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A SURVEY OF THE MEASUREMENT AND EVALUATION
OF INSTRUMENTAL MUSIC IN THE ELEMENTARY
SCHOOLS IN THE STATE OF MISSOURI ,

(A Thesis
Presented to
the Faculty of Music)
Southern Illinois University
Edwardsville ,

In Partial Fulfillment
of the Requirements for the Degree
Master of Music Education

by
(Thomas Goldwyn Bristow)
(June) 1968 ,

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CHAPTER I

THE PROBLEM

Many music teachers do not believe in giving grades and, if they do, grade mostly from personal observation.¹ A general estimate of what the student has learned during the semester seems an extremely unreliable method of grading.² The instructor is influenced by his thoughts and feelings of the moment and it is difficult, to say the least, to evaluate and remember over a period of time unless adequate records are kept.

The problem of grading is sometimes made more difficult by large enrollments and the lack of time for any systematic keeping of progress reports, charts, and the giving of individual performance tests.

Significance of the Problem

Recent trends in music education have placed greater emphasis on the academic content of the music curriculum.³

¹William E. Whybrew, Measurement and Evaluation In Music (Iowa: Wm. C. Brown Company, 1962), p. 42.

²Ibid., p. 43.

³Kenneth U. Gutsch, "Objective Measurement of Instrumental Music Performance" (unpublished Master's thesis, The University of Southern Mississippi, Hattiesburg, Mississippi, 1964), p. 2.

"One approach to meeting this challenge is through the development of more objective techniques for evaluation."⁴

Some indication of the need for study in this area is made in a statement by Mursell:

Terminal tests present one of the most difficult problems which the conscientious teacher must face and try to solve. Educators differ widely on the value and type of final estimate of the student's achievement. However, circumstances force the majority of teachers to make such an estimate, regardless of the pros and cons of educational theory.⁵

Andrews reinforces the need for objectivity in measurement:

We must remember that if we demand and receive the rights and prerogatives that go with identification as an academic subject, we also must accept the responsibilities that devolve upon us. One alone is staggering: the measurement of musical growth.⁶

To emphasize the need for more research done in school music, Schoen comments:

Since the advent of the scientific movement in education some twenty years ago, there have been reported in educational journals 221 studies on arithmetic, 436 studies on reading, 415 on language, 126 on spelling, 62 on writing, and not one on school music. I have counted some 300 experimental studies on music made in the last ten years, which does not exhaust the number. Of these not one bears directly on school music, and not one of them is by a person engaged in school music.⁷

⁴Ibid., p. 2.

⁵James L. Mursell, Human Values in Music Education (New York: Silver Burdett Company, 1934), p. 5.

⁶Frances N. Andrews, "Issues and Problems in Music Education," Music Educators Journal, XLIX (September-October, 1921), 40.

⁷Peter W. Dykema and Karl W. Gehrckens, The Teaching and Administration of High School Music (Evanston: Summy-Birchard Company, 1941), p. 366.

Definition of Terms

The following terms are used in this study:

Evaluation involves three steps:

- (a) The identification and formulation of objectives.
- (b) The collection of data relevant to status in relation to those objectives
- (c) The interpretation of the data

Grade. A mark assigned by the teacher to a pupil to indicate the degree of excellence attained.

Mark. To be used in the same sense as the word grade.

Objective Measurement. Implies the use of an evaluative tool that is standardized and meets acceptable levels of reliability and validity.

Subjective Evaluation. Those areas in music which are beyond feasible evaluation by systematic means presently.

Delimitations

This study is limited to:

1. Instrumental music
2. Selected schools found in the State of Missouri
3. Elementary schools with enrollments of 250 students or above which employ an elementary instrumental music teacher.

Specific Statement of the Problem

Marking is a function expected of most teachers in most elementary schools. It was the intent of this study to investigate the organization of instrumental music, the effective methods of evaluating musical performance, the objectives on which evaluations are based, and the manner in which evaluations are recorded in selected elementary schools in the State of Missouri.

Sources of Data

1. Related literature
2. Missouri School Directory⁸
3. Missouri State Department of Education Listing of Art and Music Teachers⁹
4. A questionnaire containing 26 items related to organization and evaluation of instrumental music, was sent to 233 elementary schools in selected school districts in the State of Missouri.

⁸State Board of Education, Missouri School Directory (Missouri: State Board of Education, 1968), pp. 1-277.

⁹State Department of Education, Missouri Music and Art Teachers (Missouri: State Department of Education, 1968), pp. 3-57.

CHAPTER II

SURVEY OF RELATED LITERATURE

Philosophies Underlying Grading

Much controversy has arisen over the value of giving grades or marks in music. An outspoken critic, James L. Mursell has said that the marking system constitutes a "pernicious influence in the organization of our schools."¹⁰

"The competitive motivation which marking introduces is destructive in its effects and the significance of the failing grade implies that the teacher has failed also."¹¹

There are those teachers who believe that grades are a psychological barrier between the child and his love of music. Sometimes the giving of low marks in instrumental music results in the loss of talented students which has a damaging effect upon the group and also is a source of discouragement.¹² "Many teachers avoid giving grades, but when compelled to do so, by the traditional grading system, tend to give high grades."¹³

¹⁰James L. Mursell, Human Values in Music Education (New York: Silver Burdett Company, 1934), p. 55.

¹¹Ibid., p. 56.

¹²Robert W. House, Instrumental Music for Today's Schools (New Jersey: Prentice-Hall, Inc., 1965), p. 30.

¹³Robert E. Nye, Music in the Elementary School (New Jersey: Prentice Hall, 1964), p. 102.

The practice of grading high in music has a tendency for parents and faculty members to discount the face value of music grades. Conversely, a music teacher may feel compelled to give high grades because music is an elective and much time is required for practice.¹⁴

There is much difference of opinion as to the meaning or significance of a grade. There are those educators who believe the letter mark should indicate achievement and nothing else, and if behavior and attitude are to be reported, there should be separate marks for them. Others hold that the letter mark may also include behavior and attitude because they influence accomplishment.¹⁵ Swanson comments:

It is a mistake to give the highest possible grade in music to a pupil who has a limited musical potential. The highest grade should be reserved for those who both have and use their natural ability. The next highest grades may go to those who have enthusiasm and who participate in spite of lower natural endowment.¹⁶

An opposing view is that grading should be based upon what one achieves in the light of what one possesses. "We must know the capital investment before we can judge the amount earned."¹⁷

¹⁴Robert G. Petzold, "Directions for Research in Music Education," Music Educators Journal, (Jan. 1964), 39.

¹⁵Ann E. Pierce, Teaching Music in the Elementary School (New York: Holt, Rinehart and Winston, 1961), p. 62.

¹⁶Bessie R. Swanson, Music in the Education of Children (Calif.: Wadsworth Publishing Company, 1964), p. 85.

¹⁷Jacob Kwalwasser, Problems in Public School Music (New York: M. Witmark and Sons, 1932), p. 57.

Criteria for Measuring Instrumental Music

Although the values of grades remains questionable, marking serves a useful role in the school. It is necessary that grades in music be indicative of each student's progress toward prescribed objectives.¹⁸ Those objectives should include concepts related to (1) musical knowledge, (2) musical understanding, (3) skills of performance, (4) skills of musical listening, (5) appreciation, (6) musical habits, and (7) attitudes.¹⁹

The following criteria for evaluation relate to those areas mentioned above. The area of musical knowledge includes:²⁰

1. Musical symbols
2. Program notes
3. Metrical structure
4. Tone direction and similarity
5. Pitch discrimination
6. Application of syllables
7. Knowledge of time values
8. Musical terms and symbols
9. Notation

¹⁸Nelson B. Henry (ed.), Basic Concepts in Music Education (Chicago: The University of Chicago Press, 1958), p. 311.

¹⁹Ibid., p. 316.

²⁰Whybrew, op. cit., p. 136.

A list of specific criteria relating to music knowledge is introduced by Prescott and Chidester:²¹

1. Receive a grade of 100% writing eight measures of the following times:

| | | | |
|----|----|----|----|
| 3 | 6 | 2 | 4 |
| 4, | 8, | 4, | 4. |

Make use of the following kinds of notes and rests: whole, half, quarter, eighth, sixteenth, and dotted half.

2. Write each of the following scales and tonic arpeggios ascending and descending, one octave, with correct fingerings: C Major, B^b Major, E^b Major, F Major, G Major, D Major, a minor and chromatic.
3. Recognize and name the following major key signatures: no flats and sharps, one flat, one sharp, two flats, two sharps, three flats.
4. Write the following intervals in the major keys: unison, Major 3rd, perfect 5th, and octave.
5. Receive a grade of 100% on a written examination covering 25 common musical terms as listed by director.
6. Write a simple transposition for your instrument of an easy folk song melody. Write the transposition in keys of C, D, E^b, F and B^b.

²¹Gerald R. Prescott and Lawrence Chidester, Getting Results with School Bands (New York: Carl Fischer, Inc., 1945), p. 55.

7. Write the chromatic scale, ascending and descending the practical range of your instrument.
8. Recognize and write the various articulation markings.
9. Write enharmonic notations for each note of the scale.
10. Name in order ten common tempo markings, beginning with the slowest.
11. Name six degrees of volume starting with the softest.
12. Given any key signature, name the major key and relative minor. Given any major or minor key, name the sharps and flats.
13. Recognize and name the following key signatures:
No flats or sharps, one flat, one sharp, two flats, two sharps, three flats.

Musical understanding, as previously indicated,

is defined as:

the ability to bring accumulated musical knowledge and skill to bear on such musical endeavors as (1) listening, (2) expressive performance, (3) composition, (4) improvisation, (5) musical reading.²²

Herman suggests the following list for listening as a criteria for evaluation in the areas of musical understanding:²³

²²Henry, op. cit., p. 324.

²³Edward J. Hermann, Supervising Music in the Elementary School (New Jersey: Prentice Hall, Inc., 1965), pp. 90-93.

3. The ability to hear another part while playing or singing his own.
4. To identify like and unlike phrases by sound as well as sight.
5. To recognize simple rondo form: e.g., ABACA.
6. To distinguish between major and minor by sound.
7. To recognize the melody line in a composition being played or heard.
8. To recognize simple and compound duple and triple meter by sound.
9. To distinguish between the sound of the various chords including the major chords of I, IV and V, diminished and augmented.
10. Be able to tune instrument with any other given concert tone.

To possess musical understanding one must know the art of expressive performance. Hermann lists the following:²⁴

1. Plays smoothly or detached as appropriate.
2. Playing a phrase on one breath.
3. Keeps strict time to music.
4. Extends instrument playing range.
5. Can demonstrate legato, marcato, or staccato as appropriate.

²⁴Hermann, op. cit., pp. 82-92.

6. Demonstrate the ability to play part expressively in small ensembles of 2, 3 or 4 parts.
7. Demonstrate sensitivity to blend and balance in part playing.
8. Ability to play rubato when appropriate.

A continuation of this list by Prescott and Chidester:²⁵

9. Sustain a tone for at least 25 seconds.
10. Demonstrate correct attack and release of tone.
11. Be able to perform most elementary rhythm patterns as selected by director.
12. Demonstrate stage presence such as concert rest attention and playing.
13. Name and demonstrate six degrees of volume starting with the softest.
14. Produce on instrument double and triple tongue.
15. Playing in a song style as contrasted with march style.
16. Demonstrate the primary and secondary accents in the following: $\frac{4}{4}$, $\frac{3}{4}$, $\frac{2}{4}$ fast and slow $\frac{6}{8}$.

Criteria for evaluation in composition as listed by Hermann:²⁶

1. Complete an unfinished melody.

²⁵Prescott and Chidester, op. cit., p. 56.

²⁶Hermann, op. cit., p. 89.

2. Make up melodies for short poems.
3. Make up a simple song with words and music.
4. Improvise harmony parts by ear.
5. Compose an instrumental melody.
6. Make up and notate original rhythm patterns.

In the area of improvisation, Hermann suggests:²⁷

1. Improvise harmony parts by ear.
2. Have students improvise parts and accompaniments to a song and evaluate them as to consistency with the style and expressive intent of the song.

Criteria for evaluation in music reading are as indicated by Hermann:²⁸

1. Become acquainted with note values.
2. Know the treble and bass clefs.
3. Become acquainted with numbers and so-fa syllables.
4. Recognize stepwise, skipwise, and repeated note patterns.
5. Observe like and unlike patterns and phrases.
6. Observe the tempo indication at the beginning of a song.
7. Be familiar with lines, spaces and letter names of treble and bass clefs.

²⁷Ibid., p. 90.

²⁸Hermann, loc. cit.

8. Recognize whole-steps and half-steps and the major scale pattern.
9. Understand various meters simple and compound.
10. Understand slurs and ties.
11. Extend reading ability to include skips between intervals not in the tonic chord, particularly the fourth and sixth.
12. Study major and minor scale construction.
13. Be introduced to syncopated rhythms.
14. Be able to identify even and uneven rhythms.

Students may be evaluated in instrumental music on skills of performance. House suggests the following:²⁹

1. Does the person's performance, whatever his level of technical proficiency, reveal the consistent movement of the musical line?
2. The ability to produce a rich tone with acceptable intonation
3. The ability to play with reasonable facility and accuracy
4. Ability to perform by ear
5. Music reading of appropriate difficulty
6. The ability to perform with others, yet in proper relation to ensemble
7. The ability to hear and follow the main elements of musical composition.

²⁹House, op. cit., p. 22.

Music attitudes and habits play an important part in the evaluation of instrumental music. House lists the following:³⁰

1. Full and whole-hearted participation in musical groups.
2. Deportment and attention.
3. Intention to improve one's musicianship.
4. Does the child possess a true interest in music?
5. Does he respond well to musical instruction?
6. Does he recognize the worth of the musical efforts of his associates?
7. Does he respect the musical preferences of others?

Criteria for evaluation of musical habits suggested by Henry:³¹

1. Frequent and efficient individual practice.
2. Selection and care of instrument.
3. Proper rehearsal attendance.
4. Does the learner develop the habit of pursuing musical learning further on his own?
5. Does he share his musical abilities?
6. Does he participate in music with increasing pleasure?

³⁰Ibid., p. 22.

³¹Henry, op. cit., p. 329.

7. Does he attend concerts regularly, possess a record collection, support community and school music activities, and listen to musical radio and television programs?

Methods Used in the Measurement and Evaluation of Instrumental Music

Two methods of the evaluation of those objectives for instrumental music performance are discussed in this study. These are (1) objective measurement and (2) subjective evaluation.

In the objective measurement of music, two contributing factors of the music aptitude test to be considered are the prognostic and diagnostic value of the tests.

There are various opinions concerning the predictive value of the aptitude test for performance purposes. Revesz states that "aptitude indicates a fitness for performance. Talent indicates capacities far above the average in a special field of human activity."³² In a 1927 report, it was noted:

Eastman School of Music made an exhaustive study on the predictive value of aptitude tests and voted unanimously to use the Seashore Measures

³²G. Revesz, Introduction to the Psychology of Music (Oklahoma: University of Oklahoma Press, 1954), p. 142.

of Musical Talent to eliminate those whose innate capacity was found to be deficient.³³

When time and facilities are limited, aptitude tests might be used to select those students who would profit most from the instrumental program.³⁴

Music aptitude tests are used to uncover talent. Investigations have shown that many people have musical talent who are not aware of it, at least not to the extent of using it very well.³⁵

Those who take the opposing view hold that:

1. Those of mediocre talent sometimes achieve more than those who are talented because of interest and will to learn.³⁶
2. Music educators reject tests of musical capacity because of doubts concerning their validity.³⁷
3. It is often easier and safer to determine musical potential through actual trial. The time spent on dropouts is not wasted by any means.³⁸
4. A high level of musical aptitude may well be frustrated if general intelligence is substantially lower or if work habits conducive to accomplishment are lacking.³⁹

³³Jacob Kwalwasser, Tests and Measurements in Music (Boston: C. C. Birchard Company, 1927), p. 10.

³⁴Arnold Bentley, Musical Ability in Children and Its Measurement (New York: October House, Inc., 1966), p. 103.

³⁵Russell N. Squire, Introduction to Music Education (New York: The Ronald Press Company, 1952), p. 135.

³⁶Kwalwasser, op. cit. p. 10.

³⁷Charles Leonhard and Robert House, Foundation and Principles in Music Education (New York: McGraw Hill, Inc. 1959), p. 344.

³⁸House, op. cit., p. 243.

³⁹Whybrew, op. cit., p. 103.

In general it has been found that musical abilities cannot be measured by means of group-tests before the age of seven years.⁴⁰ A study made at the University of Cincinnati indicated that standardized tests may be used generally when children are 8.1 years old.⁴¹ Regardless of the pros and cons, it is safe to say that tests of musical capacity should never be used as a sole factor in screening pupils for specialized music instruction.⁴²

Other factors that should be included in the selection of children for instrumental music instruction, are motivation, level of interest, and the level and degree of aspiration.⁴³

Music aptitude tests are important as a means of diagnosing pupil difficulties and as an aid in evaluating the quality of a student's work. A pupil of high musical aptitude may not work up to his potential.⁴⁴ Aptitude tests reveal, among other things, deficiencies that may or may not be suspected, such as ear defects that need immediate attention.⁴⁵ Intelligence tests together with aptitude

⁴⁰Bentley, op. cit., p. 31.

⁴¹Max Schoen, Psychology of Music (New York: Harcourt Brace and Company, 1927), p. 2.

⁴²Ibid., p. 3.

⁴³Henry, op. cit., p. 321.

⁴⁴Kwalwasser, op. cit., p. 15.

⁴⁵Ibid., p. 14.

tests can be used for the purpose of organizing classes into homogeneous groupings and to verify personal judgment. Probably the most important of all, the music aptitude test aids the student in selecting an instrument.⁴⁶ Used alone, the tests should never be used for negative findings.⁴⁷

Existing Tests of Musical Aptitude

The most frequently used tests of musical aptitude are the Seashore Measures of Musical Talent and the Kwalwasser-Dykema Music Tests.⁴⁸

The Seashore Measures of Musical Talent was first published in 1919. In 1939, a revised edition was made, eliminating weaknesses which investigations had revealed in the original battery. Scoring can be done by hand or machine. The new norms are given for grades four and five, grades six and seven, and eighth grade, and grades nine through sixteen. Although this battery has been criticized on some grounds, there can be no question concerning the thoroughness of the procedures used in its construction.⁴⁹

⁴⁶Ibid., p. 14.

⁴⁷Harry R. Wilson, Music in the High School (New York: Silver Burdett Company, 1941), p. 304.

⁴⁸Frank Pinkerton, "Talent Test and Their Application to the Public School," The Journal of Research in Music Education, XI (Spring, 1963), 11.

⁴⁹Whybrew, op. cit., p. 113.

The Kwalwasser-Dykema Music Tests, published in 1930, consists of 10 tests similar to the Seashore measures. This battery also includes tests on tonal memory, melodic taste, pitch imagery and rhythm imagery. This test may be used in grades four through six, grades seven through nine, and senior high school. Many teachers feel that the attention of the subjects is held somewhat more successfully by these tests than by the Seashore measures because of the brevity of the separate tests and especially because actual musical sounds are used.⁵⁰

Other existing tests are: (not a complete list)

1. Wing Standardized Test of Musical Intelligence
2. The Drake Musical Aptitude Test
3. The Tilson-Gretsch Musical Aptitude Tests
4. The Music Aptitude Test devised by Harvey S. Whistler and Louis P. Thorpe
5. Kwalwasser Music Talent Test
6. Gaston Test of Musicality.⁵¹

Performance Tests

Techniques and procedures for those objectives of instrumental music performance vary greatly. In many cases

⁵⁰Ibid., p. 113.

⁵¹Ibid., p. 126.

they are haphazard with little or no attempt at systematic evaluation. A statement by Whybrew emphasizes this difficulty:

Musical performance, because of its very nature, is extremely difficult to evaluate reliably. Not only is it a highly complex affair, but certain aspects of it have so far defied precise definition, to say nothing of precise measurement!⁵²

Statements of concern related to the testing of musical performance include:

1. Lack of sufficient time for regular testing of individual achievement.⁵³
2. Any trait which can be manifested only through some active type of response, such as singing, or playing, is not susceptible to group test.⁵⁴
3. Musical performance is a complex of many elements, and there is not general agreement concerning their relative importance.⁵⁵
4. An interesting study has been made comparing the evaluation of children's performance in music with evaluation in other curriculum areas. It is said that although a test score of 85 may be considered satisfactory in another study, a child who sings or plays only 85 per cent of the notes of a song correctly would be considered to have made a poor showing in that particular response. The implication is that satisfactory musical performance requires perfect or near perfect accuracy.⁵⁶

⁵²Whybrew, op. cit., p. 164.

⁵³Archie N. Jones (ed.), Music Education in Action (Boston: Allyn and Bacon, Inc., 1960), p. 122.

⁵⁴Whybrew, op. cit., p. 100.

⁵⁵Ibid., p. 101.

⁵⁶Robert E. Nye, Music for Elementary School Children (Washington, D.C.: The Center for Applied Research in Education, 1963), p. 50.

5. The necessity for objectivity raises doubts about measurement of certain aspects as aesthetic sensitivity, absolute pitch, ability to sing a melody, concept of phrase, and tone quality.⁵⁷
6. In vocal music, the quality of the voice itself remains an important factor for which no hope of objective measurement seems to exist.⁵⁸

The problems encountered in the formulation of a test devised to measure instrumental music performance are complex. In those areas that can profit from the use of tests, educators should know and take advantage of existing measurements.⁵⁹ The best method for evaluating a musical performance seems to be a rating scale. Two types of scales are used.

1. On one type, the auditor indicates on a graduated scale the quality level of each relevant element of performance.
2. On the other, the same purpose is served by awarding a number of points for each aspect of performance to be weighed in the evaluation.⁶⁰

⁵⁷Henry, op. cit., p. 326.

⁵⁸Whybrew, op. cit., p. 104.

⁵⁹Richard Colwell, "Evaluation: Its Use and Significance," Music Educators Journal, XLVIV (February, 1963), 49.

⁶⁰Whybrew, op. cit., p. 166.

The construction and evaluation of a good rating scale include the following considerations:

1. Identification of the elements of performance to be rated. An instrumental solo might be rated on tone, intonation, technique and interpretation. Due to the complexity of these elements, further analysis might require a breakdown into some of their constituents.⁶¹
2. The number of elements to be rated will be present throughout the performance and all will in effect be rated simultaneously.
3. The number of elements to be rated should be kept fairly small since excessive subdivision increases the complexity of the rating procedure by directing the listener's attention to be directed simultaneously toward too many specifics.⁶²
4. Prior agreement should be obtained as to the elements to be rated and the respective weights which these elements are to carry in the final examination.
5. When a performance is rated by several auditors, the independent ratings should be averaged to produce a single final rating.

⁶¹Whybrew, op. cit., p. 166.

⁶²Ibid., p. 167.

6. A five point marking is generally used for rating scales in musical performance. This consists of numbers one through five with one or five being the highest rating.⁶³

One suggested performance test for wind instrument players would be a point system based upon tone, range, articulation, sight reading, and style and technique.⁶⁴ Percussion players might be tested only on sight reading and technique, allowing 40 points for sight reading and 60 points for technique (based on 100 points). Tone quality on an instrument would be graded on the performance of two short passages: one, a slow legato section; the other, a faster passage of a more technical nature.

The range of an instrument could possibly be demonstrated by having a student play a chromatic scale, starting at the lowest tone that he can produce and progressing to the highest which he is capable of playing. Articulation on an instrument might be tested as the student performs at sight passages in which different articulations--such as staccatos, slurs and tenutos--are included. Sight reading on a musical instrument can be evaluated by having the student play passages that contain different rhythmic patterns.

⁶³Whybrew, *op. cit.*, p. 169.

⁶⁴*Ibid.*, p. 174.

A short time should be allowed to study the passage, then have him explain how to count it.

Style might be graded by the playing of several different passages, each performed at an indicated tempo and each being a type that would necessitate use of a certain style. Technique should be demonstrated by the performance of a sixteen measure passage from some band arrangement and of technical nature that will challenge your best player.⁶⁵

Existing Tests

Kwalwasser reported that the tests available in 1921, such as the Kwalwasser-Ruch Test of Musical Accomplishment, Beach Standardized Music Tests, Gildersleeve Music Achievement Tests, and the Hutchinson Music Tests, were designed to measure musical knowledge rather than performance.⁶⁶

Tests developed since 1921, such as the Diagnostic Tests of Achievement in Music, the Providence Inventory Tests in Music, and the Knuth Achievement Tests in Music, are also tests of musical knowledge and do not necessarily test the person's ability to read music or to perform on an instrument while reading music.⁶⁷

⁶⁵Clyde W. Duvall, The High School Band Directors Handbook (New Jersey: Prentice-Hall, 1960), p. 165.

⁶⁶Kwalwasser, op. cit., p. 125.

⁶⁷Gutsch, op. cit., p. 7.

Two tests of performance developed prior to 1928 were the Hillbrand Sight Singing Test and the Mosher Test of Individual Singing.⁶⁸ Both were vocal tests and designed to measure sight singing ability. Since 1928, some work has been done in the measurement of achievement in instrumental music performance. Reports on studies made before 1950 by Hendrickson and Stratemeyer indicate, for the most part, that they were restricted to the testing of keyboard instruments.⁶⁹

One performance test constructed prior to 1950 was the test designed by Lamp and Keys⁷⁰ which was used to determine aptitude for specific instruments. The test consisted of five parts--each of which contains twenty quarter notes--and involves no change of rhythmic pattern.⁷¹

One of the most recent (1954) developments in test design is the Watkins-Farnam Performance Scale.⁷² Colwell states: "This test, designed for winds and strings, is presently available and satisfactorily meets a need no other existing test meets."⁷³

⁶⁸Ibid., p. 9.

⁶⁹Ibid., p. 9.

⁷⁰Ibid., p. 10.

⁷¹Ibid., p. 8.

⁷²Colwell, op. cit., p. 45.

⁷³Ibid., p. 45.

In 1964, Kenneth U. Gutsch made a study on the "Objective Measurement of Instrumental Music Performance."⁷⁴ The study sought evidence bearing directly upon two points:

1. To determine if an objective measurement of instrumental music performance could be achieved on sight reading rhythms, and
2. To differentiate degrees of attainment in instrumental music achievement through the sight reading of rhythms.⁷⁵

The Schillinger system of rhythmical construction was used as a frame of reference from which to begin. The idea utilized for this study was his concept that meaningful sound which has been projected into motion, as it is in music, can be produced through a logical and systematic method such as the general method of graphing. It was through the use of this method that linear configuration was converted into motion.⁷⁶

Methods Used in Subjective Evaluation

One deterrent to the development of systematic objective evaluation in music is the wide-spread use of informal

⁷⁴Gutsch, op. cit., p. 43.

⁷⁵Ibid., p. 44.

⁷⁶Ibid., p. 44.

or subjective evaluation.⁷⁷ Colwell states:

Pupil attitude, deportment, habits, efficient lesson planning, teacher administration relationships exemplify those areas and other similar areas which are beyond feasible evaluation by systematic means.⁷⁸

One danger in evaluating music is to assume that only the instructor is capable of making judgments. Actually, students are more alert and discerning than teachers think they are.⁷⁹ In evaluating the instrumental program, the student must be encouraged to constructively criticize his own performing ability, the performance of others, and to critically evaluate music performance skills and knowledge of music terminology.⁸⁰

In subjective evaluation, the teacher's ability to determine a grade depends upon his knowledge of the individual child, awareness of his musical capacity, his maturity level, his home environment, his social, emotional, and intellectual needs.⁸¹ The day to day observations of the teacher may be compiled through:

⁷⁷Colwell, op. cit., p. 46.

⁷⁸Ibid., p. 47.

⁷⁹Emil A. Holz, Teaching Band Instruments to Beginners (New Jersey: Prentice-Hall, 1966), p. 81.

⁸⁰State Department of Education, Music for Missouri (Curriculum Guide for Grades Ten Through Twelve No. 126G. Missouri: State Department of Education, 1963), pp. 105-135.

⁸¹Nye, op. cit., p. 50.

1. A class roll book and grade book
2. Teacher constructed tests
3. Rating scales
4. Informal observation
5. Interviews
6. Score cards
7. Case histories
8. Check lists
9. Program charts
10. Cumulative report cards
11. Awards, pins, etc.
12. Weekly practice sheets.

Significant but not infallible inferences may be drawn through observation of the attitude, the level of concentration and the intensity of the effective response of students during rehearsals.⁸³ Cooperative evaluation with parents, private teachers and persons in charge of church and community musical activities is essential in the evaluation of musical habits.⁸⁴

The point system is an orderly way of keeping the records of the actions and accomplishments of each member of an instrumental group. Points are given for rehearsal

⁸²Henry, op. cit., p. 319.

⁸³Ibid., p. 332.

⁸⁴Ibid., p. 332.

attendance, instrumental inspection, and performance of music. Points are deducted for offenses against the orchestra or band. The recording of a letter grade may be based upon the total number of points given.⁸⁵

Manner of Recording the Grades

An evaluation of a student's musical performance over a given period of time can be expressed and conveyed verbally or by written report. The one grade idea in music, which can be no more than a generality, should be supplemented by written comments.⁸⁶ Some symbols used for marking such as letters A, B, C, D, are easy to record and compare but have a great disadvantage for reporting of fine judgments. An example of a music report used in the Ann Arbor, Michigan, Schools is shown on page 30. This report is used twice a year and prepared at the end of each semester. It is prepared in triplicate. The first copy is sent to the parents, the second is retained in the student's permanent folder, and the third copy is kept by the teacher to aid him in preparing the next report.⁸⁷

⁸⁵Duvall, op. cit., p. 55.

⁸⁶Nye, op. cit., p. 49.

⁸⁷Holz, op. cit., p. 77.

Ann Arbor Public Schools
Elementary Instrumental Music Report

Name _____ Semester, 19 _____

School _____ Class Room Teacher _____

Grade _____ Class: Begin. _____ Advanced _____

Musicianship

The check in the first line of squares indicates the student's performance in relation to the entire class. The check in the second line shows the teacher's estimate of **the student's ability in music**. The check in the third line shows the student's progress in relation to this estimate of his musical ability.

| | | | | | |
|----------------------------|------|------|---------|------|----------|
| Comparative Performance | Poor | Fair | Average | Good | Superior |
|----------------------------|------|------|---------|------|----------|

| | | | | | |
|------------------------|------|------|---------|------|----------|
| Estimate of Ability | Poor | Fair | Average | Good | Superior |
|------------------------|------|------|---------|------|----------|

| | | | | | |
|----------------------------|------|------|---------|------|----------|
| Performance vs. Ability | Poor | Fair | Average | Good | Superior |
|----------------------------|------|------|---------|------|----------|

For each ability used in playing an instrument a letter shows the student's achievement in relation to his own musical capacity: G (good) for achievement at the level of his capacity; F (fair) for achievement somewhat below his capacity; P (poor) for achievement seriously below his capacity.

Tone Quality _____ Reading of note names _____

Knowledge of fingerings _____ Sense of rhythm _____

Citizenship

The comments below represent the student's attitudes and cooperation in instrumental music:

| | |
|-------------------------------|--|
| _____ Preparation of lesson | _____ Courtesy |
| _____ Attention to class | _____ Cooperation |
| _____ Response to instruction | _____ Promptness |
| _____ Care of equipment | _____ Attendance with musical instruments |

A conference with parent is
always welcomed.

Instrumental Music Teacher

Additional comments if
any on reverse side.

Telephone

Dykema and Cundiff recommend a method of grading where each child is rated according to his musical potentialities and his musical attainments in seven categories (five areas of music activities, also music notation, and home and social arts) on a scale from one to five, with five--excellent, four--above average, three--average, two--below average, and one--poor. This results in two columns of seven numbers. The total of the potentialities column is divided by the total of the attainments column to find the grade.⁸⁸

⁸⁸Nye, op. cit., p. 362

CHAPTER III

THE QUESTIONNAIRE

The research instrument used in this study was a questionnaire designed to obtain data on the evaluation and measurement of elementary school instrumental music as it relates to those practices outlined in Chapter II. The questionnaire containing 26 items was mailed Jan. 5, 1968, to selected schools in the State of Missouri. The survey, representing 58 counties, was limited to those elementary schools with enrollments of 250 or above.

As indicated in Chapter I, page 4, the survey sought to determine the best practices followed regarding:

1. The organization of the elementary school instrumental program.
2. The objectives upon which evaluations are made for giving grades or marks.
3. Methods and procedures used in evaluating those objectives.
4. Methods and procedures of recording those evaluations.

CHAPTER IV

ANALYSIS AND TREATMENT OF THE DATA

A questionnaire designed to obtain information on the measurement and evaluation of instrumental music was mailed to 233 elementary music teachers in the State of Missouri. Selected school districts representing fifty-eight counties were surveyed. A return of 130 responses (56 per cent) was analyzed and tabulated in this study.

Part I of the questionnaire dealt with the organization of elementary school instrumental music. This information was deemed necessary in order to understand the total response to the problem.

In order to find which methods were most widely used, the various methods of selecting elementary school children for the instrumental music program were listed as an item in

TABLE I
METHODS USED IN SELECTING ELEMENTARY
INSTRUMENTAL MUSIC STUDENTS

| Methods Used | Number of responses (n = 123) | Percent of total responding |
|---|------------------------------------|--------------------------------|
| Music Aptitude test | 11 | 9 |
| Grade point average in class | 1 | - |
| Student-parent interest in the program | 23 | 19 |
| Combination of above | 88 | 72 |

the questionnaire. Seventy-two percent of the respondents used a combination of all methods mentioned. Nineteen percent used the method of student-parent interest in the program. Nine percent used only the music aptitude test as a means of selecting the elementary school children for the instrumental music program. Seven teachers did not respond to this question.

Other practices mentioned as methods used in the selection of children for the elementary instrumental music program and arranged in order of their importance were:

(frequency of response is shown for each.)

1. Students accepted into the instrumental program on ability in pre-instrumental music class. (7)
2. All students are allowed to try. (3)
3. Student accepted on classroom teacher's recommendation. (2)
4. Voice test, given to determine pitch discrimination, used as standard of acceptance. (1)
5. Student is accepted on vocal music teacher's recommendation. (1)
6. Six months of music exploratory classes, studying music fundamentals is basis for acceptance. (1)
7. For acceptance into the program, all 3rd grade students must take music aptitude test; wind and percussion students just enroll. (1)

8. A person renting or purchasing an instrument is accepted into the program. (1)
9. For entrance, a student is examined on physical qualifications such as stature, shape of teeth and jaw, handsize and finger length. (1)
10. Acceptance may result after conference with principal and classroom teacher to determine work habits and capabilities of students. (1)

The following data indicate the grade level of beginning instrumental music instruction in the elementary school.

TABLE II
GRADE LEVEL OF BEGINNING INSTRUMENTAL
MUSIC INSTRUCTION

| Grade Level | Number of Responses (n =107) | Percent of total responding |
|-------------|---------------------------------|--------------------------------|
| 5 | 64 | 60 |
| 4 | 34 | 32 |
| 6 | 9 | 8 |

Sixty percent of the respondents begin instrumental instruction in the fifth grade; thirty-two percent start instruction in the fourth grade.

Other practices reported were:

1. String students begin in the 4th grade; wind and percussion students begin in the 5th grade. (12)
2. String students begin in the 3rd grade; others start in the 4th grade. (3)
3. All instrumental students start in the 4th grade; percussion students start in the 6th grade. (2)
4. Pre-band starts in the 4th grade; instrumental study begins in the 5th grade. (2)
5. String instrument study begins in the 5th grade; wind and percussion instrument study begins in 6th grade. (2)
6. Instrumental study starts in the 3rd grade. (1)
7. Recorders are taught by vocal teacher in the 5th grade. Winds, strings and percussion instrument study begins in the 6th grade. (1)
8. Instrumental study can start only in the 4th grade but 5th and 6th grade students can get into the program by taking private instruction. (1)

In the beginning instrumental music class, fifty-four percent of the respondents used heterogeneous grouping for instructional purposes. Thirty-nine percent used homogeneous grouping; seven percent used a combination of both

TABLE III
GROUPING USED FOR ELEMENTARY INSTRUMENTAL
MUSIC INSTRUCTION

| Grouping Used | Number of responses (n = 117) | Percent of total responding |
|-----------------------------|----------------------------------|--------------------------------|
| Heterogeneous | 63 | 54 |
| Homogeneous | 46 | 39 |
| Combination of both methods | 8 | 7 |

methods. Five teachers did not respond to this item. Other responses indicated were: (frequency of response indicated.)

1. Homogeneity is implied in the sense that strings meet separately from band. (2)
2. Woodwinds are grouped heterogeneously. Brass and percussion instruments meet together. (2)
3. Heterogeneous grouping is used for all instruments except string instruments. (2)
4. Grouping of instruments depends upon space, time, instrumentation and teaching station. (1)
5. Private lessons are given at school's expense. (1)

Table IV shows that twenty-nine percent of those responding instructed beginning instrumental music classes for a duration of sixty to ninety minutes per week. Twenty-eight percent instructed beginning classes from thirty to forty-five minutes per week; twenty-three percent indicated beginning instruction of ninety minutes to two hours weekly. Twenty percent indicated instruction periods of forty-five to sixty minutes per week. Thirty

TABLE IV
MINUTES PER WEEK GIVEN TO BEGINNING
INSTRUMENTAL MUSIC INSTRUCTION

| Minutes of Instruction per Week | Number of responses (n = 100) | Percent of total responding |
|---------------------------------|----------------------------------|-----------------------------|
| 60 to 90 minutes | 29 | 29 |
| 30 to 45 minutes | 28 | 28 |
| 90 minutes to two hours | 23 | 23 |
| 45 minutes to 60 minutes | 20 | 20 |

teachers did not answer this question. The average period of instruction for beginners is approximately an hour and twenty minutes weekly.

Other practices listed were:

1. Fifty-five minute periods four days a week. (1)
2. Fifty-five to 60 minutes per week for strings and 30 to 45 minutes per week for wind and percussion instruments. (2)

3. Thirty to 45 minutes per week first semester;
45 to 60 minutes per week second semester. (1)
4. Five hours per week. (1)
5. Fourth grade students 30 minutes three times
weekly; 5th grade students 50 minutes daily. (1)
6. Two hours and 30 minutes weekly. (6)
7. Brass, woodwinds and percussion 30 minutes
weekly; strings 60 minutes weekly plus 45
to 60 minutes in orchestra as soon as they
are ready. (1)
8. All instruments meet every day for 45
minutes. (1)
9. Three hours per week. (3)
10. Forty minute periods. (3)

The number of minutes of instruction per week for second and third year instrumental students is shown in Table V.

TABLE V
MINUTES PER WEEK GIVEN TO SECOND AND THIRD
YEAR (EXPERIENCE) STUDENTS

| Number of Minutes | Number of responses (n = 91) | Percent of total responding |
|-----------------------|---------------------------------|--------------------------------|
| 60 to 90 minutes | 27 | 30 |
| 90 minutes to 2 hours | 25 | 27 |
| 45 to 60 minutes | 22 | 24 |
| 30 to 45 minutes | 17 | 19 |

Thirty percent of those responding reported that the second and third year instrumental students received from sixty to ninety minutes of class instruction weekly. Twenty-seven percent reported weekly instruction of from ninety minutes to two hours. Five persons did not respond to the question. Instructional time for the beginning student, as compared with the second and third year student, appears to be about the same.

Other practices indicated and arranged in order of importance are:

1. Five classes of 55 minutes each per week. (7)
2. Three hours per week. (5)
3. Five hours per week. (4)
4. Three 45 minute periods per week first semester; five 45 minute periods per week second semester. (3)
5. Two hours and 30 minutes weekly. (3)
6. Five 40 minute periods per week. (2)
7. Four hours and 35 minutes weekly. (2)
8. Band meets daily for 35 minutes. Some band members get to chorus 25 minutes twice weekly. (2)
9. Brass, woodwinds and percussion receive 30 minutes together weekly and 45 to 60 minutes weekly for orchestra. (1)

10. Two hours per week first semester and one hour and 15 minutes per week second semester. (1)
11. Second and third year students which make up junior band get 30 minutes each day before classes start. (1)
12. Three 55 minute periods weekly. (1)
13. Sixty minutes twice weekly. (1)
14. Second year student gets 2-1/2 hours of instruction per week. Third year student gets 5 hours of instruction per week. (1)

An attempt was made to find how class instruction was organized for the second and third year instrumental student. The data indicated that second and third year (experience) instrumental students are sometimes combined for instruction because of the lack of time. Forty-nine percent indicated that second and third year students were

TABLE VI

ORGANIZATION OF CLASSES FOR SECOND AND THIRD YEAR (EXPERIENCE) INSTRUMENTAL STUDENTS

| Class Organizations | Number of responses (n = 114) | Percent of total responding |
|------------------------------|-------------------------------|-----------------------------|
| Combined | 56 | 49 |
| Held separately | 47 | 41 |
| Held separately and combined | 11 | 10 |

combined for class instruction. Forty-one percent held separate classes. Ten percent held separate and combined classes. Four persons did not answer the question.

Other practices indicated and listed in order of importance were:

1. Orchestra and band students are combined. (4)
2. Wind and string classes are held separately. (2)
3. String, wind, and percussion students are combined once weekly. (1)
4. Wind and string classes are held separately during the first semester. During the second semester, second and third year students are combined with the beginners one day a week. (1)
5. The classes of second and third year students are held separately twice a week and combined three times per week. (1)
6. The third year student is combined with the junior high school band because of small enrollment. (1)
7. When classes are too small, all instrumental students are combined. When classes are large, students are divided into intermediate and advanced classes. (1)
8. Experience and family of instruments determine class organization. (1)

Table VII indicates that the average number of instrumental music classes taught each day in the elementary school is nine. Ten persons did not respond to this question.

TABLE VII
NUMBER OF CLASSES TAUGHT EACH DAY
IN THE ELEMENTARY SCHOOLS

| Days of Week | Number of Classes taught | | | | | | | | | | | | | | Average Classes Taught |
|--------------|--------------------------|----|----|----|---|---|----|----|----|---|----|----|----|----|------------------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | |
| Mon. | 5 | 25 | 24 | 13 | 9 | 2 | 10 | 7 | 4 | 9 | 8 | 3 | 1 | | 9 |
| Tues. | 8 | 26 | 23 | 12 | 5 | 4 | 9 | 7 | 9 | 8 | 6 | 1 | 1 | 1 | 8 |
| Wed. | 6 | 24 | 28 | 12 | 7 | 3 | 8 | 5 | 10 | 7 | 7 | 2 | 1 | | 9 |
| Thurs. | 7 | 32 | 20 | 11 | 6 | 3 | 7 | 8 | 10 | 7 | 5 | 3 | 1 | | 9 |
| Fri. | 6 | 23 | 27 | 10 | 6 | 4 | 11 | 11 | 12 | 3 | 5 | | 2 | | 10 |

Seventy percent of the teachers reported teaching instrumental music. Thirty percent taught vocal music in addition to instrumental music.

TABLE VIII
INSTRUMENTAL TEACHERS WHO INSTRUCT
IN VOCAL MUSIC

| Teach Vocal Music | Number Responding (n = 130) | Percent of Total Responding |
|-------------------|---------------------------------|-----------------------------|
| No | 92 | 70 |
| Yes | 38 | 30 |

It was also reported that sixty-six percent of those responding taught either band or orchestra. Thirty-four percent taught both band and orchestra.

TABLE IX
INSTRUCTION IN BOTH BAND AND ORCHESTRA

| Instruct in both Band and Orchestra | Number Responding (n = 130) | Percent of total Responding |
|-------------------------------------|------------------------------|-----------------------------|
| No | 86 | 66 |
| Yes | 44 | 34 |

A response by sixty-two percent of the teachers disclosed that they were assigned for instruction in both the secondary and elementary schools. Thirty-eight percent were assigned for instruction either in the elementary or secondary school.

TABLE X
ASSIGNED FOR INSTRUCTION IN BOTH SECONDARY AND ELEMENTARY SCHOOLS

| Instruction in Both Secondary and Elementary Schools | Number Responding (n = 130) | Percent of Total Responding |
|--|-----------------------------|-----------------------------|
| Yes | 81 | 62 |
| No | 49 | 38 |

In the assignment of parts to instrumental students, fifty-nine percent reported the practice of assigning first parts to the more advanced player. Of the fifty-two teachers responding negatively, forty-five teachers frequently assigned first parts to the more advanced players; six teachers seldom did so; one never did. Three teachers did not respond to the item.

TABLE XI
ASSIGNMENT OF FIRST PARTS TO
MORE ADVANCED PLAYERS

| Assignment of first parts to more advanced players | Number Responding (n = 127) | Percent of total Responding |
|--|-----------------------------|-----------------------------|
| Yes | 75 | 59 |
| No | 52 | 41 |

In the beginning string class, it was reported that all violins played first parts.

The survey indicated that in the elementary beginning instrumental music class, the duration of time spent on tone production prior to the beginning of note reading, is usually determined by class size and the ability and effort of the students.

The majority of teachers reported spending one week on tone production prior to the beginning of note reading.

TABLE XII

DURATION OF TIME SPENT ON TONE PRODUCTION PRIOR TO THE BEGINNING OF NOTE READING

| Number of Weeks | Number Responding (n = 106) | Percent of total Responding |
|-----------------|--------------------------------|-----------------------------|
| One week | 54 | 51 |
| Two weeks | 37 | 35 |
| Three weeks | 15 | 14 |

Thirty-five percent spent two weeks on tone production; fourteen percent spent three weeks. Fifteen reported that no definite time pattern was followed, and gave these comments:

1. The study of tone production and note reading cannot be separated.
2. Time spent on tone production varies according to student progress.
3. Tone production is taught constantly.
4. The following is worked on until right: lip, lip tension, left hand, right hand, tongue, wind, and wind pressure.
5. The time spent on tone production depends upon class ability.

Other comments with frequency of response indicated were:

1. Each student is taught to produce a tone on various instruments during pre-band training. (1)
2. Four to six weeks is spent on tone production prior to the beginning of note reading. (1)
3. Note reading and tone production is taught simultaneously since some note reading has already been taught in pre-band class. (2)
4. Two weeks is spent on tone production for woodwinds; one to two months for strings. (1)

Eighty-four percent of the respondents did not teach rote pieces prior to the beginning of note reading. Only sixteen percent reported the practice of using rote songs for beginners.

TABLE XIII
ROTE PIECES PRIOR TO NOTE READING

| Taught rote pieces prior to note reading | Number Responding (n = 121) | Percent of total responding |
|--|-----------------------------|-----------------------------|
| No | 102 | 84 |
| Yes | 19 | 16 |

The following responses indicated the use of rote pieces to some extent in the beginning string class.

1. Rote songs are used in the string program only. (3)
2. Rote songs are used for strings but not for band instruments; however, some thought is being given to starting it for "winds." (1)
3. I usually give a couple of rote pieces to create interest at the same time I am teaching note reading. (1)
4. Rote teaching is used in song only. (1)
5. Rote teaching is used for "strings" and "winds". Some rote playing will develop fine embouchure. The student's concentration is not divided. (1)

Ninety-two percent of the teachers reported that zero to twenty-five percent of their students took private instruction outside of school hours. One teacher reported that fifty to seventy-five percent of students were taking private instruction outside of school if piano was included.

TABLE XIV

STUDENTS TAKING PRIVATE INSTRUCTION
OUTSIDE OF SCHOOL HOURS

| Percentage taking private instruction | Number of responses (n = 125) | Percent of total Responding |
|---------------------------------------|----------------------------------|-----------------------------|
| 0 to 25 percent | 115 | 92 |
| 25 to 50 percent | 10 | 8 |
| 50 to 75 percent | 0 | 0 |

Table XV indicates that forty percent of the respondents reported two concerts a year given by students enrolled in the elementary instrumental music program. Twenty-eight percent reported giving one concert a year; three percent gave no concerts.

TABLE XV
NUMBER OF CONCERTS GIVEN PER SCHOOL YEAR

| Number of concerts | Number of responses (n = 128) | Percent of total responding |
|--------------------|----------------------------------|--------------------------------|
| 0 | 4 | 3 |
| 1 | 36 | 28 |
| 2 | 51 | 40 |
| 3 | 26 | 20 |
| 4 | 6 | 5 |
| 5 | 5 | 4 |

It was disclosed that a large portion of students who participated in elementary school concerts in the Missouri Schools at the time of this study were selected from the sixth and fifth grades, respectively. Eight persons reported using third grade students in the elementary school concert.

TABLE XVI

GRADE LEVEL OF STUDENTS PARTICIPATING
IN CONCERTS

| Grade Level | Number of responses |
|-------------|---------------------|
| 6 | 108 |
| 5 | 104 |
| 7 | 53 |
| 4 | 46 |
| 8 | 41 |
| 3 | 8 |

Part II of the questionnaire was concerned with evaluation. The data that follows relate to (1) objectives upon which evaluations are made for giving grades or marks, (2) methods and procedures used in evaluating those objectives, and (3) methods and procedures of recording those evaluations.

Eighty-two percent of those who answered the question reported giving grades or marks in instrumental music in the elementary school; eighteen percent did not give grades.

TABLE XVII

GRADES GIVEN IN ELEMENTARY INSTRUMENTAL
MUSIC INSTRUCTION

| Grades in instrumental music | Number of responses (n = 130) | Percent of total responding |
|------------------------------|----------------------------------|-----------------------------|
| Yes | 106 | 82 |
| No | 24 | 18 |

Of those giving grades in instrumental music, fifty-six percent indicated that the student did not receive a progress report other than that which must be indicated on his regular report card. Forty-four percent reported the use of a progress report in addition to that which must be indicated on the regular report card.

TABLE XVIII
STUDENT PROGRESS REPORT

| Progress Report in addition to regular report card | Number of responses (n = 126) | Percent of total responding |
|--|-------------------------------|-----------------------------|
| No | 70 | 56 |
| Yes | 56 | 44 |

The marks "E," "S", "M", etc., were the method most frequently used in grading instrumental students. "A", "B," "C", etc., was the next most frequently used method. Sixteen percent used the marks "satisfactory" and "unsatisfactory."

TABLE XIX
SYMBOLS USED FOR MARKING (GRADING)
INSTRUMENTAL MUSIC

| Symbols used for marking | Number of responses (n = 97) | Percent of total responding |
|---------------------------------|------------------------------|-----------------------------|
| E, S, M | 52 | 54 |
| A, B, C | 29 | 30 |
| Satisfactory and Unsatisfactory | 16 | 16 |

Other responses indicated were:

1. Outstanding growth, satisfactory, improvement needed. (5)
2. Outstanding, satisfactory, improvement needed (4)
3. No letter grade given. Only items are checked. (1)
4. A, B, C, etc., along with effort grades
(1) (top), 2, 3, 4, 5) are given. (1)
5. Conversation with parents on child's progress. (1)
6. Scales used: such as 1, 2, 3, 4, 5, with one
as highest. (1)
7. A short note on the progress of the child is
sent to parents. (1)
8. High achievement, fair achievement, improve-
ment needed. (1)
9. Excellent, good, medium, poor, unsatisfactory. (1)
10. Outstanding achievement, satisfactory achieve-
ment, improvement needed. (1)
11. Satisfactory, needs improving. (1)
12. Satisfactory and unsatisfactory with plus
and minus signs added. (1)
13. Excellent, superior, above average, below
average, inferior, failing in all respects. (1)
14. Superior achievement, satisfactory, improve-
ment needed. (1)
15. I - excellent; II - good; III - fair; IV - poor. (1)

Table XX shows various procedures used in the evaluation of instrumental music. The order of their importance is indicated by numbers one through seven with one being high. Informal observation was the procedure most highly rated in the evaluation of instrumental music students. The use of teacher-constructed tests and progress charts were of next importance in the evaluation of instrumental music students.

TABLE XX
EVALUATION PROCEDURES RATED IN ORDER
OF IMPORTANCE (n = 68)

| Procedures of evaluation | Rating Scale | | | | | | |
|---------------------------|--------------|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Teacher constructed tests | 13 | 12 | 11 | 10 | 9 | 6 | 7 |
| Rating Scales | 2 | 6 | 14 | 20 | 5 | 14 | 7 |
| Informal observation | 34 | 9 | 10 | 6 | 5 | 1 | 3 |
| Interviews | 1 | 12 | 10 | 10 | 12 | 12 | 11 |
| Weekly practice charts | 7 | 12 | 9 | 8 | 14 | 9 | 9 |
| Case histories | 2 | 2 | 6 | 4 | 6 | 17 | 31 |
| Progress charts | 11 | 13 | 8 | 10 | 15 | 10 | 1 |

In evaluating a student for a grade, sixty-three percent of the respondents rated a student in terms of his own capacity and progress. Sixteen percent rated a student in comparison with the entire group. Twenty-one percent used a

combination of both methods. One teacher rated a student in comparison to his own age group and on the effort he might put forth.

TABLE XXI

METHODS OF EVALUATING A STUDENT FOR A GRADE

| Method of evaluating | Number of responses (n = 120) | Percent of total responding |
|---|----------------------------------|-----------------------------|
| Rating a student in comparison with the entire group | 19 | 16 |
| *Rating a student in terms of his own capacity and progress | 76 | 63 |
| Combination of both methods | 25 | 21 |

*It must be assumed that this statement was interpreted to mean individual progress rather than one's capacity, since this response was inconsistent with the percentage of those using the aptitude test in Table I, page 33.

Fifty-two percent of the respondents used written tests as a means of evaluating the instrumental music student. Forty-eight percent did not use written tests.

TABLE XXII

USE OF WRITTEN TEST

| Use of written tests for evaluation | Number of responses (n = 124) | Percent of total responding |
|-------------------------------------|----------------------------------|-----------------------------|
| Yes | 65 | 52 |
| No | 59 | 48 |

Eighty-three percent of the teachers used performance tests as a means of evaluating the instrumental music student. Seventeen percent did not use performance tests.

TABLE XXIII
USE OF PERFORMANCE TESTS

| Use of Performance Tests | Number of responses (n = 125) | Percent of total responding |
|--------------------------|----------------------------------|--------------------------------|
| Yes | 104 | 83 |
| No | 21 | 17 |

The method most frequently used, in arriving at a final grade for the elementary instrumental student, was an overall estimate of the student's work. Five percent used the method of averaging the final grade from established periodic grades in order to give a final mark. Forty-five percent used a combination of both methods in arriving at a final grade.

TABLE XXIV
METHODS USED IN EVALUATING AN INSTRUMENTAL
STUDENT FOR A GRADE

| Method of arriving at a final grade | Number of responses (n = 120) | Percent of total responding |
|--|----------------------------------|--------------------------------|
| An overall estimate of the student's work | 60 | 50 |
| Averaging the final grade from established periodic grades | 6 | 5 |
| Combination of both methods | 54 | 45 |

An attempt was made to ascertain techniques used in making an evaluation of those students in the elementary instrumental music class. Also surveyed was the order of importance of the techniques employed.

Attitude was indicated as the technique most used in the evaluation of elementary instrumental music classes. Technical instrumental ability, followed by performance tests, were the next most frequently used technique. Awards, pins, etc., were the techniques least used. Other techniques reported in evaluation were:

1. Tone quality
2. Rhythm
3. Embouchure
4. Breath control
5. Steady progress in daily performance
6. Theory
7. Intonation
8. Articulation
9. Dynamics
10. Expression
11. Stage presence
12. Tempo
13. Voice test for hearing pitch
14. Home practice

TABLE XXV

FREQUENCY OF RESPONSE TO TECHNIQUES USED
 IN THE EVALUATION OF ELEMENTARY
 INSTRUMENTAL MUSIC CLASSES

| Techniques of evaluation | |
|--|----|
| Attitude | |
| Technical instrumental ability | |
| Performance tests | |
| Being present in class with instrument | |
| deportment | |
| Selection of music | |
| Assigning of chairs | |
| Awards, pins, etc. | 14 |

CHAPTER V

SUMMARY AND CONCLUSIONS

This survey was conducted in order to investigate (1) those methods and procedures used in the evaluation of instrumental music in the elementary schools in the State of Missouri, (2) the criteria upon which such evaluations are made and (3) the manner of recording those evaluations.

A questionnaire containing twenty-six items was mailed to two hundred thirty-three elementary instrumental music teachers in selected school districts in the State of Missouri. Part I of the questionnaire dealt with the organization of instrumental music in the elementary school. Part II was concerned with the evaluation of instrumental music.

The survey showed that the elementary instrumental music teacher used the methods of student-parent interest in the program and the music aptitude test as the means of selecting children for the instrumental program.

Instrumental music instruction in the elementary school was begun in the fifth grade. Many teachers indicated that the fourth grade child is too immature to begin instrumental instruction. The string program is given a boost by beginning string instruction in the fourth grade and other instruments in the fifth grade.

Most teachers in the beginning instrumental music class used the method of heterogeneous grouping for instructional purposes. Probably the lack of instructional time accounts for the use of heterogeneous grouping of instruments.

The average period of instruction for beginners was approximately an hour and twenty minutes weekly.

For second and third year (experience) students, the average period of instruction was approximately one hour and thirty minutes. Instructional time for the beginning student, as compared with the second and third year student, was found to be about the same.

The combining of second and third year (experience) elementary instrumental music students for class instruction was the method used by the majority of teachers.

The average number of classes taught each day in the elementary school was nine.

A trend toward specialized instruction in instrumental music is revealed by the fact that the majority of teachers were assigned for instrumental instruction, and by the fact that the majority of teachers taught either band or orchestra.

The majority of respondents indicated that they were assigned for instrumental instruction in both the elementary and secondary school. This response was apparently due to the large number of small school districts surveyed.

In the assignment of parts to instrumental students,

it seems that most teachers assigned first parts to the more advanced students. Inasmuch as advanced players are needed on all parts, the response to this question was not as expected.

In the elementary beginning instrumental music class, the majority of teachers spent one week on tone production prior to the beginning of note reading; however, it was generally felt that the duration of time spent on tone production is usually determined by class size and the ability and effort of the students.

The response indicated that rote pieces were not used to any extent in the beginning instrumental music class. Rote pieces were used to some extent in the beginning string class.

From zero to twenty-five percent of the students took private instruction outside of school hours.

Two concerts a year were given by students enrolled in the elementary instrumental music program. Participants were selected from the sixth and fifth grades, respectively.

As indicated in Part II of the questionnaire (concerned with the evaluation of instrumental music), most teachers did give grades or marks in instrumental music instruction.

Apparently the majority of teachers did not use a progress report in addition to that which must be indicated on the regular report card.

The marks "E", "S", "M", etc., were most frequently used in grading instrumental music students.

The teachers selected the method of informal observation as the procedure most frequently used in the evaluation of the instrumental music students. The use of teacher-constructed tests and progress charts were second and third respectively. Apparently teachers still prefer to rely on informal observation rather than something more systematic as the rating scale.

In evaluating a student for a grade, most teachers chose to rate a student in terms of his own capacity and progress. Most teachers felt that rating a student in comparison with the entire group was frustrating and discouraging to the student.

It was indicated that written tests were not used to any great extent as a method of evaluation in the instrumental music class. The extent to which written tests were used was probably due to the lack of time for giving written tests.

The majority of teachers approved the use of performance tests as a means of evaluating the instrumental music student.

The method selected by the teachers, in arriving at a final grade for the elementary instrumental student, was an over-all estimate of the student's work.

A large percentage of the teachers indicated that they used the method of averaging the final grade from

from established periodic grades in addition to an over-all estimate of the student's work. This method represents an effort, at least, toward some sort of systemization in grading. It appears that the use of both methods are essential in arriving at a just and final grade.

The majority of teachers chose attitude as the technique most used in the evaluation of elementary instrumental music classes. Technical instrumental ability and performance tests were listed as second and third, respectively.

Present methods in the evaluation of instrumental music are subjective. Continued investigation is needed in the objective technique of evaluating and measuring instrumental music.

It is recommended that further study be given to the utilization of rote pieces in the beginning wind and percussion instrument classes, particularly for the purpose of building student interest and development of embouchure.

This study showed that the rating scale was not used by the majority of teachers, and yet it currently remains the most systematic method available in the measurement and evaluation of instrumental music. Further study in this area might be of interest to music educators.

More investigation is needed concerning the methods used to select elementary children for the instrumental program, since the majority of teachers reported using other methods not covered by this study. Further study is needed to ascertain the evaluative practices of non-grading teachers.

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APPENDIX

Thomas G. Bristow
2901 Poe Avenue
Overland, Missouri 63114

January 10, 1968

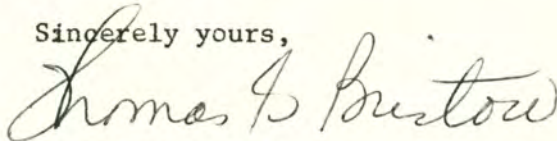
Dear Music Educator:

As a candidate for the Masters Degree in Music Education at Southern Illinois University, Edwardsville, Illinois, I am making a study of "The Evaluation and Measurement of Instrumental Music Performance in the Elementary Schools of Missouri."

You, as an instrumental music teacher in your present school system, are the best qualified person from whom to obtain needed information for the above named study. Therefore, I am submitting to you the enclosed form designed to obtain information as it relates to your particular teaching situation in the elementary school.

A self-addressed envelope is enclosed. Please return at your earliest convenience. Your cooperation will be appreciated.

Sincerely yours,



Thomas G. Bristow
Instrumental Music Coordinator
Elementary Schools
Pattonville R-3 School District
St. Louis County, Missouri

QUESTIONNAIRE

1. Check the method used in selecting beginning students for the instrumental music program.

- a. Music aptitude test.
 - b. Student's I.Q.
 - c. Grade point average in class.
 - d. Student/parent interest in the program.
 - e. Combination of above.
 - f. Other. (Please state)
-
-

2. At which grade level does instrumental music instruction begin? (Check one.)

- a. 4th grade
 - b. 5th grade
 - c. 6th grade
 - d. 7th grade
 - e. (Other. Please state.)
-
-

3. For instructional purposes, how are instruments divided in the beginning elementary instrumental music class? (Check)

- a. heterogeneous grouping
- b. homogeneous grouping

4. Is instrumental music instruction scheduled within the school day?

- a. Yes.
- b. No.

5. How many minutes of instruction a week do beginning instrumental music students receive in the elementary school? (Check)

- a. 30 min. to 45 min.
 - b. 45 min. to 60 min.
 - c. 60 min. to 90 min.
 - d. 90 min. to 2 hours
 - e. Other. (Please state.)
-
-

6. How many minutes of instruction a week do 2nd and 3rd year (experience) instrumental students receive?

- a. 30 min. to 45 min.
 - b. 45 min. to 60 min.
 - c. 60 min. to 90 min.
 - d. 90 min. to 2 hours
 - e. Other. (Please state.)
-
-

7. Specify how classes are organized for students in the 2nd and 3rd year (experience) elementary instrumental music groups. (Check)

- a. Held separately.
 - b. Combined.
 - c. Other. (Please state.)
-
-

8. List below the number of classes taught each day in the elementary instrumental music program. (Indicate number according to each day taught.)

Mon. Tues. Wed. Thurs. Fri.

9. Do you also teach vocal music in the elementary school?

- a. Yes.
- b. No.

Do you instruct in the area of both band and orchestra?

- a. Yes.
- b. No.

11. Are you assigned for instruction in both the secondary and elementary schools?

- a. Yes.
- b. No.

12. Do you assign first parts to the more advanced players?

- a. Yes.
- b. No.

If no, would a more correct response have been - (check)

- a. frequently.
- b. seldom.
- c. never.

13. In the elementary beginning instrumental music class what is the duration of time spent on tone production, prior to the beginning of note reading? (Check one.)

- a. one week.
 - b. two weeks.
 - c. three weeks.
 - d. Other. (Please state.)
-
-

14. Are beginning instrumental students taught pieces by rote prior to note reading?

- a. Yes.
- b. No.

15. List below the percentage of students taking private instruction outside of school hours.
- a. 0 to 25%
- b. 25% to 50%
- c. 50% to 75%
16. How many concerts per school year are given by students enrolled in the elementary instrumental music program? (Please circle.)
- 0 1 2 3 4 5
17. At what grade levels are students selected who participate in the concerts? (Check)
- a. 3rd grade c. 5th grade e. 7th grade
- b. 4th grade d. 6th grade f. 8th grade

EVALUATION

18. Do you give grades in elementary instrumental music?
- a. Yes.
- b. No.

If yes, indicate the current practices for evaluation in your teaching situation for each item which follows.

19. Does the instrumental music student receive a progress report other than that which must be indicated on his regular report card?
- a. Yes.
- b. No.
20. What symbols do you use for marking in instrumental music? (Check)
- a. A, B, C, etc.
- b. E, S, M, etc.
- c. S (satisfactory), U (unsatisfactory)
- d. Other. (Indicate)
-
-

21. Rate the following procedures in the order of their importance to you in the evaluation of the instrumental performance classes, i.e., most frequently used. Use numbers 1 through 7 (1 being "high").
- a. teacher constructed tests.
- b. rating scales.
- c. informal observation
- d. interviews.

(continued on next page)

- e. Weekly practice charts
- f. progress charts
- g. case histories
- h. others (list in importance order)

1. _____ 2. _____ 3. _____

22. In evaluating an instrumental student for a grade, which of the following do you use? (Check)

- a. Rating a student in comparison with the entire group.
- b. Rating a student in terms of his own capacity and progress.
- c. If neither, comment.

23. Are written tests used for evaluation in the elementary instrumental performance class?

- a. Yes.
- b. No.

24. Are performance tests used for evaluation in the elementary instrumental class?

- a. Yes.
- b. No.

25. By what method do you arrive at a final grade? (Check)

- a. An over-all estimate of the student's work.
- b. Averaging the final grade from established periodic grades.
- c. Combination of a. and b.
- d. Other. Comment.

26. Which of the following techniques do you use in the evaluation of those students in the elementary instrumental music classes? (check)

- a. Performance tests.
- b. Awards (pins, letters, etc.)
- c. Assigning of chairs.
- d. Selection of music as to kind and performance level.
- e. Being present in class with instrument.
- f. Deportment
- g. Attitude.
- h. Technical instrumental ability.
- i. Others. 1. _____ 2. _____ 3. _____

Indicate below (by letter designated) in priority order of most frequent utilization, the five items most often employed. (Indicate by alphabet letter used above.)

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

DISTRIBUTION OF DATA

| <u>Counties</u> | <u>Number Sent</u> | <u>Number Responding</u> |
|-----------------|--------------------|--------------------------|
| Atchison | 2 | 3 |
| Barry | 3 | 2 |
| Barton | 1 | 1 |
| Bates | 3 | 2 |
| Benton | 4 | 1 |
| Boone | 8 | 3 |
| Buchanan | 1 | 1 |
| Butler | 2 | 1 |
| Caldwell | 4 | 1 |
| Calloway | 2 | 1 |
| Camden | 3 | 2 |
| Cape Girardeau | 2 | 1 |
| Carroll | 5 | 2 |
| Cass | 6 | 3 |
| Chariton | 3 | 3 |
| Christian | 3 | 1 |
| Clay | 6 | 2 |
| Clinton | 4 | 2 |
| Cole | 2 | 1 |
| Cooper | 3 | 1 |
| Daviess | 3 | 1 |

| <u>Counties</u> | <u>Number Sent</u> | <u>Number Responding</u> |
|-----------------|--------------------|--------------------------|
| DeKalb | 3 | 2 |
| Dunklin | 2 | 2 |
| Franklin | 4 | 1 |
| Greene | 4 | 2 |
| Grundy | 1 | 1 |
| Harrison | 3 | 1 |
| Henry | 4 | 1 |
| Howard | 2 | 2 |
| Iron | 1 | 1 |
| Jackson | 25 | 18 |
| Jasper | 3 | 3 |
| Jefferson | 3 | 1 |
| Johnson | 5 | 2 |
| Lafayette | 4 | 2 |
| Lawrence | 3 | 3 |
| Lincoln | 3 | 3 |
| Linn | 2 | 2 |
| Livingston | 1 | 1 |
| Madison | 1 | 1 |
| Mississippi | 2 | 2 |
| Monroe | 1 | 1 |
| Montgomery | 1 | 1 |
| Morgan | 2 | 2 |
| New Madrid | 1 | 1 |
| Newton | 1 | 1 |

| <u>Counties</u> | <u>Number Sent</u> | <u>Number Responding</u> |
|------------------|------------------------|------------------------------|
| Nodaway | 3 | 1 |
| Pettis | 3 | 1 |
| Phelps | 2 | 1 |
| Polk | 1 | 1 |
| Ray | 3 | 1 |
| St. Charles | 6 | 2 |
| St. Francis | 3 | 2 |
| St. Louis City | 7 | 3 |
| St. Louis County | 48 | 27 |
| Scott | 2 | 1 |
| Stoddard | 2 | 1 |
| Taney | 1 | 1 |
| TOTAL | 233 | 130 |