within a single item are in the same mode. The pupil records his answer for each item by marking a box imprinted with M (major) or m (minor).

Part B--Phrases.--This part is composed of thirteen items. It measures the pupil's ability to recognize major and minor modes within a musical context. Each question contains a phrase of a song commonly found in an elementary-music series, played on the piano and appropriately harmonized. The phrase is usually four or eight measures in length and ends on the tonic chord. The pupil is required to decide whether the phrase is entirely major, entirely minor, or partly in each mode. Harmonic minor is generally used in

the minor examples, with some melodic minor where demanded by the nature of the melodic line. In each test item the pupil records his answer by marking a box imprinted with M (major), m (minor), or C (change).

### The Questionnaire

The instrument used to gather data relevant to music instructional provisions was a provision inventory questionnaire. The questionnaire was designed to gather information pertaining to several important aspects of provisions. Questions were constructed to allow the respondent to report data about the enrollment size of the school system, the music teaching personnel, scope and design of courses, evaluative procedures, percentages of budget devoted to music instruction, allotment of time for instruction, and provisions for materials, facilities, and equipment. The form also contained "open-end" questions in which the respondent was asked to express his opinion about the strengths and weaknesses of his school system's music instructional program. The respondent was asked to indicate opinions concerning the significance of various activities often included in elementary music education programs. A copy of the questionnaire is included in the appendix.

### Gathering of Data

Through the use of a table of random numbers the

sixteen school systems, which were to constitute the non-urban group, were selected. From these and from the urban systems, random selection was then made of the desired number of classroom teachers whose students would be tested. Early in 1968, contact was made with supervisors of instruction in the selected school systems.

A letter stating the purposes of the study and the standardized testing procedure was sent to the supervisors. The letter contained a listing of classroom teachers whose homerooms had been chosen for testing. Permission was requested to contact these teachers. As soon as permission had been granted, mailing of the Elementary Music Achievement Test recordings, administration manuals, and student answer forms was begun. Packets were mailed directly to the classroom teachers. A copy of the questionnaire was included in each initial letter to the supervisors of systems in which the testing was to occur. Supervisors were asked to return the completed questionnaire as soon as possible. Questionnaires not sent in the first mailing were forwarded to all remaining supervisors in the ensuing weeks.

The initial mailing of questionnaires and permission requests for testing was accomplished during the first week of March, 1968. All other questionnaires were mailed March 20, 1968. Packets containing the testing materials were mailed during the third week of March. Follow-up

letters were mailed in early May to all those who had not responded. Acceptance of completed music achievement testing materials and of questionnaires was terminated on June 1, 1968.

Of the 152 school systems in the state included in the survey of provisions for music instruction, completed questionnaires were received from six out of seven urban systems and one hundred twenty-nine out of one hundred forty-five non-urban systems for a total of one hundred thirty-five, a response percentage of 88.8.

Other than the decision on the part of the Memphis City Schools not to participate in the study, complete cooperation was gained in the administration of the music achievement test. It should be noted here that the other system from this urban area did take part in the study.

Consistent with the sampling procedure stated earlier, thirty-six classrooms in the urban group and twenty-six in the non-urban group took the music achievement test. The total number of children taking Test 1 was 1,835. Those taking Test 2 also numbered 1,835. Children taking both Test 1 and Test 2 totaled 1,795.

#### Treatment of Test Data

Student answer forms for the Music Achievement Test were designed to be marked for optical-scan grading. In the

instructions to the teacher, it was suggested that Test 1 and Test 2 be given on separate days, at separate hours, or with a brief break between them. Many teachers evidently did give the tests on separate days, in that in most classrooms one or two students did not take both Test 1 and Test 2. In establishing class mean scores, this was taken into consideration. All students taking Test 1 are included in the compilation of the Test 1 mean and all students taking Test 2 are included in the compilation of the Test 2 mean. Similarly, only those students taking both tests are included in the combined means.

When grading of answer forms was made by the optical scanning equipment, data-processing cards for students were automatically punched. Before grading was begun, each student was given a student identification number and all rooms were given room identification numbers. As processing began, each student was given one card for Test 1 and one card for Test 2. Each card for Test 1 identified the student by room number and student identification number, and contained the scores for the parts of Test 1. Card 2 contained the room and student identification numbers and Test 2 scores.

Cards for Test 1 and Test 2 were electronically processed and a print-out for each student was obtained. This made it possible for the investigator to examine visually the achievement results of each student on Test 1,

Test 2, and a combination of Tests 1 and 2. Following this initial procedure, the information gained from the data cards was transferred to electronic tape for use in analyses.

Analyses of results of the Music Achievement Test were accomplished by comparing means of tested samples with the mean of the standardization sample through application of the statistical t test.

#### Treatment of Questionnaire Data

Responses from the six urban and the one hundred twenty-nine non-urban systems were grouped respectively and the information was coded and transferred to electronic data processing equipment for tabulation. A series of tables was drawn to show urban, non-urban, and total responses.

#### Method of Comparing Achievement and Provisions

To study the relationship of achievement and provisions, the six school systems which had highest mean achievement scores and the six systems which had lowest mean achievement scores on the combined tests were determined and respectively grouped. Instructional provisions of these two groups were then compared. Questionnaire responses were itemized into thirty-five variables deemed relevant to achievement. These variables were first visually examined, and were then programmed for electronic computer comparison.

through the application of a chi-square test. For the chi-square test, each of the thirty-five questionnaire variables were assigned numerical value weights. Respective weight figures reflecting questionnaire responses were then entered into the proper columns of each of the six upper group systems and each of the six lower group systems. From these weights, and the high-low relations from the achievement scores, a contingency table was constructed for each variable of the questionnaire. The chi-square test compared the lower group with the upper group, testing for significance of difference.



## CHAPTER III

### ELEMENTARY MUSIC ACHIEVEMENT TEST RESULTS

This chapter reports the findings of the standardized music achievement test. Data are reported for Test 1, Test 2, and the combination of the two tests. Results of the sixty-two tested classrooms are given first, followed by the grouping of these into twenty-two school systems. Systems are then categorized into urban and non-urban groups and comparisons made. Finally, results for the total Tennessee sample are reported.

#### Analysis Method

Analyses of results of the achievement test were made by comparing means of tested samples with the mean of the standardization sample.

Sixth grade norms published in the test manual are as follows (see Appendix D):

Test 1 has a mean of 50.31, with a standard deviation of 11.59.

Test 2 has a mean of 42.78, with a standard deviation of 15.26.

The combined test mean is 93.09, with a standard deviation of 19.16.

All mean comparisons were made through application of t value computations. The following formula was used:<sup>1</sup>

$$t = \frac{M_{\text{sample}} - M_{\text{standard}}}{\sqrt{\frac{s_{\text{sample}}^2}{N_{\text{sample}}} + \frac{s_{\text{standard}}^2}{N_{\text{standard}}}}}$$

Confidence levels used utilize a two-tailed test of significance where 1.96 is significant at the 0.05 level and 2.58 is significant at the 0.01 level.

#### Achievement Test Results by Class--Test 1

This section gives the results of Test 1 for the sixty-two classrooms tested. Mean scores, standard deviations, and t values are given for each class.

Table 1 shows that on Test 1, class 13 had the highest mean with 58.20; class 38 had the lowest mean with 32.85. Lowest standard deviation occurred in class 22 with 4.28, and this room had the second lowest mean. Highest standard deviation occurred in class 51 with 13.76. Five classrooms had means equal to or above the mean of the standardization sample. The fifty-seven remaining classrooms had mean scores

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<sup>1</sup>Helen M. Walker and Joseph Lev, Statistical Inference (New York: Holt Rinehart and Winston, 1953), p. 157.

TABLE 1  
RESULTS BY CLASS OF ACHIEVEMENT TEST 1

Class	Mean	Standard Deviation	t Value
Standard-ization Sample	50.31	11.59	
1	38.00	5.44	-10.98a
2	38.50	7.26	- 8.45a
3	37.66	6.79	-10.87a
4	38.09	8.23	- 8.26a
5	38.40	6.46	- 9.36a
6	46.73	12.88	- 1.51
7	38.41	8.84	- 7.94a
8	36.88	6.94	- 9.68a
9	44.23	10.74	- 3.26a
10	54.00	12.59	1.64
11	39.27	11.58	- 5.42a
12	41.02	10.12	- 5.36a
13	58.20	12.87	3.33a
14	37.65	8.28	- 8.11a
15	38.56	6.49	- 8.51a
16	37.33	8.56	- 7.77a
17	42.51	7.29	- 5.83a
18	44.37	6.52	- 5.01a
19	41.76	8.41	- 5.82a
20	45.61	8.72	- 2.95a
21	42.96	13.34	- 3.09a
22	32.88	4.28	-22.90a
23	47.23	12.33	- 1.52
24	45.06	10.24	- 2.86a
25	42.23	10.67	- 3.82a
26	48.36	10.90	- .88
27	35.59	5.56	-15.46a
28	38.76	7.15	- 9.19a
29	38.55	8.13	- 8.73a
30	37.87	8.92	- 7.65a
31	36.75	7.30	-10.29a
32	38.75	7.40	- 8.78a
33	34.00	6.76	-12.71
34	48.75	11.41	- .77
35	42.66	11.29	- 3.29a

TABLE 1 (Continued)

Class	Mean	Standard Deviation	<u>t</u> Value
36	36.36	6.32	-10.16 <sup>a</sup>
37	42.64	8.22	- 5.11 <sup>a</sup>
38	32.85	6.23	-14.21 <sup>a</sup>
39	37.57	6.80	- 8.45 <sup>a</sup>
40	41.60	8.40	- 6.03 <sup>a</sup>
41	47.48	13.28	- 1.14
42	38.31	7.41	- 7.48 <sup>a</sup>
43	46.08	10.80	- 1.86
44	43.46	9.19	- 4.02 <sup>a</sup>
45	49.93	7.15	- .28
46	38.00	9.90	- 6.62 <sup>a</sup>
47	47.69	11.85	- 1.11
48	46.57	9.16	- 2.05 <sup>b</sup>
49	57.82	11.88	3.38 <sup>a</sup>
50	41.03	8.54	- 5.67 <sup>a</sup>
51	49.12	13.76	- .48
52	52.59	10.14	1.35
53	33.83	5.54	-12.37 <sup>a</sup>
54	48.52	9.59	- 1.09
55	37.92	6.69	- 9.42 <sup>a</sup>
56	36.26	7.58	- 7.98 <sup>a</sup>
57	39.03	9.49	- 5.99 <sup>a</sup>
58	39.82	6.81	- 8.10 <sup>a</sup>
59	41.18	9.02	- 5.19 <sup>a</sup>
60	50.70	11.63	.18
61	44.08	13.75	- 2.25 <sup>b</sup>
62	37.00	7.44	- 9.46 <sup>a</sup>

<sup>a</sup>Significant beyond the 0.01 level

<sup>b</sup>Significant beyond the 0.05 level

below the national norm with t values ranging from -.28 to -22.90. Class 22 had the overall poorest results with a mean of 32.88, standard deviation of 4.28, and a t value of -22.90. Classes 13 and 49 scored highest with a mean of

58.20, standard deviation of 12.87, and  $\underline{t}$  of 3.33 for class 13, and a mean of 57.82, standard deviation of 11.88, and  $\underline{t}$  of 3.38 for class 49. Four of the five classes that had means above the standardization mean were from the urban sample.

#### Achievement Test Results by Class--Test 2

Results from Test 2, given in Table 2, show that class 13 again had the highest mean with 62.93. Class 53 had the lowest mean with 27.77. Standard deviation was greatest in room 13 with 20.72 and least in room 33 with 3.85. Class 21 had the third highest mean with 60.64 but had the highest  $\underline{t}$  value because of relatively small standard deviation. Whereas achievement for Test 1 resulted in five classes having mean scores equal to or greater than the national norm, the results for Test 2 show sixteen equal to or greater than the norm. Of these sixteen, all but two were from the urban sample.

#### Achievement Test Results by Class Combined Test

The results of Tests 1 and 2 combined show that class 13 again had the highest mean with 120.43. The second highest was achieved by class 49 with a mean of 117.24. For those classes with means equal to or greater than the standardization mean, class 13 had a  $\underline{t}$  of 4.81, class 52 ranked

TABLE 2  
RESULTS BY CLASS OF ACHIEVEMENT TEST 2

Class	Mean	Standard Deviation	t Value
Standard-ization Sample	42.78	15.26	
1	32.68	6.36	- 7.72 <sup>a</sup>
2	35.20	8.46	- 4.73 <sup>a</sup>
3	36.34	6.58	- 5.58 <sup>a</sup>
4	34.42	8.17	- 5.12 <sup>a</sup>
5	36.40	4.89	- 6.45 <sup>a</sup>
6	43.72	15.43	.32
7	34.41	9.63	- 5.11 <sup>a</sup>
8	33.92	5.06	- 8.67 <sup>a</sup>
9	41.76	16.19	.36
10	52.46	20.23	2.69 <sup>a</sup>
11	33.50	11.90	- 4.49 <sup>a</sup>
12	45.50	13.79	1.14
13	62.93	20.72	5.39 <sup>a</sup>
14	34.10	8.76	- 5.33 <sup>a</sup>
15	32.08	4.12	-12.19 <sup>a</sup>
16	33.76	6.02	- 7.26 <sup>a</sup>
17	34.70	10.79	- 4.11 <sup>a</sup>
18	38.77	11.18	- 2.09 <sup>b</sup>
19	37.08	11.06	- 3.00 <sup>a</sup>
20	40.70	14.73	.77
21	60.64	7.49	12.96 <sup>a</sup>
22	31.05	5.69	-11.78 <sup>a</sup>
23	49.52	17.74	2.33 <sup>b</sup>
24	43.68	15.11	.33
25	38.96	12.68	- 1.49
26	45.39	19.50	.70
27	31.02	7.34	- 9.33 <sup>a</sup>
28	35.27	12.22	- 3.64 <sup>a</sup>
29	35.76	9.49	- 4.23 <sup>a</sup>
30	36.25	9.41	- 3.79 <sup>a</sup>
31	37.09	6.94	- 4.56 <sup>a</sup>
32	32.00	6.60	- 9.20 <sup>a</sup>
33	30.00	3.85	-16.49 <sup>a</sup>
34	45.96	16.77	1.08
35	38.68	10.90	- 1.86

TABLE 2 (Continued)

Class	Mean	Standard Deviation	<u>t</u> Value
36	34.95	8.26	- 4.28 <sup>a</sup>
37	39.38	12.94	- 1.44
38	32.18	4.81	-10.88 <sup>a</sup>
39	34.85	8.41	- 4.25 <sup>a</sup>
40	33.68	7.35	- 7.11 <sup>a</sup>
41	42.14	16.56	- .19
42	34.95	7.84	- 4.60 <sup>a</sup>
43	39.43	15.34	- 1.04
44	37.13	8.69	- 3.49 <sup>a</sup>
45	44.61	14.72	.68
46	34.28	9.39	- 4.71 <sup>a</sup>
47	51.88	14.75	3.18 <sup>a</sup>
48	40.80	10.72	- .92
49	61.53	19.81	4.99 <sup>a</sup>
50	35.96	13.19	- 2.80 <sup>a</sup>
51	45.35	19.62	.72
52	60.70	15.33	6.77 <sup>a</sup>
53	27.77	7.48	- 8.38 <sup>a</sup>
54	41.58	15.00	- .47
55	35.40	9.15	- 4.12 <sup>a</sup>
56	36.57	5.48	- 4.79 <sup>a</sup>
57	35.34	9.64	- 3.88 <sup>a</sup>
58	30.51	6.20	-10.63 <sup>a</sup>
59	32.75	7.94	- 6.65 <sup>a</sup>
60	51.53	17.03	2.80 <sup>a</sup>
61	49.28	18.70	1.73
62	31.93	8.74	- 6.67 <sup>a</sup>

<sup>a</sup>Significant beyond the 0.01 level

<sup>b</sup>Significant beyond the 0.05 level

second with 4.48, and class 49 ranked third with a t of 4.21. Only thirteen classes of the total sixty-two had mean scores equal to or greater than the mean of the norm. Twelve of these were from the urban sample.

Class 53 achieved the combined poorest mean with 61.61. However, class 22 has the greatest  $t$  value with -24.24. (See Table 3.)

#### Achievement Test Results by Systems

This section reports the finding of the achievement test by school systems. In accordance with the sampling procedure, random selection of classrooms was made in six urban and sixteen non-urban systems, resulting in a total of twenty-two systems. In Table 4, systems 1 through 6 are urban and 7 through 22 are non-urban.

From the urban system with the largest number of students enrolled, ten classes were tested. Five or more classes were tested in all urban systems. From the non-urban group, the highest number of rooms tested in any one system was four. In ten systems only one class from each system was given the test.

It should be pointed out here that the results of one class tested in a system should not lead one to the conclusion that that system would have the same achievement rating had a larger sampling been made. Random selection was made according to the procedure cited earlier, and interpretation of results of testing should be made in light of this procedure.



TABLE 3

## RESULTS BY CLASS OF ACHIEVEMENT COMBINED TEST

Class	Mean	Standard Deviation	t Value
Standard-ization Sample	93.09	19.16	
1	70.68	6.44	-16.48 <sup>a</sup>
2	74.55	14.06	- 6.76 <sup>a</sup>
3	73.76	10.98	-10.00 <sup>a</sup>
4	73.26	12.42	- 8.00 <sup>a</sup>
5	74.81	8.48	-10.82 <sup>a</sup>
6	90.65	26.58	- .49
7	72.83	16.05	- 7.47 <sup>a</sup>
8	70.73	9.27	-11.96 <sup>a</sup>
9	86.00	24.98	- 1.64
10	106.00	31.28	2.29 <sup>b</sup>
11	72.90	21.46	- 5.36 <sup>a</sup>
12	86.70	20.97	- 1.76
13	120.43	31.03	4.81 <sup>a</sup>
14	70.50	15.39	- 7.94 <sup>a</sup>
15	70.47	9.19	-11.50 <sup>a</sup>
16	70.91	11.74	- 9.10 <sup>a</sup>
17	77.22	15.15	- 5.75 <sup>a</sup>
18	83.56	15.72	- 3.38 <sup>a</sup>
19	79.14	18.18	- 4.42 <sup>a</sup>
20	86.32	20.62	- 1.81
21	101.71	13.60	3.30 <sup>a</sup>
22	63.94	6.73	-24.24 <sup>a</sup>
23	96.76	28.83	.78
24	88.75	23.17	- 1.05
25	79.66	20.55	- 3.18 <sup>a</sup>
26	95.28	29.35	.37
27	64.16	13.33	-12.94 <sup>a</sup>
28	73.91	17.21	- 6.42 <sup>a</sup>
29	75.44	14.23	- 7.12 <sup>a</sup>
30	74.12	15.60	- 6.68 <sup>a</sup>
31	74.74	11.06	- 9.02 <sup>a</sup>
32	70.78	12.75	- 9.86 <sup>a</sup>
33	64.00	8.29	-18.19 <sup>a</sup>
34	94.72	26.10	.35
35	81.73	20.14	- 2.68 <sup>a</sup>

TABLE 3 (Continued)

Class	Mean	Standard Deviation	<u>t</u> Value
36	72.04	12.30	- 7.73 <sup>a</sup>
37	81.53	18.02	- 3.48 <sup>a</sup>
38	65.28	8.66	-15.58 <sup>a</sup>
39	72.42	11.82	- 7.89 <sup>a</sup>
40	75.28	12.25	- 8.41 <sup>a</sup>
41	87.46	28.41	- 1.04
42	73.38	14.13	- 6.32 <sup>a</sup>
43	85.52	23.76	- 1.52
44	80.60	15.89	- 4.25 <sup>a</sup>
45	94.54	19.62	.41
46	71.64	16.02	- 7.00 <sup>a</sup>
47	97.69	23.81	.98
48	87.38	17.73	- 1.62
49	117.24	30.74	4.21 <sup>a</sup>
50	77.14	18.32	- 4.57 <sup>a</sup>
51	96.16	30.53	.55
52	112.15	24.28	4.48 <sup>a</sup>
53	61.61	9.00	-14.53 <sup>a</sup>
54	89.60	20.62	- .99
55	73.33	14.42	7.03 <sup>a</sup>
56	72.84	9.92	- 8.74 <sup>a</sup>
57	74.38	16.79	- 5.63 <sup>a</sup>
58	70.60	11.38	-10.24 <sup>a</sup>
59	74.81	14.52	- 6.46 <sup>a</sup>
60	102.23	27.01	1.84
61	93.36	30.65	.04
62	67.70	9.85	-13.72 <sup>a</sup>

<sup>a</sup>Significant beyond the 0.01 level

<sup>b</sup>Significant beyond the 0.05 level

#### Achievement Test Results by Systems--Test 1

Table 5 gives the results of the twenty-two school systems with Test 1. Only system number 8 had a mean greater than the norm mean of 50.31. The t value of .18 is not

TABLE 4  
GROUPING OF CLASSES BY SYSTEMS

System	Classes
1	10, 11, 15, 44, 45, 48, 49, 53, 58, 59
2	12, 20, 34, 46, 62
3	21, 40, 51, 61
4	16, 23, 25, 26, 28, 43, 52
5	13, 18, 36, 42, 47
6	14, 22, 24, 37, 38
7	1, 35
8	60
9	33
10	2
11	3, 4
12	5, 17, 27
13	6, 41
14	7
15	29
16	31
17	8
18	19, 30, 32
19	39
20	54
21	50, 55, 56, 57
22	9

significant. Systems number 13 and 20 had mean scores below the norm mean that resulted in insignificant  $t$  values. Nineteen school systems had  $t$  values significant at the 0.01 level. Table 8 also shows the percentile rank of each school system as established by the standardized test and published in the manual. A percentile indicates a particular measurement's position in terms of the percentage of measurements falling below it. Only system number 8 had a mean

TABLE 5  
RESULTS BY SYSTEMS OF ACHIEVEMENT TEST 1

System	Mean	Standard Deviation	t Value	Per- centile
Standard- ization Sample	50.31	11.59		
1	45.06	11.79	- 6.96 <sup>a</sup>	35
2	42.25	10.65	- 9.05 <sup>a</sup>	26
3	44.39	12.70	- 5.05 <sup>a</sup>	33
4	44.92	11.47	- 6.45 <sup>a</sup>	33
5	45.82	12.32	- 4.06 <sup>a</sup>	35
6	38.23	9.18	-15.43 <sup>a</sup>	15
7	40.28	9.11	- 7.55 <sup>a</sup>	19
8	50.70	11.63	.18	52
9	34.00	6.76	-12.71 <sup>a</sup>	7
10	38.50	7.26	- 8.45 <sup>a</sup>	15
11	37.86	7.51	-13.13 <sup>a</sup>	13
12	38.65	7.06	-15.14 <sup>a</sup>	15
13	47.10	13.08	- 1.86	42
14	38.41	8.84	- 7.94 <sup>a</sup>	15
15	38.55	8.13	- 8.73 <sup>a</sup>	15
16	36.75	7.30	-10.29 <sup>a</sup>	11
17	36.88	6.94	- 9.68 <sup>a</sup>	11
18	39.52	8.43	-12.11 <sup>a</sup>	17
19	37.57	6.80	- 8.45 <sup>a</sup>	13
20	48.52	9.59	- 1.09	45
21	38.77	8.35	-13.19 <sup>a</sup>	15
22	44.23	10.74	- 3.26 <sup>a</sup>	33

<sup>a</sup>Significant beyond the 0.01 level

score which placed above the median for Test 1. Eight systems had mean scores placing them between the 25th and 50th percentile, while thirteen systems fell at or below the first quartile. Tabulation of scores and percentiles for Test 1 and 2 are found in the appendix.

### Achievement Test Results by Systems--Test 2

Results from Test 2 are shown in Table 6. Five systems had combined class means higher than the national norm of 42.78. The mean of 46.69 for system number 3, resulted in a  $t$  value significant at the 0.05 level. System number 8 with a mean of 51.53 had a  $t$  of 2.80 which is significant at the 0.01 level. Of the systems with means below that of the standardization sample, 20 and 22 had  $t$  values that are not significant. Except for system number 2, all others are significant at the 0.01 level. The lowest mean occurred in system number 9 with 30.00. This system also had the greatest  $t$  with -16.49.

Percentile placement figures established by standardization of Test 2 shows that nine mean scores were at or above the median, with system number 8 placing at the 77th percentile. Twelve system means were between the 25th and 50th percentile, while only system number 9 fell in the first quartile.

### Combined Test Results by Systems

The mean of the standardization sample for the combination of Tests 1 and 2 is 93.00 with standard deviation 19.16. From the twenty-two school systems in which testing took place only one system, number 8, with a mean of 102.23, equalled or exceeded the national norm. The  $t$  of 1.84 for

TABLE 6  
RESULTS BY SYSTEM OF ACHIEVEMENT TEST 2

System	Mean	Standard Deviation	t Value	Per- centile
Standard-ization Sample	42.78	15.26		
1	39.77	16.16	- 2.98 <sup>a</sup>	53
2	40.02	14.39	- 2.31 <sup>b</sup>	56
3	46.69	17.29	2.45 <sup>b</sup>	69
4	44.07	17.43	1.04	65
5	45.67	17.83	1.85	67
6	36.08	11.38	- 6.98 <sup>a</sup>	42
7	35.68	9.42	- 5.20 <sup>a</sup>	38
8	51.53	17.03	2.80 <sup>a</sup>	77
9	30.00	3.85	-16.49 <sup>a</sup>	19
10	35.20	8.46	- 4.73 <sup>a</sup>	38
11	35.52	7.36	- 7.33 <sup>a</sup>	38
12	33.78	8.43	- 9.77 <sup>a</sup>	29
13	42.96	16.00	.08	61
14	34.41	9.63	- 5.11 <sup>a</sup>	33
15	35.76	9.49	- 4.23 <sup>a</sup>	38
16	37.09	6.94	- 4.56 <sup>a</sup>	46
17	33.92	5.06	- 8.67 <sup>a</sup>	29
18	35.10	9.49	- 7.71 <sup>a</sup>	38
19	34.85	8.41	- 4.25 <sup>a</sup>	33
20	41.58	15.00	-.47	58
21	35.77	10.14	- 6.68 <sup>a</sup>	38
22	41.76	16.19	-.36	58

<sup>a</sup>Significant beyond the 0.01 level

<sup>b</sup>Significant beyond the 0.05 level

this system is not significant. Systems number 3, 5, 13, 20, and 21 with means below the norm resulted in t values not significant at the 0.05 level. System number 4, with a t value of -2.17 is significant at the 0.05 level but is not

significant at the 0.01 level. Fifteen systems have t values significant at the 0.01 level. (See Table 7.)

TABLE 7  
RESULTS BY SYSTEM OF ACHIEVEMENT COMBINED TEST

System	Mean	Standard Deviation	<u>t</u> Value
Standard-ization Sample	93.00	19.16	
1	84.92	26.15	- 5.00 <sup>a</sup>
2	81.96	22.15	- 6.09 <sup>a</sup>
3	90.69	25.15	- 1.01
4	88.82	27.13	- 2.17 <sup>b</sup>
5	91.39	27.99	- .68
6	74.08	18.45	-12.23 <sup>a</sup>
7	75.97	15.70	- 7.41 <sup>a</sup>
8	102.23	27.01	1.84
9	64.00	8.29	-18.19 <sup>a</sup>
10	74.55	14.06	- 6.76 <sup>a</sup>
11	73.55	11.63	-12.50 <sup>a</sup>
12	71.45	14.12	-14.31 <sup>a</sup>
13	89.08	27.54	- 1.08
14	72.83	16.05	- 7.47 <sup>a</sup>
15	75.44	14.23	- 7.12 <sup>a</sup>
16	74.74	11.06	- 9.02 <sup>a</sup>
17	70.73	9.27	-11.96 <sup>a</sup>
18	74.74	16.08	-10.91 <sup>a</sup>
19	72.42	11.82	- 7.89 <sup>a</sup>
20	89.60	20.62	- .99
21	74.58	15.65	-11.40 <sup>a</sup>
22	86.00	24.98	- 1.64

<sup>a</sup>Significant beyond the 0.01 level

<sup>b</sup>Significant beyond the 0.05 level

Table 8 gives system numbers in ranked order for  $t$  value results on the combined test.

All urban systems except number 6 are above the median. Six non-urban systems including number 8, which ranked first, are above the median.

TABLE 8  
RANKING OF SYSTEMS BY  $t$  VALUES COMBINED TEST

Rank	System Number	Mean	$t$ Value
Standard-ization Sample		93.00	
1	8	102.23	1.84
2	5	91.39	-.68
3	20	89.60	-.99
4	3	90.69	-1.01
5	13	89.08	-1.08
6	22	86.00	-1.64
7	4	88.82	-2.17
8	1	84.92	-5.00
9	2	81.96	-6.09
10	10	74.55	-6.76
11	15	75.44	-7.12
12	7	75.97	-7.41
13	14	72.83	-7.47
14	19	72.42	-7.89
15	16	74.74	-9.02
16	18	74.74	-10.91
17	21	74.58	-11.40
18	17	70.73	-11.96
19	6	74.08	-12.23
20	11	73.55	-12.50
21	12	71.45	-14.31
22	9	64.00	-18.19



Achievement Test Results Urban  
and Non-Urban

When systems were combined into urban and non-urban classifications to be compared with Test 1 national norms, both groups were considerably below the norms.

The urban sample had a mean of 43.63, compared to the national norm of 50.31. The standard deviation of 11.66 was approximately the same as that of the norm sample of 11.59. The  $t$  value was -15.05. The non-urban sample resulted in even less favorable comparison with a mean of 40.25, a standard deviation of 9.63, and a  $t$  value of -23.25.

Both groups compared more favorably in their results with Test 2, yet they still did not equal the norm mean. The urban sample had a mean of 41.66, compared to the national norm of 42.78. Standard deviation was 16.31 compared to 15.26. The non-urban sample yielded a mean of 36.75 with a standard deviation of 11.40. The  $t$  for the urban group was -1.91, not significant at the 0.05 level. The  $t$  of -11.87 reveals that the non-urban group did not achieve as well as the urban.

In the combined test comparisons, both groups were considerably below the national norms. The urban group had better results than did the non-urban with a mean of 85.10 and a standard deviation of 25.52. The  $t$  for the urban

sample for the combined test is -8.84. A mean of 76.96 and a standard deviation of 18.84 yielded a  $t$  value of -19.96 for the non-urban sample. Both  $t$  values are significant at the 0.01 level. See Table 9 for these results.

TABLE 9  
ACHIEVEMENT TEST RESULTS URBAN AND NON-URBAN

Sample	Mean	Standard Deviation	$t$ Value
Test 1			
Standardization	50.31	11.59	
Urban	43.63	11.66	-15.05 <sup>a</sup>
Non-Urban	40.25	9.63	-23.25 <sup>a</sup>
Test 2			
Standardization	42.78	15.26	
Urban	41.66	16.31	- 1.91 (n.s.)
Non-Urban	36.75	11.40	-11.87 <sup>a</sup>
Combined Test			
Standardization	93.09	19.16	
Urban	85.10	25.52	- 8.84 <sup>a</sup>
Non-Urban	76.96	18.84	-19.96 <sup>a</sup>

<sup>a</sup>Significant beyond the 0.01 level

Achievement Test Results Total  
Tennessee Sample

The sixty-two classes constituting the twenty-two school systems were combined to establish the total sample results. For Test 1 the total sample mean was 42.19, compared to the standardization mean of 50.31. Standard deviation for the total sample was 10.97, compared to the norm standard deviation of 11.59. The computed  $t$  value for Test 1 was -22.19 and is significant at the 0.01 level.

The total sample mean for Test 2 was 39.59, compared to the standardization mean of 42.78. Standard deviation for Test 2 was 14.65, compared to the norm standard deviation of 15.26. The  $t$  value of -7.00 is significant.

The combining of Tests 1 and 2 for the total Tennessee sample resulted in a mean of 81.65, with a standard deviation of 23.26, compared to the national norm mean of 93.09 and the standard deviation of 19.16. The  $t$  value for the total sample, compared with the national norm, is -16.38 and is significant. (See Table 10.)

TABLE 10  
ACHIEVEMENT TEST RESULTS TOTAL  
TENNESSEE SAMPLE

Sample	N	Mean	Standard Deviation	t Value
Test 1				
Standardization	1980	50.31	11.59	
Tennessee	1835	42.19	10.97	-22.19 <sup>a</sup>
Test 2				
Standardization	1980	42.78	15.26	
Tennessee	1835	39.59	14.65	- 7.00 <sup>a</sup>
Combined Test				
Standardization	1980	93.09	19.16	
Tennessee	1795	81.65	23.26	-16.38 <sup>a</sup>

<sup>a</sup>Significant beyond the 0.01 level

## CHAPTER IV

### RESULTS OF THE INSTRUCTIONAL PROVISIONS SURVEY

This chapter reports the findings of the instructional provisions questionnaire. As stated in Chapter II, responses were categorized and programmed for electronic computation. Tabulations are found in Appendix E. Responses in the tables are shown in percentage figures. Each item was tabulated to the nearest one-tenth of one per cent.

#### Enrollment Figures

Total enrollment for all grade levels represented by the systems surveyed in this study was 713,024. The urban enrollment part of this was 247,442 and the non-urban 465,582. Children enrolled in grades one through six in the urban schools numbered 139,161, in the non-urban 261,821, a total of 400,982.

Nineteen non-urban school systems responding had a total student enrollment of less than one thousand. Seventy-five non-urban systems had a total enrollment between one thousand and five thousand, and thirty had an enrollment between five thousand and ten thousand. Five had an enrollment of more than ten thousand. Several small systems had

only one school building each, having either all grades or all elementary grades. Only one urban system had an enrollment of less than twenty-five thousand.

Thirty-four non-urban systems had grade one through six enrollment of less than one thousand, eighty-seven had enrollment of from fifteen hundred to five thousand, and seven had enrollment of between five thousand and ten thousand. Only one had an elementary enrollment of over ten thousand. Five of the six urban systems had an elementary enrollment of between ten thousand and twenty-five thousand, with one having over twenty-five thousand.

#### Music Instructional Personnel

The questionnaire responses relevant to full-time music teachers and supervisors are reported in Tables 12 through 15 in Appendix E.

#### Supervisory Personnel

The prevalence and distribution of competent music supervisors employed by school systems is some indication of the emphasis given music instruction.

Each urban respondent stated that his system had a full-time music supervisor who was responsible for planning and implementing the music program. Several systems reported having assistant supervisors. Only ten of the 129 non-urban systems had music supervisors (see Table 12, Appendix E).

Most non-urban systems rely on one instructional supervisor to formulate and carry out the various subject matter instructional programs. Evidently, many school systems do not feel that the need exists to employ trained music supervisors. A scarcity of music supervisors exists. Although the study made no effort to investigate the qualifications of general instructional supervisors, many undoubtedly are lacking in understanding of music and of what a good program in music should be and of how to administer such a program.

The question arises, do those school systems with trained supervisors of music make better provisions for music instruction? The answer is unclear. There is evidence that many systems without music supervisors do not make adequate provisions in music. However, several systems with music supervisors also appear to be making less than adequate provisions. One may assume that variance among supervisors and the practices they control or fail to control may be most significant. Characteristics these persons possess no doubt determine to a large degree the success of music in the schools. Length of service of supervisors and the longevity of program policy are factors undoubtedly relevant.

### Full-Time Music Teachers--Assignments and Degrees

There were 636 full-time music teachers employed in the systems responding to this survey. Two hundred seventy-nine of these taught in grades one through six. Enrollment figures indicate that well over half of all students enrolled are in the elementary schools, yet approximately one-third of the teachers are assigned primarily to elementary schools. One urban system placed forty-seven out of seventy-one music teachers in its elementary schools, whereas another placed only six out of nearly one hundred in elementary teaching positions. Although fifty-five non-urban systems reported no full-time elementary music teachers, some systems, varying in size, had several elementary music teachers.

Pupil-teacher ratio was slightly lower in urban systems. Kinds of position assignments between urban and non-urban systems were somewhat similar. Non-urban systems indicated a higher percentage of general music teachers, but the percentage of teachers assigned primarily to elementary schools was slightly better in urban systems. For the four hundred thousand children enrolled in grades one through six in school systems responding to this survey, there were less than three hundred teachers specifically assigned to teach music, a ratio of approximately fourteen hundred children per teacher.



The size of school systems seems to affect personnel provisions for music; however, a pattern is not clear. Music teachers are most scarce, proportionately, in medium-sized school systems. Many very small systems are totally without music teachers (see Tables 13 and 14, Appendix E). Large school systems consistently assign a major portion of their full-time music teachers to instrumental music at the secondary level.

Over one hundred of the teachers employed by responding systems were persons who had not earned a college degree. Two-thirds of the teachers held only the Bachelor's degree. One-sixth had the Master's degree and approximately 5 per cent had worked beyond the Master's degree. Five music teachers had the earned doctorate.

#### Classroom Teacher or Music Specialist

Elementary music is taught in many systems in Tennessee primarily by the regular classroom teacher. Less than one-third of the school systems reported elementary children were being taught by persons specifically prepared to teach music. Over two-thirds reported that all elementary music that was being taught was done so by classroom teachers (see Table 15, Appendix E). Many systems reported no music instruction of any kind was being given at the elementary school level.

Urban systems responded that all music in their schools was taught by the regular classroom teachers at the first and second grade levels. Full-time music teachers were responsible in 16.7 per cent of the systems for grades three and four and 33 per cent in grades five and six. A fairly constant portion of music instruction by specialists and classroom teachers was reported for all six grades in non-urban systems. Approximately one-third reported they had special music teachers at the various levels. These figures would appear to be in conflict with the actual number of music teachers assigned to both urban and non-urban elementary instruction. One may conclude that with the lack of music teachers actually assigned to elementary music, thinness of spread can be the only inference when considering the number of systems indicating instruction done by music specialists.

The survey responses revealed that supervisors were, for the most part, dissatisfied with the practice of classroom teachers being responsible for music.

There was wide variance not only among systems as to teacher assignment types and numbers but also within systems. Many systems reported "spotty" good instruction with other schools and classes receiving little or no instruction. Music teacher provision seemed highly subject to "convenient" availability of personnel with many schools being deprived

of instructional personnel because music teachers were said to be unavailable.

A scarcity of persons trained to teach general music may exist. If this is true, all persons responsible for teacher training should work toward eliminating this shortage. If administrators earnestly demand a program and teachers and order the necessary fiscal support, teachers for elementary general music can probably be supplied.

#### Distribution of Full-Time Elementary Music Teachers

In an effort to investigate whether all the elementary students of school systems were permitted approximately equal instruction time from music teachers assigned principally to elementary schools, respondents were asked to indicate whether elementary music teachers were equitably distributed among the schools. Fifty per cent of the urban systems and 34.1 per cent of the non-urban systems reported elementary music teachers were equally distributed among their schools.

#### Statements of Philosophy and Course Study Outlines

Slightly more than one-fourth of the systems reported they had a written statement of philosophy and/or objectives to guide their instructional program in music in the elementary grades. Two-thirds of the urban systems said they had

70

such a statement (see Table 16, Appendix E). Those systems which reported having a statement of philosophy were asked to submit a copy. Approximately one-third of the systems reporting they had a statement of philosophy enclosed a copy. Examination of these revealed that most of them were brief statements of objectives. Statements of objectives ranged from brief listings of desired achievements to listings of activities.

An even greater number of systems indicated that they were without a written course of study for music instruction in the elementary grades. Twenty-five per cent indicated such an outline existed and approximately one-third of these enclosed a copy. Although several submitted courses of study were rather elaborate and extensive, examination revealed that in most instances little attention was given to actual course sequence and scope. Many contained only listings of songs to be learned, activities to be performed, and materials and equipment to be provided for music instruction. A small number of systems reported they followed a course outline contained in music textbooks. Several respondents indicated that even though a statement of philosophy and a study outline were extant, the degree to which these were being followed was questionable.

The scarcity of statements of philosophy and objectives and the scarcity of course of study guides are reflected

in other provisional inadequacies. The lacking of an overall policy is responsible, to some extent at least, for instructional shortcomings.

#### Evaluative Means Used to Assess and Improve Music Education

Respondents were asked to report the evaluative means employed by their school systems in attempts to assess and improve the effectiveness of musical instruction. Forty-two per cent of all systems reported they used subjective analysis as a method of evaluating students. Approximately one-third reported they employed tests designed by the teachers as a method of evaluating. Only 7 per cent of the systems used standardized tests as part of their evaluative procedure (see Table 17, Appendix E). Many respondents stated that pupil's playing or singing performances determined progress evaluation.

There is probably wide disagreement as to proficiency expectations at all levels. Investigation of activity emphasis and their importance ratings reported later in this chapter tend to substantiate this.

#### Assessment of Music Education Programs

Respondents were asked to rate the quality of their total music program for grades one through three and for grades four through six. Only 1.5 per cent of all school

systems rated their program for grades one through three outstanding. Forty-two per cent stated they felt their program was poor (see Table 18, Appendix E). Supervisors in the urban system appraised their program as being more favorable than did the supervisors in the non-urban systems.

Urban respondents indicated they felt there was a marked improvement in their programs at grades four through six; however, an even higher total of non-urban respondents rated their fourth, fifth, and sixth grade programs in the poor category.

#### Strengths and Weaknesses

School systems were asked in an open-end question to list their principle strengths and weaknesses. The item most frequently submitted, relative to strengths, indicated that some "good, spotted" instruction was being administered. The second most frequently submitted strength was a statement to the effect that most children were participating in the instructional program with enjoyment and appreciation. A further listing of felt strengths is as follows:

The existence of a federally subsidized experimental program.

The abundance of materials and equipment.

The prevalence of qualified teachers.

Participation in educational television.

The use of taped-instructional lessons.

The teaching of small wind and percussion instruments.

Good in-service programs for teachers.

System-wide participation in concerts by orchestras.

Pilot programs in Orff, Richards, and Kodaly methods for lower grades.

In listing weaknesses about one-third of the non-urban systems said they had a total lack of instruction in music, with a complete absence of teaching, sufficiency of materials, and provisions for music. Forty-eight non-urban and four urban systems stated the chief weakness was the lack of competent music teachers. Approximately one-third of the supervisors felt music was not given enough time in the instructional program and that allocation of funds for music was deficient. Other stated weaknesses are as follows:

- Services of teachers were unevenly and thinly spread.
- The lack of evaluative procedures.
- The inability on the part of the supervisors of instruction to organize and to put into effect a music program with purpose, scope, and sequence.
- The irregularity of scheduling music classes.
- The lack of definition of expected achievement and outcomes.
- The over-emphasis on singing.
- The inability to employ and maintain qualified music instructional personnel.
- The inability to keep up with instructional materials in music.
- The lack of the teaching of music reading and hearing.
- The playing of musical instruments limited to small percentages of enrollment.

Weaknesses cited were more numerous in non-urban systems' responses. Only one urban system indicated a near-total absence of a music program.

#### Portions of Total School Budgets Allocated for Music Instruction

School systems in Tennessee have no standard guide to help them determine the portions of school budgets

desirable for various instructional areas. The variation among systems is probably sizeable. It is not surprising to find that great variance occurs relative to music. Respondents were asked to report the percentage of total instructional budget, excluding salaries of regular classroom teachers, spent on full-time music teachers, materials, instruments, equipment, and facilities.

Less than one-tenth of the systems reported that music budgets for all phases of the program at all levels exceeded 3 per cent of the total instructional budget. One out of four systems indicated budget proportions were 1 to 3 per cent, and over half stated that music received less than 1 per cent of the total budget. Over 40 per cent indicated the proportionate amount was less than 0.1 per cent. Urban systems reported slightly higher proportions of budgets allocated to music than non-urban (see Table 19, Appendix E).

#### Music Budget Allocated to Elementary, Junior High, and Senior High

In reporting what portion of music budgets were given to elementary, junior high, and senior high levels, non-urban systems tended to spend more at the elementary and senior high levels and less at the junior high level. Viewed statewide, over 70 per cent of music budgets were



spent at the senior high school level, with about 17 per cent at junior high and only 11.6 per cent at the elementary level (see Table 20, Appendix E).

#### Portion of Cost of Music Instruction Borne Directly by Parents

The portion of music instruction cost borne by parents and not part of public school budgets was sought. All the non-urban systems reported some part of the cost was borne directly by parents. Over 71 per cent indicated that up to one-fourth of the total cost was borne by parents. Eleven per cent stated that between three-fourths and all the cost of music was not part of the school budget thus being paid directly by parents. All urban systems stated parents supported up to 25 per cent of the total cost of music instruction (see Table 21, Appendix E).

#### Time Allotted for Elementary Music

Most school systems reported that music was part of the required instructional program. Approximately 75 per cent stated that children were required to participate in music classes at all elementary grade levels. However, in seeming contradiction, over 30 per cent reported that music was not regularly scheduled at all, and many indicated music classes met no more than once a week.

All urban systems reported they required music instruction at all elementary grade levels. Several non-urban systems admitted music was required at all grade levels but that they had no program, music teachers, or other provisions to carry out the requirement. Table 22, Appendix E, reports the responses to this inquiry.

Although requirements for music instruction set forth by the State Department of Education stipulates that all elementary levels will receive a minimum of sixty minutes organized instruction per week, the average reported in the survey does not exceed forty-five minutes. In several instances where time allocation equalled sixty minutes per week, other responses seemed to fail to support this.

Supervisors seemed to be trusting classroom teachers to fulfill obligations of state minimum requirements and in many instances the amount of time allocated to music was reported unknown by the supervisors (see Table 23, Appendix E).

#### Scheduling of Elementary Music Classes

Over 30 per cent of the systems reported that music was not regularly scheduled in their schools in grades one through six.

For grades one through three, the most common schedule was two days per week, with 37 per cent reporting this practice. The schedules in urban and non-urban systems were not materially different with a slightly higher percentage of urban systems indicating two and five days per week schedules and only non-urban systems reporting scheduling three days per week.

None of the respondents reported scheduling music four days per week (see Table 24, Appendix E).

Scheduling in grades four, five, and six departed slightly from that of the lower grades. All urban systems had classes at these levels, two-thirds reporting two days per week was their schedule and one-third stating three days. A few more non-urban systems had schedules of two days per week and a few less had one day than in the first three grades. Percentages of those scheduling three and five days were not too different from the percentages in the lower grades.

To learn the average number of days per week music was reported scheduled, urban and non-urban responses were combined. The survey revealed that in grades one and two the average number of days per week music was taught was 1.5. For grades three through six, the average was 1.4 days.

### Availability of Materials and Equipment

School systems reported marked deficiencies relevant to various kinds of instructional material and equipment availability for schools (see Table 25, Appendix E). Indications were that urban systems provided more adequately for their schools than non-urban systems did for theirs. Except for pianos, record players, and recordings for listening, less than half the non-urban systems reported that materials and equipment listed in the questionnaire were sufficiently available.

In an effort to clearly determine the sufficiency of music textbooks, respondents were asked to state whether books were available to 25 per cent, 50 per cent, 75 per cent, or 100 per cent of the children, per grade. A choice indicating total lack of books was also provided. No specification as to the number of children using the books available was requested here (see Table 26, Appendix E).

About one-fourth of the systems reported they had 100 per cent coverage of books for first and second grades and approximately the same portion indicated that no books were available for these grades. Availability of books in grade three ranged from 10.4 per cent stating books were totally available to 22.9 per cent stating they had books available to one-fourth of their children. Improvement of availability was reported for the fourth grade, particularly

in the non-urban systems. At the fifth and sixth grade levels two-thirds of the urban systems reported 50 per cent availability of music books, and one-third stated no books were available to their schools.

Approximately two-thirds of the school systems in Tennessee do not provide music textbooks in sufficient quantity for their elementary children at all grade levels.

#### Music Textbooks Used in Systems

Elementary schools in Tennessee have the opportunity to use a considerable number of state approved music textbooks. Most of the currently available series are on the state's adopted list, and systems may choose one or as many of the series they like. Five out of six systems reported they had an officially adopted music textbook series. Some systems reported more than one book had been adopted. The survey revealed that adoption was no direct indication of sufficient availability and that great variance of usage occurs in many systems. Responses indicate that most of the currently popular music textbooks are being used by some school systems in Tennessee (see Table 27, Appendix E).

#### Emphasis Given Musical Activities and Importance Ratings of Activities

Supervisors were asked to indicate whether several rather commonly used musical activities were being given

significant emphasis in their schools. The choices were singing, listening for tonal relationships, listening for sounds of musical instruments, listening for the mood of music, reading of music to learn notation, reading for singing, reading in order to play small instruments, playing of bells, playing of small wind instruments, playing the auto-harp, playing of keyboards, singing games and action songs, rhythmic conducting, and creative rhythms. In addition supervisors were asked to rate the importance of those activities in an adequate music instructional program. Choices supplied were (1) very important, (2) moderately important, and (3) least important (see Table 28, Appendix E).

Nearly all urban systems reported singing was receiving sufficient emphasis at all levels. A fairly high percentage of non-urban systems reported likewise with emphasis declining somewhat in the upper grades. Most systems indicated that singing was very important or moderately important.

Practically no systems felt part-singing was receiving sufficient emphasis in the lower grades, perhaps an indication that supervisors do not conceive this activity applicable to these levels. Even at upper levels, part-singing emphasis was reported sufficient in only half the systems. Approximately one-third reported part-singing to be very important, and nearly half stated it was moderately important.

Less than one-fourth stated listening for tonal

relationships was being sufficiently emphasized at the first grade level. The percentage rose to nearly one-half at the sixth grade. Slightly less than 50 per cent felt this activity was very important, and one-third said it was moderately important.

Less than one-fourth lower grade children were reported sufficiently instructed in how to listen for sounds of musical instruments. Nearly half received adequate instruction in the upper grades. Respondents were about equally divided as to their opinion of importance, rating it very important and moderately important.

Similar numbers of systems reported sufficient emphasis given to listening for music's mood. Approximately one-fifth stated sufficient emphasis at grade one and one-half at grade five and six. Less than one-half of the systems rated this activity very important and over one-third rated it moderately important. Several systems failed to give an importance indication.

Practically all systems indicated they felt that the reading of music to learn notation was being insufficiently taught in lower grades. Less than one-third expressed satisfaction of middle grade instruction in this activity, but approximately half stated sufficient emphasis was being given to upper grades. A high percentage of respondents rated this activity as very important or moderately important.

Less than a third of the respondents felt sight-singing was being sufficiently emphasized at any level with only 10 per cent indicating it was stressed adequately at the lower grade levels. Nearly equal numbers of non-urban systems rated this activity very important, moderately important, and least important. Urban systems were more in agreement with two-thirds stating it was very important and one-third stating it was moderately important.

Reading notation while playing small instruments was practically non-existent in lower grades. Urban systems responding indicated more satisfaction than non-urban systems, but all stated sharp deficiency in this activity. Less than one-fifth stated this activity was very important; nearly the same number said it was moderately important; and over one-third said it was least important. One-fourth of the non-urban respondents failed to give a rating.

Respondents were given four categories of choices concerned with the playing of classroom instruments--playing bells, small wind instruments, autoharps, and keyboards.

Emphasis sufficiency for the playing of song bells or resonator bells remained fairly consistent through the grade levels with about one-fourth the respondents indicating satisfaction. Urban systems indicated the activity was high in importance. In contrast, over one-third of the non-urban systems rated this activity least important, and again



a sizeable number failed to give a rating.

The playing of small wind instruments received practically no stress in the lower grades. Even at the third through sixth grade levels, less than one-fifth the respondents indicated satisfaction of emphasis. Urban systems were in sharp contrast with non-urban at the fifth and sixth grade levels with nearly all the urban indicating satisfaction for grade five, and 50 per cent stating satisfaction for grade six. Urban and non-urban respondents were in disagreement as to the importance of the activity, with urban consistently rating it more important.

Autoharp playing was hardly existent in schools at lower grade levels. Most urban systems reported satisfaction with emphasis of this activity at upper grades, but less than one-third non-urban systems made a similar response. Most urban respondents rated this activity as either very or moderately important. Nearly half the non-urban systems rated it least important with about one-third failing to give indication.

Of all the activities listed, the playing of keyboards was reported most insufficiently emphasized. Ten per cent of the respondents indicated adequacy was given first grades, but for the other grades less than 6 per cent reported sufficient emphasis was being given. As with several other activities, importance ratings given seem

peculiarly confusing in that although most systems indicated sharp deficiency of emphasis, a majority either rated this activity least important or failed to make an indication of importance.

The last set of activity choices relate to rhythmic activities included rhythmic conducting, creative rhythms, and singing games and action songs.

The teaching of rhythmic conducting was reported completely deficient in urban schools and between 10 and 17 per cent of the non-urban respondents indicated satisfaction with emphasis of this activity. No urban respondents rated this as very important. One-sixth rated it moderately important and one-sixth least important. Three-fourths gave no indication. Non-urban respondents were about equally divided as to the three rating categories with several failing to indicate.

Less than 12 per cent reported sufficient emphasis was given the activity of creative rhythms. Urban percentages were higher than non-urban for all grade levels. Nearly half rated this activity as moderately important with close to one-fourth each rating it very important and least important.

For singing games and action songs, sharp lacking of emphasis was reported for the first two grades with approximately 50 per cent reporting sufficient emphasis given in

other grades. Over 40 per cent rated this activity very important, and equal numbers moderately important. Nearly 20 per cent rated it least important.

## CHAPTER V

### RELATIONSHIP OF MUSIC ACHIEVEMENT AND INSTRUCTIONAL PROVISIONS

One purpose of this study was to determine if a relationship could be seen between music achievement as measured by the testing instrument and provisions as reported through the questionnaire responses. To accomplish this, instructional provisions of the six school systems which had highest achievement test results and of the six systems which had lowest achievement test results were compared. The six high and low systems were chosen from t value results on the combined achievement test as shown ranked in Table 8 in Chapter III. Questionnaire responses were itemized into thirty-five provision variables which the researcher felt were relevant to affecting achievement. Provision variables of the two groups were first visually compared.

Items for which the upper group made better provisions are as follows:

1. The ratio of full-time elementary music teachers to elementary students enrolled. The ratio of the upper group was approximately one teacher for each eight hundred

students. For the lower group, the ratio was approximately one teacher for 4,500 students. System number 5, an urban system which ranked second in test results, had a ratio of approximately one teacher for each five hundred students.

2. The number of music supervisors. Four systems in the upper group had music supervisors; two of these also had assistant supervisors. None of the lower group systems had music supervisors.

3. The availability of music textbooks for students. Three systems in the upper group reported excellent provisions of books, two stated books were 50 per cent available, and one stated books were not provided. Only one system in the lower group provided books to all children. Two systems stated that books were 50 per cent available and three stated no books were available.

4. Recordings to accompany music textbooks. Three systems in the upper group and two in the lower group provided recordings to accompany music textbooks.

5. Recordings for listening. Four systems in the upper group and three in the lower group reported providing this type of recording.

6. The availability for student use of autoharps, resonator bells, classroom rhythm instruments, and pianos. Except for pianos, which all upper group systems and all except one lower group system claimed were sufficiently

available, supplying of the above instruments was better in the upper group.

7. The portion of the total school budget allocated to music. Three systems in the upper group stated that approximately 2 per cent of the total instructional budget was allocated to music. Three systems stated approximately 0.5 per cent was allocated to music. Three systems in the lower group reported that approximately 1 per cent of the total budget was allocated to music and three systems reported that less than 0.1 per cent went to music.

8. The percentage of the total music budget allocated to the elementary school program. Three systems of the upper group reported they allocated 60 per cent or more of their budget to music instruction for grades one through six. Three stated they allocated approximately 20 per cent. Two of the systems that stated they allocated over 60 per cent had no secondary schools. Urban system number 5 of the top group, although having about half of its total enrollment in grades one through six, allocated over 60 per cent of its music budget for elementary instruction. Two systems of the lower group reported they allocated approximately 30 per cent of the music budget to instruction for grades one through six. The other four systems reported that practically all money for music was spent at the secondary level.

9. The emphasis given the playing of classroom music

instruments. Three systems in the upper group reported that sufficient emphasis was being given to the playing of instruments in the fourth through sixth grades. Two of these systems were satisfied with this activity in the lower grades. No system in the lower group reported satisfaction with this activity emphasis.

For all the variables except those listed above, the upper and lower systems reported virtually equal provisions. In no case were better provisions reported by any lower group system than by any upper group system.

To investigate further whether achievement and provisions had a relationship, the thirty-five variables for the upper and lower groups were given a test of significance by applying a chi-square test. The following formula was used:<sup>1</sup>

$$\chi^2 = \frac{\sum_{i=1}^k \frac{a_i^2}{n_i} - \frac{A^2}{N}}{\frac{A}{N} \cdot \frac{B}{N}}$$

The chi-square test revealed significant difference in the upper and lower achievement groups on three provisions variables, each reflecting better provisions in the upper achievement group. One variable, the ratio of full-time elementary music teachers to pupils enrolled in grades one through six, gave a chi-square value significant at the

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<sup>1</sup>Helen M. Walker and Joseph Lev, Statistical Inference (New York: Holt Rinehart and Winston, 1953), p. 99.

0.01 level. Two provision variables were significant at the 0.05 level. They were the employment of music supervisors, and the emphasis reported being given to the activity of playing classroom instruments.

Through close examination of provision variables of those systems which ranked highest and of those systems which ranked lowest in achievement test results, and by application of the chi-square test, there is evidence that the upper achievement group made better provisions than the lower. However, the degree to which the upper group made better provisions is only marginal. There is evidence that more full-time music teachers for fewer students resulted in better student achievement. Students in those systems with music supervisors had better achievement. Students in systems which gave sufficient instruction in the playing of classroom instruments had better achievement. Other provisions apparently resulting in better achievement, although not significant according to the chi-square test, were the sufficient availability of music textbooks and accompanying recordings, the sufficient availability of recordings for listening, the sufficient availability of classroom instruments, the allocation of a greater portion of instructional budget to music, and the allocation of a greater portion of the music budget to the elementary program.

As cited earlier, the six urban systems consistently



made better provisions than systems of the non-urban group, and all urban systems except number 6, were above the median in t value results with the achievement test. This is additional evidence that better provisions result in better achievement.

Examination of elementary music instructional provisions of all systems reporting in this survey show that systems were relatively homogeneous, and that most systems are making poor provisions.

All systems except one in which testing took place had achievement test results below the mean of the standardization sample. Achievement means of seven of the twenty-two systems below the standardization mean had t values that were insignificant. The other fifteen systems had t values significantly below the national norm.

A final conclusion is evident. Achievement as measured by the test and provisions as reflected by the questionnaire are related, and both indicate that elementary music in the public schools of Tennessee is being seriously neglected.

## CHAPTER VI

### RECOMMENDATIONS AND SUMMARY

#### Recommendations

On the basis of the evidence from this study, the following recommendations are submitted:

1. It is important that some form of standard musical assessment be made of elementary students in all schools in Tennessee. The test used in this study should be administered by schools and by school systems to all instructional levels where applicable. Other standardized achievement tests should be applied. This need is particularly pressing because most currently used general achievement tests do not have a section which assesses musical achievement.

2. Other evaluative techniques need to be formed which could help teachers and administrators determine whether objectives and aspirations are being attained. Those persons responsible for music education in this state should come to some agreement about basic goals for music in the elementary school. Relatively uniform evaluative techniques need then to be applied to assure reasonable consistency of evaluation in schools. Responses given in this survey show a lack of agreement on what is important in a

music instructional program and of how to evaluate what is being accomplished.

3. School systems within the state should make their own studies of music provisions. Criteria for adequate provisions need to be formulated and efforts should be exerted to upgrade provisions where necessary.

This study revealed serious deficiencies in elementary music education in Tennessee. Conditions revealed as meriting immediate attention are as follows:

1. The music achievement of elementary children tested did not compare favorably with the national average. Only one system had an achievement test mean equal to the mean of the standardization sample. Achievement means of twenty-one systems were below that of the national average. All necessary efforts, including the improvement of instructional provisions, should be exerted to bring achievement up to that of the national average.

2. Very few systems claimed that a strong program in music was being provided. From the 135 systems responding to the survey, less than 2 per cent stated that they felt they had an outstanding program. Fifty-five per cent admitted that their program was poor. A well-structured general music course should be made available to all students and should be a required part of the public elementary school curriculum. The State Department of Education regulation

stipulates that an organized program will be offered to all children and that all children must participate in such a program. There seems little value in such a requirement unless efforts are made to enforce it.

3. Few systems were making adequate, much less good, provisions for music instruction. Music teachers, materials, and equipment were not sufficiently available to carry on even a minimum program in many systems. The ratio of full-time music teachers to pupils was approximately one to 1,500. Many systems had no music teachers. Most respondents stated that they were dissatisfied with the practice of classroom teachers being responsible for music instruction and that adequately trained music teachers were necessary for a successful instructional program. Evidence gained in this study supports the premise that classroom teachers are not, in many instances, giving adequate instruction. This study indicates that systems with more full-time elementary music teachers proportionately for students enrolled, had better results on the achievement test. The paucity of full-time elementary music teachers should be remedied, and school officials should cease expecting music to be effectively taught by classroom teachers. Instructional materials, especially recently published music textbooks and accompanying recordings, should be made sufficiently available. Instruments and equipment necessary for a strong program should be provided.

4. Most school systems were allocating little instructional money for elementary music. Nearly half the respondents stated that their systems allocated less than one-tenth of 1 per cent of the total instructional budget to music for all grade levels. The portion of the music budget spent for elementary instruction averaged less than 12 per cent. Expenditures for music instruction should be increased, and a greater portion of the music budget should be spent at the elementary level.

5. Actual time scheduled for music instruction was reported to be below the recommended minimum set by the State Department of Education. In some cases respondents indicated that they were complying with the state minimum time requirement of sixty minutes of planned instruction per week in word only. Many respondents estimated the amount of time allocated, stating that there was no organized program and that they did not know how much time was being given. Achievement test results and the amount of time reported for music indicate the need for increased music instructional time. Again, there seems little value in having rules and standards established by the State Department of Education if these are not enforced.

6. Musical activities through which concepts and skills may be developed were reported receiving insufficient emphasis in most school systems. Except for singing, all

activities listed in the questionnaire were reported being given insufficient emphasis. Many activities which were rated as important in a program were receiving practically no emphasis. As already stated, educators should reach a consensus about desirable skills and concepts for elementary music. Efforts should be made to help administrators and teachers know what activities would be more likely to contribute to accomplishing objectives. Evaluative criteria need to be established and made clear to help school officials assess programs effectively.

#### Summary

This study attempted to investigate achievement and instructional provisions in the elementary schools of Tennessee. The Elementary Music Achievement Test was administered to randomly selected sixth grade students in the public schools. A provisions inventory questionnaire was administered to all the public school systems in the state. Testing was made in sixty-two classrooms from twenty-two school systems representing the four urban areas and the non-urban area of the state. Comparison of the tested sample means was executed by the use of the statistical t test. Of the twenty-two systems in which testing took place, only one system had a mean score on the combined test equal to or exceeding the mean of the test standardization sample.

Fifteen of the twenty-two systems had mean scores below the standardization mean resulting in computed  $t$  values significant at the 0.01 level. Classrooms from the urban sample had better results on the test than classrooms from the non-urban sample. When the entire Tennessee sample mean was compared to the standardization mean, a  $t$  value of -22.19 was yielded.

The questionnaire gathered data relevant to several important aspects of instructional provisions. Results of the questionnaire revealed that although a few systems were providing adequately for music instruction, most were not. Urban systems rather consistently reported better provisions than the non-urban systems. Many respondents cited serious deficiencies in design and scope of programs, in teaching personnel, in budgets for elementary music, in materials and equipment, in time allotted for instruction, in evaluative techniques, and in emphases given various music activities. Approximately one-third of the respondents said that they had a total lack of instruction in music, with a complete absence of teaching, of sufficiency of materials, and of other provisions necessary for music instruction in their elementary schools.

An additional part of this study was an attempt to determine if a relationship could be seen between music achievement as measured by the testing instrument and

provisions as reported through the questionnaire responses. To accomplish this, the six systems which had highest mean achievement test results and the six systems which had lowest mean achievement results according to t values were grouped, and the questionnaire responses of the two groups were analyzed and compared. Analysis was made both through visual examination and by use of a chi-square test of significance. Visual examination and the chi-square test revealed that the upper achievement group made better provisions relevant to the ratio of full-time elementary music teachers to pupils enrolled, the number of music supervisors, and the emphasis given the activity of playing classroom instruments. The upper group reported better provisions in several other areas, but according to the chi-square test, these were not significant. For many variables, the upper and lower group reported virtually equal provisions, but on no item did the lower group report better provisions than did the upper. Results on the test and questionnaire responses also showed that the urban systems had better test results and made better provisions for instruction than did the non-urban systems. The degree to which both the upper achievement group and the urban systems made better provisions was, however, only marginal.

The conclusion is made that achievement as measured by the test and provisions as reflected by the questionnaire



are related, and both indicate that elementary music in the public schools of Tennessee is being seriously neglected.

BIBLIOGRAPHY

## BIBLIOGRAPHY

### Books

- Good, Carter V., Barr, A. S., and Scates, Douglas E. The Methodology of Educational Research. New York: Appleton-Century Crofts, 1941.
- Leonhard, Charles, and House, Robert. Foundations and Principles of Music Education. New York: McGraw-Hill Book Company, Inc., 1959.
- Popham, W. James. Educational Statistics. New York: Harper and Row, 1967.
- Tennessee. State Board of Education. Annual Statistical Report. Nashville: State Board of Education, 1967.
- \_\_\_\_\_. Directory of Public Schools for 1967-68. Nashville: State Board of Education, 1967.
- \_\_\_\_\_. Rules, Regulations, and Minimum Standards. Nashville: State Board of Education, 1965.
- Van Dalen, Deobold B. Understanding Educational Research. New York: McGraw-Hill Book Company, 1962.
- Whybrew, William E. Measurements and Evaluation in Music. Dubuque: Wm. C. Brown Company Publishers, 1962.
- Walker, Helen M., and Lev, Joseph. Statistical Inference. New York: Holt Rinehart and Winston, 1953.

### Music Song Textbooks

- Berg, Richard C., Hooley, Daniel S., and Wolverton, Josephine. Music for Young Americans. New York: American Book Company, 1960.
- Boardman, Eunice, and Landis, Beth. Exploring Music. New York: Holt, Rinehart and Winston, 1966.
- Dykema, Peter W., et al. A Singing School. Boston: C. C. Birchard and Company, 1956.

- Leonhard, Charles, et al. Discovering Music Together. Chicago: Follett Publishing Company, 1966.
- Mursell, James L., et al. Music for Living. Morristown, N.J.: Silver Burdett Company, 1956.
- Pitts, Lilla Belle, et al. Our Singing World. Boston: Ginn and Company, 1951.
- Sur, William R., et al. This is Music. Boston: Allyn and Bacon, 1961.
- Watters, Lorrain E., et al. The Magic of Music. Boston: Ginn and Company, 1966.
- Wilson, Harry R., et al. Growing with Music. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966.
- Wolfe, Irving, et al. Together We Sing. Chicago: Follett Publishing Company, 1963.
- Landeck, Beatrice, et al. Making Music Your Own. Morristown, N.J.: Silver Burdett Company, 1964.

#### Dissertations and Theses

- Chugg, Melburne D. "A Study of the Classroom Music Program in the Elementary Schools of Utah." Unpublished Ed.D. dissertation, University of Oregon, 1964.
- Colwell, Richard J. "An Investigation of Achievement in Music in the Public Schools of Sioux Falls, South Dakota." Unpublished Ed.D. dissertation, Graduate College, University of Illinois, 1961.
- Emmert, Ruth F. "Music Education for the Elementary Schools of Washington County, Tennessee." Unpublished Master of Education thesis, George Peabody College for Teachers, 1951.
- Estes, William V. "Change in Status of Music Education Between 1955-56 and 1961-62 in Public School Systems of Selected Cities Between 50,000 and 100,000 Population." Unpublished Ed.D. dissertation, University of Illinois, 1964.

- Freeman, Warren S. "A Survey and Evaluation of the Current Status of Music Education Activities in Public Schools of the U.S." Unpublished Ed.D. dissertation, Boston University, 1955.
- Johnson, William L. An Appraisal of Music Programs in the Public Schools of Illinois Excluding Chicago. Springfield: Office of the Superintendent of Instruction, State of Illinois, 1967.
- Noah, Max S. "Promotion of Music Education by Southern State Departments of Education." Unpublished Ph.D. dissertation, George Peabody College for Teachers, 1953.
- Patterson, Mildred M. "Suggestive Musical Activities and Materials for Knox County Schools. Grade 1-6." Unpublished Master's thesis, University of Tennessee, 1950.
- Snyder, Alice M. "The Development, Construction and Standardization of a Test of Music Achievement." Unpublished Ed.D. dissertation, School of Education, University of Oregon, 1958.
- Swinchoski, Albert A. "The Development of a Standardized Music Achievement Test for the Intermediate Grades." Unpublished Ph.D. dissertation, University of Kansas, 1963.

#### Articles

- Choate, Robert A. "Research in Music Education," Journal of Research in Music Education, XIII (Summer, 1965).
- Leonhard, Charles. "Philosophy of Music Education," Music Educators Journal, LII (September, 1965).
- "Music in the Public Schools," NEA Research Bulletin, XLI (May, 1963).
- Reimer, Bennett. "The Development of Aesthetic Sensitivity," Music Educators Journal, LI (January, 1965).

## Music Tests

- Aliferis, James. Aliferis Music Achievement Test: College Entrance Level. Minneapolis: University of Minnesota Press, 1954.
- Beach, Frank A., and Schrammel, H. E. Beach Music Accomplishment Test. Emporia, Kansas: Bureau of Educational Measurements, Kansas State Teachers College, 1930.
- Colwell, Richard J. Elementary Music Achievement Test. Chicago: Follett Publishing Company, 1967.
- \_\_\_\_\_. Elementary Music Achievement Tests, Administration and Scoring Manual. Chicago: Follett Publishing Company, 1967.
- Farnum, Stephen. Farnum Music Notation Test. New York: Psychological Corporation, 1953.
- Kunth, William. Achievement Tests in Music. Minneapolis: Education Tests Bureau, 1936.
- Kwalwasser, Jacob, and Ruch, G. Tests of Music Accomplishment. Iowa City: Bureau of Education Research and Service, University of Iowa, 1927.
- Seashore, Carl E., Seashore, Lewis D., and Saetveit, J. G. Seashore Measures of Musical Talents. New York: Psychological Corporation, 1960.

APPENDIX A  
TENNESSEE PUBLIC SCHOOL SYSTEMS

APPENDIX A

TENNESSEE PUBLIC SCHOOL SYSTEMS

Urban Systems

Chattanooga	Hamilton County
Knoxville	Knox County
Memphis	Shelby County
Nashville-Davidson County	

Non-urban Systems

Anderson County	Hamblen County
Bedford County	Hancock County
Benton County	Hardeman County
Bledsoe County	Hardin County
Blount County	Hawkins County
Bradley County	Haywood County
Campbell County	Henderson County
Cannon County	Henry County
Carroll County	Hickman County
Carter County	Houston County
Cheatham County	Humphreys County
Chester County	Jackson County
Claiborne County	Jefferson County
Clay County	Johnson County
Cocke County	Lake County
Coffee County	Lauderdale County
Crockett County	Lawrence County
Cumberland County	Lewis County
Decatur County	Lincoln County
DeKalb County	Loudon County
Dickson County	McMinn County
Dyer County	McNairy County
Fayette County	Macon County
Fentress County	Madison County
Franklin County	Marion County
Gibson County	Marshall County
Giles County	Maury County
Grainger County	Meigs County
Greene County	Monroe County
Grundy County	Montgomery County



Moore County  
 Morgan County  
 Obion County  
 Overton County  
 Perry County  
 Pickett County  
 Polk County  
 Putnam County  
 Rhea County  
 Roane County  
 Robertson County  
 Rutherford County  
 Scott County  
 Sequatchie County  
 Sevier County  
 Smith County  
 Stewart County  
 Sullivan County  
 Sumner County  
 Tipton County  
 Trousdale County  
 Unicoi County  
 Union County  
 Van Buren County  
 Warren County  
 Washington County  
 Wayne County  
 Weakley County  
 White County  
 Williamson County  
 Wilson County

Alamo  
 Alcoa  
 Athens  
 Atwood  
 Bells  
 Bristol  
 Brownsville  
 Cleveland  
 Clinton  
 Covington  
 Crocket Mills

Dayton  
 Dyersburg  
 Elizabethton  
 Etowah  
 Fayetteville  
 Franklin  
 Friendship  
 Gadsden  
 Greeneville  
 Harriman  
 Hollow Rock-Bruceston  
 Humboldt  
 Huntingdon  
 Jackson  
 Johnson City  
 Kingsport  
 Lebanon  
 Lenoir City  
 Lexington  
 McKenzie  
 McMinnville  
 Manchester  
 Maryville  
 Maury City  
 Milan  
 Morristown  
 Murfreesboro  
 Newport  
 Oak Ridge  
 Oneida  
 Paris  
 Richard City  
 Rockwood  
 Rogersville  
 Shelbyville  
 South Carroll County  
 Sparta  
 Sweetwater  
 Trezevant  
 Tullahoma  
 Union City  
 Watertown

APPENDIX B  
CORRESPONDENCE

MIDDLE TENNESSEE STATE UNIVERSITY

Murfreesboro, Tennessee 37130

Department of Music

February 28, 1968

In a research project I am preparing, I need the assistance of your office and of some teachers in your school system.

For a long time there has been a need for objective information relevant to music achievement of our school children in Tennessee. Although music is an endorsed part of the elementary school curriculum, there has never been an investigation of childrens' musical achievement. I propose to administer a standardized music achievement test to children of selected sixth grade rooms in selected systems in our state. I hope to use the data yielded to arrive at some picture of elementary music achievement.

In a random selection procedure your school system has been chosen as one of twenty-two in which I would like to do some testing. I would like to administer the Elementary Music Achievement Test, published by Follett Publishing Company, to one or more sixth grade rooms in your school system. Through preliminary reports records in the State Department of Education offices, I have obtained the names of all the sixth grade homeroom teachers in your system. As my research is based on procedure that necessitates random selection of students in room groups, I have randomly selected the desired number of rooms I need from your system. I have listed these rooms below.

In addition to student music achievement testing data, I need as part of this study data relevant to instructional provisions in music. I have constructed a questionnaire which when filled out will yield the information I desire. The questionnaire does not, of course, give a complete picture of your instructional provisions, but it does make it possible to gain a partial picture of instructional provisions. The questionnaire is enclosed. I would like to ask you to fill out the questionnaire. If you wish to have someone in music

February 28, 1968  
Page 2

fill it out, that would be perfectly all right. The answers to some few questions may not be available to persons in music. As you might surmise, an attempt will be made in the study to relate achievement and provisions. The questionnaire, incidentally, will be sent to all the 152 school systems in the state.

I hope you will find my procedural plan acceptable and will assist me. When the questionnaire has been completed, please return it in the enclosed brown envelope. Unless there is objection, I shall contact the teachers concerning testing in a few days. May I assure you that I will take as little of their time as possible. I believe the testing will be a nice experience for them and their students.

As you know research in education can be very important. This project, I feel, can be of real value to Tennessee educators. The results of the study will, of course, be made known to you.

I appreciate the fact that your participation in this study will require time from your already busy schedule. I am very grateful to you for your assistance.

Sincerely yours,

T. Earl Hinton  
Music Department

TEH/hw

Enclosures

Sixth grade homeroom(s) selected at random to take the music achievement test.

Teacher

School

## MIDDLE TENNESSEE STATE UNIVERSITY

Murfreesboro, Tennessee 37130

Department of Music

March 7, 1968

In a research project I am undertaking, I need your assistance.

As part of this project, I need to have a music achievement test given to about 80 sixth grade homerooms randomly selected from Tennessee schools. Your room is one of those selected. I would like to ask you to give the Elementary Music Achievement Test, Test 1 and 2 to all the children in your room. If some child is absent this will not matter. And if one or two do not take both tests, that also will not matter.

All materials, except a record player and student pencils, are enclosed. When you are ready to give the test, give out only the Test 1 answer sheets. Distribute the Test 2 forms after Test 1 is completed. Directions for giving the tests are enclosed, beginning on page 34 of the manual and continuing through page 54 for Test 2. As you will note we have made minor but important alterations in the instructions from the way they were originally printed. For the instructions that are to be read, ask the students to listen carefully. Most of the instructions for the test occur on the recordings. You will need a record player that plays 33 1/3 speed.

Please note in the directions that right before you begin the Test 1, you are requested to read the statements for the "Data Box." The "Data Box" questions are for Test 1 only. Test 2 has a data box on it but is not to be used. For this testing we will not be using the "Identification" box on either test.

The time for taking Test 1 is about 22 minutes, for Test 2 about 28 minutes. I might suggest that there be a short break between the two, perhaps even giving them on consecutive days.

March 7, 1968  
Page 2

After you have given the two tests, please return the student answer forms and the two recordings to me. I am enclosing an address label for you to place on the box, stamps for mailing, and a short piece of sealing tape to close the box. As answer forms are to be machine graded, care to see that they are not folded or wrinkled will be appreciated.

Your assistance in the research project is of paramount importance. In fact the research cannot be done without the testing being carried out. I am very grateful to you for the time and effort this will take. The results of the study will, of course, be made known to you.

Sincerely yours,

T. Earl Hinton  
Music Department

TEH/hw

Enclosures

## MIDDLE TENNESSEE STATE UNIVERSITY

Murfreesboro, Tennessee 37130

Department of Music

March 20, 1968

In a research project I am preparing, I need your assistance.

This project is designed to study the music achievement of elementary grade students in Tennessee public schools and the provisions for instruction in music at the elementary school level. The testing of selected students will accomplish the first part of this and it is on the second part that I need your help.

I have constructed a questionnaire which when filled out will yield the information I seek relevant to instructional provisions. A copy of this questionnaire is enclosed. I would like to ask you to fill out the questionnaire. The questionnaire does not, of course, give a complete picture of your music instructional provisions, but it does make it possible to gain a partial picture of instructional provisions. When you have completed the questionnaire, please return it in the enclosed addressed, stamped envelope. The questionnaire, incidentally, will be sent to all the 152 school systems in the state.

As you know research in education can be very important. This project, I feel, can be of real value to Tennessee educators. The results of the study will, of course, be made known to you.

I appreciate the fact that your participation in this study will require time from your already busy schedule. I am very grateful to you for your assistance.

Sincerely yours,

T. Earl Hinton  
Music Department

Enclosures

## MIDDLE TENNESSEE STATE UNIVERSITY

Murfreesboro, Tennessee 37130

Department of Music

May 8, 1968

A few weeks ago I sent you a set of elementary music testing material and asked you to assist me in a research project by administering this test to your sixth grade students.

As I have not received the completed test materials from you, I am writing to find out if you can assist me. May I say immediately that I am in no undue hurry for you to give the test and return the forms to me. Any time even up to the last days of school would be fine for you to give the test. I am merely writing to stress my hope that I can count on you. Obviously, it is important to me to have your students participate in this research.

May I thank you for taking the time this testing will involve. I feel it is a good learning experience for students and that it is a pleasant experience. I believe the information gained from this study will contribute to the betterment of music instruction in this state.

Thank you again and I look forward to receiving your answer forms when you have time to give the test.

Sincerely yours,

T. Earl Hinton  
Music Department



MIDDLE TENNESSEE STATE UNIVERSITY  
Murfreesboro, Tennessee 37130

Department of Music

May 8, 1968

Several weeks ago I sent you a questionnaire concerning instructional provisions for elementary music in your system. According to my records your completed questionnaire has not been received as of this date. Our study, as you may recall from our letter of March 20, is designed to gather information from all the 152 public school systems in the state. It would, of course, be incomplete without information from your system.

Enclosed you will find another copy of the questionnaire. I hope very much that you will take time to complete it. I realize that this is an extra busy time of year for you.

I shall be most grateful for your cooperation in this important matter.

Sincerely yours,

T. Earl Hinton  
Music Department

Enclosure

APPENDIX C

MUSIC EDUCATION SURVEY QUESTIONNAIRE  
AND ELEMENTARY MUSIC ACHIEVEMENT  
TEST ANSWER SHEETS

The following copyrighted material  
has been removed: Elementary  
Music Achievement Test Answer  
Sheet by Richard J. Colwell (Copy-  
right 1967 by Follett Publishing  
Company, Chicago), pp. 104-106.

MUSIC EDUCATION SURVEY QUESTIONNAIRE

Elementary Schools

When completed, return to:

For Office Use

T. Earl Hinton  
Middle Tennessee State University  
Murfreesboro, Tennessee 37130

When completing this questionnaire, please use typewriter or print plainly. To indicate a specific grade level, or in providing "yes or no" answers, circle the appropriate answer. When check marks are requested, please use "x." It is important that you provide answers to all questions which apply to your school system.

School System \_\_\_\_\_ City \_\_\_\_\_

County \_\_\_\_\_

Total System Enrollment \_\_\_\_\_ Enrollment Grades 1 through 6 \_\_\_\_\_

Superintendent \_\_\_\_\_

Supervisor of Instruction \_\_\_\_\_

Person filling out questionnaire if other than supervisor of instruction \_\_\_\_\_

Please list below the names of all music teachers and/or music supervisors who serve this system. (A music teacher is defined here as a person who spends at least one-half of his or her teaching time in teaching or supervising music.) Designate teaching assignment by number: 1--Instrumental; 2--Vocal; 3--General Music; 4--Instrumental-Vocal; 5--Instrumental-General; 6--Vocal-General; 7--Instrumental-Vocal-General; 8--Full-time Supervisor. Designate by number highest degree earned: 1--No degree; 2--Bachelor's; 3--Master's; 4--Master's plus 32 semester hours; 5--Doctor's

NAMETEACHING ASSIGNMENTHIGHEST DEGREE EARNED

How many teachers listed are assigned principally to elementary school? \_\_\_\_\_

Are services of elementary music teaching personnel equally distributed to all schools in the system? Yes \_\_\_\_\_ No \_\_\_\_\_

If answer is "no," please explain distribution.

1. Is there a written statement of philosophy and/or objectives which guides the scope and design of music instruction in your elementary schools? Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, please attach a copy to this questionnaire.

2. Is there a written course of study for music in the elementary grades? Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, please attach a copy to this questionnaire.

3. What means of evaluation are regularly employed in an attempt to assess and improve the effectiveness of music education?  
a. \_\_\_\_\_ classroom tests      c. \_\_\_\_\_ subjective analysis  
b. \_\_\_\_\_ standardized tests      d. \_\_\_\_\_ other \_\_\_\_\_

4. What do you consider to be the major strengths of your elementary music education curriculum?

5. What do you consider to be the major weaknesses of your elementary music education curriculum?

6. Indicate your appraisal of your total elementary music education program.

Grades 1-3

Grades 4-6

a. \_\_\_\_\_ outstanding

a. \_\_\_\_\_ outstanding

b. \_\_\_\_\_ very good

b. \_\_\_\_\_ very good

c. \_\_\_\_\_ satisfactory

c. \_\_\_\_\_ satisfactory

d. \_\_\_\_\_ poor

d. \_\_\_\_\_ poor

7. Excluding salaries of classroom teacher, but including salaries of supervisors of music, music teachers, music materials, equipment and instruments, what approximate portion of the total system school budget is spent on music instruction? \_\_\_\_\_%
8. Approximately what portion of this above amount is allocated for the three instructional levels?  
Elementary \_\_\_\_\_% Junior High \_\_\_\_\_% Senior High \_\_\_\_\_%
9. What portion of the cost of music instruction is borne by individual parents rather than by the school system?  
\_\_\_\_\_%
10. At what grade levels is music required of all students?  
1 2 3 4 5 6 all none
11. At each grade level, indicate the number of days per week that general music classes are regularly scheduled.  
1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_
12. At each grade level give the approximate total number of minutes devoted per week to regularly scheduled general music classes at each grade level.  
1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_
13. At what grade levels is general music taught entirely or almost entirely by the regular classroom teacher?  
1 2 3 4 5 6 all none
14. At what grade levels is general music taught entirely or mostly by a music teacher (defined above)?  
1 2 3 4 5 6 all none
15. Indicate the kinds of instructional material and equipment available in sufficient numbers for music instruction in your schools.
- |   |  |
|---|--|
| a. _____ songbooks<br>(one copy per child)              | f. _____ tuned resonator bells<br>(one set per room) |
| b. _____ songbooks<br>(one copy for each two children)  | g. _____ record players<br>(one per room)            |
| c. _____ records to accompany<br>songbooks (full set)   | h. _____ classroom rhythm<br>instruments             |
| d. _____ records for listening<br>(one basic album set) | i. _____ classroom melody<br>instruments             |
| e. _____ autoharps<br>(one per room)                    | j. _____ pianos                                      |
|   | k. _____ other _____                                 |

16. Indicate at what grade level the musical activities listed below are given significant emphasis in the general music program. In one of the last three columns, indicate your opinion concerning the importance of each activity in an adequate music program for the elementary schools.

	Is Given Sufficient Emphasis in Grades						Importance of Each Activity in an Adequate Elementary Music Program		
							Very Important	Moderately Important	Least Important
	1	2	3	4	5	6			
a. singing									
b. part singing									
c. listening for tonal relationships									
d. listening for sounds of instruments									
e. listening for mood of music									
f. reading music to learn notation									
g. reading for small instruments									
h. reading for singing (sight-singing)									
i. playing autoharp									
j. playing bells									
k. playing small wind instruments									
l. playing keyboards									
m. rhythmic conducting									
n. creative rhythms									
o. singing games, action songs									

17. At each grade level, what per cent of your classrooms have sufficient copies of music textbooks?

	1	2	3	4	5	6
100%	_____	_____	_____	_____	_____	_____
75%	_____	_____	_____	_____	_____	_____
50%	_____	_____	_____	_____	_____	_____
25%	_____	_____	_____	_____	_____	_____
0%	_____	_____	_____	_____	_____	_____

18. For each grade indicate the music series being used. (Please circle.)

<u>Grade</u>						<u>Series</u>	<u>Publisher</u>
1	2	3	4	5	6	A SINGING SCHOOL	C. C. Birchard Co.
1	2	3	4	5	6	DISCOVERING MUSIC TOGETHER	Follett Pub. Co.
1	2	3	4	5	6	EXPLORING MUSIC	Holt, Rinehart and Winston
1	2	3	4	5	6	GROWING WITH MUSIC	Prentice-Hall, Inc.
1	2	3	4	5	6	MAGIC OF MUSIC, THE	Ginn and Company
1	2	3	4	5	6	MAKING MUSIC YOUR OWN	Silver Burdett Co.
1	2	3	4	5	6	MUSIC FOR LIVING	Silver Burdett Co.
1	2	3	4	5	6	MUSIC FOR YOUNG AMERICANS	American Book Co.
1	2	3	4	5	6	OUR SINGING WORLD	Ginn and Company
1	2	3	4	5	6	THIS IS MUSIC	Allyn and Bacon, Inc.
1	2	3	4	5	6	TOGETHER WE SING	Follett Publishing Co.
1	2	3	4	5	6	Other _____	
1	2	3	4	5	6	None	

APPENDIX D

ELEMENTARY MUSIC ACHIEVEMENT TEST  
NORMS FOR SIXTH GRADE



APPENDIX D

TABLE 11

ELEMENTARY MUSIC ACHIEVEMENT TEST NORMS FOR SIXTH GRADE

Test 1					
Raw Score	Standard Score	Per-centile	Raw Score	Standard Score	Per-centile
83	780	99	48	478	45
82	771	99	47	469	42
81	763	99	46	461	38
80	754	99	45	452	35
79	746	99	44	444	33
78	737	99	43	435	29
77	728	98	42	426	26
76	720	98	41	418	22
75	711	98	40	409	19
74	702	97	39	400	17
73	694	96	38	392	15
72	685	96	37	383	13
71	677	95	36	375	11
70	668	94	35	366	9
69	659	93	34	357	7
68	651	92	33	349	5
67	642	91	32	340	4
66	633	90	31	331	3
65	625	89	30	323	3
64	616	88	29	314	2
63	608	86	28	306	2
62	599	84	27	297	1
61	590	82	26	288	1
60	582	81	25	280	1
59	573	79	24	271	1
58	574	77	23	262	1
57	556	74	22	254	1
56	547	71	21	245	1
55	538	69	20	237	1
54	530	65	19	228	1
53	521	62	18	219	1
52	513	59	17	211	1
51	504	56	16	202	1
50	495	52	15	200	1
49	487	48			

TABLE 11 (Continued)

Test 2					
Raw Score	Standard Score	Per-centile	Raw Score	Standard Score	Per-centile
108	800	99	65	646	90
107	800	99	64	639	90
106	800	99	63	633	89
105	800	99	62	626	88
104	800	99	61	619	87
103	800	99	60	613	86
102	800	99	59	606	86
101	800	99	58	600	85
100	800	99	57	593	84
99	800	99	56	587	82
98	800	99	55	580	81
97	800	99	54	574	81
96	800	99	53	567	79
95	800	99	52	560	78
94	800	99	51	554	77
93	800	99	50	547	75
92	800	99	49	541	74
91	800	99	48	534	72
90	800	99	47	528	71
89	800	99	46	521	69
88	796	99	45	515	67
87	790	99	44	508	65
86	783	99	43	501	63
85	777	99	42	495	61
84	770	98	41	488	58
83	764	98	40	482	56
82	757	98	39	475	53
81	750	98	38	469	49
80	744	97	37	462	46
79	737	97	36	456	42
78	731	97	35	449	38
77	724	96	34	442	33
76	718	96	33	436	29
75	711	95	32	429	26
74	705	95	31	423	22
73	698	94	30	416	19
72	691	94	29	410	16
71	685	93	28	403	13
70	678	93	27	397	10
69	672	92	26	390	8
68	665	92	25	384	6
67	659	91	24	377	5
66	652	91			

TABLE 11 (Continued)

Test 2 (Continued)					
Raw Score	Standard Score	Per- centile	Raw Score	Standard Score	Per- centile
23	370	3			
22	364	3			
21	357	2			
20	351	1			
19	344	1			
18	338	1			
17	331	1			
16	325	1			
15	318	1			
14	311	1			
13	305	1			
12	298	1			

APPENDIX E  
TABLES--INSTRUCTIONAL PROVISIONS

TABLE 12

NUMBERS OF FULL-TIME MUSIC TEACHERS EMPLOYED  
AND THEIR ASSIGNMENTS AND DEGREES

Systems	Number of Teachers		Assignments										Degrees				
	Total	Assigned to Elementary Schools	Instrumental	Vocal	General Music	Instrumental Vocal	Instrumental General	Vocal General	Instrumental Vocal	Instrumental General	Supervisor	No Degree	Bachelors	Masters	Masters Plus	Doctors	
			98	48	35	13	5	78	8	12	28	202	76	8	3		
6 Urban	297	104	98	48	35	13	5	78	8	12	28	202	76	8	3		
129 Non-Urban	339	175	75	20	139	45	9	30	21	10	70	203	52	12	2		
Totals	636	279	173	68	174	58	14	108	29	22	98	405	128	20	5		



TABLE 13  
 PERCENTAGES OF SCHOOL SYSTEMS REPORTING CERTAIN NUMBERS  
 OF FULL-TIME MUSIC TEACHERS EMPLOYED

Total Enrollment	Urban		Non-Urban		Total		
	Number of Teachers	Number Systems	Percentage	Number Systems	Percentage	Number Systems	Percentage
to 499	0			6	85.7	6	85.7
	1			1	14.3	1	14.3
500 to 999	0			5	41.7	5	41.7
	1			3	25.0	3	25.0
	2-4			4	33.3	4	33.3
				9	12.0	9	12.0
1,000 to 4,999	0			23	30.7	23	30.7
	1			38	50.7	38	50.7
	2-4			5	6.6	5	6.6
	5-10			3	10.0	3	10.0
				6	20.0	6	20.0
5,000 to 9,999	0			12	40.0	12	40.0
	1			5	16.7	5	16.7
	2-4			4	13.3	4	13.3
	5-10						
10,000 to 24,999	0			1	16.7	1	16.7
	1			4	66.6	4	66.6
	2-4						
	5-10						
	11-25						
25,000 or more	26-50	1	16.7			1	16.7
	51-75						
	76-100						
		1	20.0			1	20.0
		2	40.0			2	40.0
	1	20.0			1	20.0	
	1	20.0			1	20.0	

TABLE 14

PERCENTAGES OF SCHOOL SYSTEMS REPORTING CERTAIN NUMBERS OF FULL-TIME MUSIC TEACHERS EMPLOYED BY ELEMENTARY ENROLLMENT

Elementary Enrollment	Urban		Non-Urban		Total		
	Number of Teachers	Number Systems	Percentage	Number Systems	Percentage	Number Systems	Percentage
to 499	0			12	85.7	12	85.7
	1 2-4			2	14.3	2	14.3
500 to 999	0			8	40.0	8	40.0
	1			6	30.0	6	30.0
	2-4			6	30.0	6	30.0
1,000 to 4,999	0			33	37.9	33	37.9
	1			21	24.1	21	24.1
	2-4			25	28.7	25	28.7
	5-10			8	9.2	8	9.2
5,000 to 9,999	0			2	28.5	2	28.5
	1			2	28.5	2	28.5
	2-4			2	28.5	2	28.5
	5-10 11-25			1	14.9	1	14.9
10,000 to 24,999	1		16.7			1	16.7
	2-4		16.7			1	16.7
	5-10						
	11-25 26-50	2 1	33.3 16.7			3 1	49.9 16.7
25,000 or more	5-10	1	100.0			1	100.0



TABLE 15

PERCENTAGES OF SCHOOL SYSTEMS IN WHICH GENERAL MUSIC  
IS TAUGHT ENTIRELY OR ALMOST ENTIRELY BY  
REGULAR CLASSROOM TEACHERS

Grade	Urban Systems	Non-Urban Systems	Total
One	100.0	69.3	70.7
Two	100.0	69.3	70.7
Three	83.3	67.8	68.5
Four	83.3	67.8	68.5
Five	66.7	66.2	66.2
Six	66.7	69.3	69.2

TABLE 16

PERCENTAGES OF SCHOOL SYSTEMS REPORTING WRITTEN  
STATEMENT OF PHILOSOPHY OR COURSE OF STUDY  
FOR MUSIC EDUCATION IN ELEMENTARY SCHOOLS

Urban Systems	Non-Urban Systems	Total
Statement of Philosophy		
66.7	25.6	27.4
Course of Study		
33.3	25.6	25.9



TABLE 17

PERCENTAGES OF SCHOOL SYSTEMS REPORTING THE USE OF  
VARIOUS TECHNIQUES TO ASSESS AND IMPROVE THE  
EFFECTIVENESS OF MUSIC EDUCATION

Techniques	Urban Systems	Non-Urban Systems	Total
Classroom tests	33.3	35.6	37.7
Standardized tests	16.7	6.9	7.4
Subjective analysis	33.3	42.6	42.2
Other	50.0	23.2	24.4

TABLE 18

PERCENTAGES OF SCHOOL SYSTEMS ASSIGNING CERTAIN  
RATINGS TO THEIR ELEMENTARY MUSIC  
EDUCATION PROGRAM

Ratings	Urban Systems	Non-Urban Systems	Total
Grades One, Two, and Three			
Outstanding	16.7	.8	1.5
Very Good	33.3	20.8	21.2
Satisfactory	33.3	35.1	35.2
Poor	16.7	43.3	42.1
Grades Four, Five, and Six			
Outstanding	16.7	1.6	2.4
Very Good	33.3	18.3	19.0
Satisfactory	50.0	33.4	34.2
Poor	0.0	46.7	44.4

TABLE 19

PERCENTAGES OF SCHOOL SYSTEMS INDICATING VARIOUS PORTIONS OF TOTAL SCHOOL BUDGETS SPENT ON MUSIC INSTRUCTION

Portion of Budget (Per cent)	Urban Systems	Non-Urban Systems	Total
5 or more	0.0	7.1	6.2
3 to 5	0.0	3.1	2.3
1 to 3	50.0	22.8	23.3
1.0 to 0.5	33.3	20.5	21.2
0.5 to 0.1	0.0	55.5	5.0
Less than 0.1	16.7	41.0	42.0

TABLE 20

PERCENTAGES OF MUSIC EDUCATION BUDGETS ALLOCATED TO ELEMENTARY, JUNIOR HIGH, AND SENIOR HIGH LEVELS

Level of School	Urban Systems	Non-Urban Systems	Total
Elementary	5.2	12.2	11.6
Junior High	36.5	16.6	17.2
Senior High	48.2	70.3	70.2

TABLE 21

PERCENTAGES OF SCHOOL SYSTEMS REPORTING PORTIONS OF MUSIC INSTRUCTION COST BORNE BY PARENTS

Portion (Per cent)	Urban Systems	Non-Urban Systems	Total
to 25	100.0	69.4	71.7
26 to 50	0.0	13.9	13.6
51 to 75	0.0	3.8	3.7
76 to 100	0.0	10.9	11.0

TABLE 22

PERCENTAGES OF SCHOOL SYSTEMS REPORTING REQUIRED  
PARTICIPATION IN MUSIC CLASSES

Required at Grade Level	Urban Systems	Non-Urban Systems	Total
Grade one	100.0	72.8	74.0
Grade two	100.0	72.8	74.0
Grade three	100.0	72.8	74.0
Grade four	100.0	74.4	75.5
Grade five	100.0	74.7	75.5
Grade six	100.0	74.7	74.9

TABLE 23

AVERAGE NUMBER OF MINUTES ALLOTTED PER WEEK TO  
REGULARLY SCHEDULED MUSIC CLASSES

Grade	Urban Systems	Non-Urban Systems	Total
1	50	41	41
2	50	42	42
3	54	42	43
4	69	43	44
5	75	44	45
6	75	43	45

TABLE 24

PERCENTAGES OF SYSTEMS INDICATING REGULARLY  
SCHEDULED MUSIC CLASSES

Grade	Days Per Week	Urban Systems	Non-Urban Systems	Total
One	0	16.6	33.3	31.8
	1	16.6	15.0	14.8
	2	50.0	37.3	37.0
	3		10.3	9.6
	5	16.7	6.3	6.6
Two	0	16.6	32.5	31.1
	1	16.7	15.0	14.8
	2	50.0	38.8	38.5
	3		10.3	9.6
	5	16.7	5.5	5.9
Three	0	16.6	33.3	31.8
	1		15.0	14.0
	2	66.6	39.6	40.0
	3		8.7	8.1
	5	16.7	5.5	5.9
Four	0		33.3	31.1
	1		13.4	12.5
	2	66.6	43.6	43.7
	3	33.3	7.9	8.8
	5		3.9	3.7
Five	0		33.3	31.1
	1		13.4	12.5
	2	66.6	43.6	43.7
	3	33.3	7.9	8.8
	5		3.9	3.7
Six	0		33.3	31.1
	1		14.2	13.3
	2	66.6	43.6	43.7
	3	33.3	7.1	8.1
	5		3.9	3.7

TABLE 25

PERCENTAGES OF SCHOOL SYSTEMS REPORTING CERTAIN  
KINDS OF INSTRUCTIONAL MATERIALS AND  
EQUIPMENT SUFFICIENTLY AVAILABLE

Materials and Equipment	Urban Systems	Non-Urban Systems	Total
Songbooks (one copy per child)	33.3	29.4	29.6
Songbooks (one copy for each two children)	66.7	34.1	35.5
Records to accompany songbooks (full set)	83.3	48.0	49.6
Records for listening (one basic album set)	100.0	55.8	57.8
Auto harps (one per room)	50.0	24.8	25.9
Tuned resonator bells (one set per room)	33.3	19.3	20.0
Record Players (one per room)	83.3	72.1	72.6
Classroom Rhythm Instruments	50.0	44.2	44.4
Classroom Melody Instruments	33.3	18.6	19.2
Pianos	100.0	54.2	56.1
Other	16.6	13.9	14.0

TABLE 26

PERCENTAGES OF SCHOOL SYSTEMS REPORTING  
SUFFICIENT AVAILABILITY OF BOOKS AT  
VARIOUS LEVELS

Level of Sufficiency (Per cent)	Urban Systems	Non-Urban Systems	Total
Grade One			
100	50.0	24.2	25.3
75	16.7	7.8	8.2
50	0.0	13.3	12.7
25	16.7	7.0	7.4
0	16.7	36.7	35.8
No Indication		11.0	
Grade Two			
100	50.0	26.5	27.6
75	16.7	8.6	8.9
50	16.7	16.4	16.4
25	16.7	8.6	8.9
0	0.0	28.9	27.6
No Indication		11.0	
Grade Three			
100	33.3	9.3	10.4
75	16.7	16.2	16.3
50	0.0	11.6	11.1
25	0.0	24.0	22.9
0	50.0	26.3	27.8
No Indication		12.6	

TABLE 26 (Continued)

Level of Sufficiency (Per cent)	Urban Systems	Non-Urban Systems	Total
Grade Four			
100	16.7	19.4	19.5
75	16.7	12.5	12.6
50	0.0	21.8	20.7
25	66.7	25.6	27.4
0	0.0	10.1	9.4
No Indication		11.1	
Grade Five			
100	0.0	11.6	11.1
75	0.0	23.2	22.2
50	66.7	25.6	27.4
25	0.0	8.5	8.1
0	33.3	22.5	22.8
No Indication		8.5	
Grade Six			
100	0.0	10.0	9.3
75	0.0	8.7	8.3
50	66.7	25.4	27.5
25	0.0	8.5	8.1
0	33.3	39.8	38.8
No Indication		7.6	

TABLE 27

NUMBER OF SCHOOL SYSTEMS USING MUSIC TEXTBOOKS  
OF VARIOUS PUBLISHERS

Textbooks	Urban Systems	Non-Urban Systems	Total
A Singing School	0	2	2
Discovering Music Together	0	17	17
Exploring Music	1	2	3
Growing With Music	0	2	2
Magic of Music, The	0	5	5
Making Music Your Own	1	16	17
Music For Living	3	14	17
Music For Young Americans	0	10	10
Our Singing World	2	25	27
This Is Music	4	20	24
Together We Sing	1	31	32
Other	1	7	8
None	0	21	21



TABLE 28

PERCENTAGES OF SCHOOL SYSTEMS INDICATING VARIOUS  
ACTIVITIES GIVEN SUFFICIENT EMPHASIS AT GRADE  
LEVELS AND IMPORTANCE RATINGS OF  
THE ACTIVITIES

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Singing			
Emphasis			
Grade One	100.0	72.9	74.2
Grade Two	100.0	68.8	70.3
Grade Three	100.0	68.0	69.5
Grade Four	83.0	65.5	66.4
Grade Five	83.0	63.9	64.8
Grade Six	100.0	63.1	64.8
Importance			
Very Important	100.0	72.9	74.2
Moderately Important		11.4	10.9
Least Important		.8	.8
No Indication		4.7	
Part-Singing			
Emphasis			
Grade One	0.0	6.4	6.0
Grade Two	0.0	6.4	6.0
Grade Three	33.3	13.7	14.7
Grade Four	50.0	29.3	30.4
Grade Five	83.3	48.6	50.4
Grade Six	83.3	46.8	48.7
Importance			
Very Important	50.0	33.0	33.9
Moderately Important	50.0	46.8	47.2
Least Important	0.0	4.6	4.3
No Indication		15.6	

3

TABLE 28 (Continued)

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Listening			
Emphasis			
Grade One	33.3	22.9	23.4
Grade Two	50.0	24.7	26.1
Grade Three	50.0	31.2	32.1
Grade Four	66.7	41.2	42.6
Grade Five	50.0	44.9	45.2
Grade Six	50.0	43.1	43.5
Importance			
Very Important	66.7	46.8	47.8
Moderately Important	33.3	33.9	33.9
Least Important	0.0	2.7	2.6
No Indication		16.6	
Listening for Sounds of Musical Instruments			
Emphasis			
Grade One	50.0	18.9	20.5
Grade Two	50.0	23.4	24.8
Grade Three	50.0	35.1	35.9
Grade Four	66.7	42.3	43.6
Grade Five	66.7	48.6	49.6
Grade Six	66.7	46.8	47.8
Importance			
Very Important	50.0	42.3	42.7
Moderately Important	50.0	40.5	41.0
Least Important	0.0	2.7	2.5
No Indication		14.5	

TABLE 28 (Continued)

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Listening for the Mood of Music			
Emphasis			
Grade One	33.3	28.5	28.1
Grade Two	33.3	31.2	31.3
Grade Three	50.0	34.8	34.7
Grade Four	50.0	41.0	41.5
Grade Five	50.0	50.0	50.0
Grade Six	50.0	49.1	49.1
Importance			
Very Important	50.0	46.4	46.6
Moderately Important	50.0	36.6	37.3
Least Important	0.0	1.8	1.6
No Indication		15.2	
Reading of Music to Learn Notation			
Emphasis			
Grade One	0.0	4.6	4.4
Grade Two	0.0	11.2	10.6
Grade Three	33.3	28.0	28.3
Grade Four	33.3	33.6	33.6
Grade Five	50.0	43.9	44.2
Grade Six	50.0	42.9	43.3
Importance			
Very Important	50.0	39.2	39.8
Moderately Important	33.3	37.3	37.1
Least Important	16.6	3.7	4.1
No Indication	16.7	19.8	19.3

TABLE 28 (Continued)

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Reading for Singing (Sight-Singing)			
Emphasis			
Grade One	0.0	10.0	9.6
Grade Two	0.0	3.8	3.7
Grade Three	0.0	6.2	5.9
Grade Four	16.7	15.5	15.5
Grade Five	33.3	26.3	26.6
Grade Six	66.7	31.0	32.6
Importance			
Very Important	66.7	33.3	34.8
Moderately Important	33.3	37.9	37.7
Least Important	0.0	28.8	27.5
Reading of Music in Order to Play Small Instruments			
Emphasis			
Grade One	0.0	.8	.7
Grade Two	33.3	2.3	3.7
Grade Three	50.0	4.7	6.7
Grade Four	50.0	7.8	9.7
Grade Five	33.3	15.6	16.4
Grade Six	16.7	19.5	19.4
Importance			
Very Important	16.7	21.8	21.6
Moderately Important	16.7	18.0	17.9
Least Important	66.6	35.1	36.5
No Indication		25.0	

TABLE 28 (Continued)

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Playing of Bells			
Emphasis			
Grade One	0.0	14.7	14.0
Grade Two	0.0	13.1	12.6
Grade Three	33.3	16.2	17.0
Grade Four	66.7	17.0	19.2
Grade Five	66.7	17.8	20.0
Grade Six	66.7	19.4	21.4
Importance			
Very Important	66.7	17.8	20.0
Moderately Important	33.3	16.2	17.0
Least Important	0.0	34.8	34.2
No Indication		29.2	
Playing of Small Wind Instruments			
Emphasis			
Grade One	0.0	2.4	2.1
Grade Two	0.0	3.1	2.9
Grade Three	0.0	3.1	2.9
Grade Four	0.0	13.1	16.3
Grade Five	83.3	13.1	16.3
Grade Six	50.0	17.8	19.2
Importance			
Very Important	50.0	20.1	21.4
Moderately Important	33.3	18.6	19.2
Least Important	16.7	32.5	33.3
No Indication		18.8	

TABLE 28 (Continued)

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Playing the Autoharp			
Emphasis			
Grade One	0.0	2.3	2.2
Grade Two	0.0	4.6	4.4
Grade Three	0.0	7.7	7.4
Grade Four	16.7	10.0	10.3
Grade Five	83.3	20.9	23.7
Grade Six	83.3	26.3	28.9
Importance			
Very Important	66.7	26.3	28.1
Moderately Important	16.7	10.8	11.1
Least Important	16.7	43.4	44.4
No Indication		29.5	
Playing of Keyboards			
Emphasis			
Grade One	0.0	10.8	10.3
Grade Two	0.0	.8	.7
Grade Three	0.0	1.5	1.4
Grade Four	0.0	3.8	3.7
Grade Five	16.7	3.8	4.4
Grade Six	16.7	5.4	5.9
Importance			
Very Important	16.7	9.3	9.6
Moderately Important	16.7	17.8	17.7
Least Important	50.0	27.1	28.1
No Indication	33.3	45.8	

TABLE 28 (Continued)

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Rhythmic Conducting			
Emphasis			
Grade One	0.0	13.1	12.6
Grade Two	0.0	13.9	13.3
Grade Three	0.0	14.7	14.0
Grade Four	0.0	13.1	12.6
Grade Five	0.0	14.7	14.0
Grade Six	0.0	17.0	16.3
Importance			
Very Important	0.0	19.3	18.5
Moderately Important	16.7	20.9	20.7
Least Important	16.7	32.5	31.8
No Indication	67.7	27.3	
Creative Rhythms			
Emphasis			
Grade One	33.3	10.8	11.8
Grade Two	66.7	29.4	31.1
Grade Three	66.7	30.2	31.8
Grade Four	50.0	30.2	31.1
Grade Five	33.3	23.2	23.7
Grade Six	33.3	23.2	23.7
Importance			
Very Important	33.3	22.4	22.9
Moderately Important	50.0	40.3	42.2
Least Important	16.7	23.2	22.9
No Indication		13.1	

TABLE 28 (Continued)

Emphasis and Importance	Urban Systems	Non-Urban Systems	Total
Singing Games and Action Songs			
Emphasis			
Grade One	0.0	3.8	3.7
Grade Two	0.0	.8	.7
Grade Three	100.0	58.9	60.7
Grade Four	100.0	57.3	59.2
Grade Five	100.0	55.0	57.0
Grade Six	33.0	44.2	43.7
Importance			
Very Important	33.3	41.8	41.4
Moderately Important	33.3	39.5	39.2
Least Important	33.3	18.6	18.3